

CATALOG

2022-2023



BLACK
GRADS
MATTER

CLASS
OF
2022

DVC
DIABLO VALLEY COLLEGE

DVC DIABLO VALLEY COLLEGE



Pleasant Hill Campus
San Ramon Campus

2022-2023 CATALOG

Fall 2022 • Spring 2023 • Summer 2023

Seventy-third academic year

approved by

The California State Department of Education
The Department of Homeland Security

ACCREDITATION

Institutional

Diablo Valley College is accredited by the Accrediting Commission for Community and Junior Colleges of the Western Association of Schools and Colleges (ACCJC/WASC), which is an institutional accrediting body recognized by the Council for Higher Education Accreditation and the U.S. Department of Education. The contact information of the AACJC is provided below:

Accrediting Commission for
Community and Junior Colleges
331 J Street, Suite 200
Sacramento, CA 95814
415-506-0234
www.accjc.org

Programmatic

The following Diablo Valley College programs are accredited by programmatic accrediting bodies, which are responsible to determine license/certification eligibility.

Addiction Counselor Certification
Board of California
4182 N. Viking Way Suite 213
Long Beach, CA 90808
Phone Number: 562-304-5261
www.accbc.org

Culinary Arts, Baking and Pastry,
Restaurant Management
Accrediting Commission
180 Center Place Way
St. Augustine, Florida 32095
www.acfchefs.org

California Association for Alcohol/Drug
Educators
4195 N. Viking Way Unit 270
Long Beach, CA 90808
562-246-6690
www.dev.caade.org

Dental Assisting and Dental Hygiene
Commission on Dental Accreditation of
the American Dental Association
211 East Chicago Avenue
Chicago, Illinois 60611-2678
<https://coda.ada.org>

California Consortium of Addiction
Programs and Professionals
2400 Marconi Avenue, Suite C
Sacramento, California 95821
PO Box 214127
800-564-5927
www.ccapp.us

Contra Costa Community College District Administration

DISTRICT GOVERNING BOARD 2022

Dr. Judy E. Walters, President
Fernando Sandoval, Vice President
John E. Márquez, Secretary
Rebecca Barrett, Member
Andy Li, Member
Austin Green, Student Trustee

DISTRICT CHANCELLOR

Mojdeh Mehdizadeh, Interim Chancellor

DIABLO VALLEY COLLEGE PRESIDENT

Susan E. Lamb



MAILING ADDRESS

Pleasant Hill Campus
321 Golf Club Road
Pleasant Hill, CA 94523
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www.dvc.edu

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1690 Watermill Road
San Ramon, CA 94582
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Fax: 925-242-0856
Website:
www.dvc.edu/sanramon

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. The college disclaims liability for any unintended errors in this publication. This catalog sets forth college policies for all college programs and services in accordance with the California Education Code, California Code of Regulations (Title 5), and District and college policies.



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GENERAL INFORMATION

chapter one

catalog 2022-2023



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GENERAL INFORMATION

Diablo Valley College (DVC) is one of the three publicly supported two-year community colleges that comprise the Contra Costa Community College District. DVC offers classes on its Pleasant Hill Campus, located near Interstate 680 in Pleasant Hill and at its San Ramon Campus, which serves the south county in Dougherty Valley. Between its two campuses, DVC serves more than 20,000 students each term with a wide variety of program options.

Academic freedom statement

The Contra Costa Community College District affirms its belief in the academic freedom of faculty, management, and students to teach, study, conduct research, write and challenge viewpoints without undue restriction.

Members of the college faculty are citizens, members of a learned profession and representatives of an educational institution. When they speak or write as citizens, they should be free from institutional censorship or discipline, but their special position in the community imposes special obligations. As persons of learning with institutional affiliations, they should remember that the public may judge their profession and institution by their statements. Hence, they should at all times be accurate, exercise appropriate restraint, show respect for the opinion of others, and make every effort to indicate that they are not expressing their institution's views.

Mission

We inspire, educate, and empower students to transform their lives and their communities.

We guide students to achieve their goals by awarding degrees and certificates, preparing them for transfer to four-year colleges and universities, facilitating entrance to and advancement in careers, and fostering personal growth.

DVC Institutional learning outcomes

Through their experiences at Diablo Valley College, a student will develop proficiency in the five areas identified in the following list as part of a dynamic educational environment.

- **Communication and Collaboration** - A student with effective communication skills will be a good listener and speaker. They will be able to communicate orally, through writing, and visually using an appropriate medium. A student with collaboration skills will be able to work with teams comprised of a diverse set of people. They will develop leadership skills and the ability to work with groups on the completion of a wide variety of projects. *Includes effective written and visual message construction, media choices, leadership skills, and the ability to work with others on projects.*
- **Empathy Mindset** - A student with an empathy mindset will be able to build relationships through understanding and valuing others with diverse backgrounds and cultures. They will be connected and active in their community and will act in accordance with ethical norms. *Includes social and diversity awareness, civic engagement, and ethics.*

- **Growth Mindset** - A student with a growth mindset is willing to take risks, learn from mistakes, and has a drive to complete tasks. They set goals and priorities for actions and are flexible and able to respond to changes. A person with a growth mindset believes that abilities and intelligence can be developed through practice, training, and effort. *Includes adaptability, resilience, self-awareness, and entrepreneurial mindset.*
- **Information and Technology Fluency** - A student who is information and technology fluent will utilize appropriate technology to locate and critically evaluate information from a variety of sources, to formulate responses to issues, reach informed decisions, and communicate effectively. *Includes being flexible and strategic in the use of technology, as well as the accurate and ethical use of written and visual materials.*
- **Solution Mindset** - A student with a solution mindset will think critically and evaluate information sources for accuracy and usefulness. They will think critically about data and information. They will be able to design and implement appropriate solutions for situations they face. *Includes understanding methods of inquiry and analysis of available choices.*

About this catalog and program requirements

The DVC 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 which courses the student must complete to earn a degree or certificate.

The information in this catalog describes the anticipated programs, courses, policies, regulations, and fees of Diablo Valley College. These are subject to change at any time. The college disclaims liability for any unintended errors in this publication.

Please see page 62 for more information on catalog rights and the continuous enrollment policy for degrees and certificates.

Schedule of classes

An online searchable class schedule is updated daily. This schedule provides the most recent and accurate information and is available on the DVC website.

COURSE AND PROGRAM OFFERINGS

Degree and certificate programs

DVC offers more than 100 associate degrees, more than 100 certificates of achievement, as well as a broad selection of certificates of accomplishment. Most associate degree programs can be completed in four terms of full-time study (15 units per term). Certificate programs are generally shorter in length. Length of time to completion will vary based on student course-taking patterns. To see the complete list of programs, visit: www.dvc.edu/programs.

Day, evening, and summer classes

Classes are offered during the day and evening in full-term and short-term formats. A selection of day and evening classes are also offered during the summer. See the schedule of classes for more information. www.dvc.edu/schedule

Fully online and partially online classes

An online class in the Contra Costa Community College District is a class offered fully online and has no required face-to-face meetings. In the schedule of classes these courses are listed as online. A partially online class in the Contra Costa Community College District is a class that offers instruction both online and on campus. Required in-person class meetings are included in the schedule of classes following a predictable pattern (on the same day(s) of the week and at the same time). In the schedule of classes these classes are listed as partially online. To find out more about online classes visit www.dvc.edu/online.

Contract education classes

A contract education class is one that a community college offers under contract pursuant to Education Code section 78021 with a public or private agency, corporation, association, or other organization (title 5, section, 55000). Such classes are not open to general enrollment.

Noncredit courses

A noncredit course is one that is approved by the college and district as meeting the needs of enrolled students but that does not award college credit. Such courses are limited to the following categories: Parent Education, Basic Skills, English as a Second Language, Immigrant Education, Education Programs for Persons with Substantial Disabilities, Short Term Vocational Programs with High Employment Potential, Education Programs for Older Adults, Family and Consumer Sciences, Health and Safety.

Academic Calendar 2022-23

Please check our website www.dvc.edu/calendar and click on Academic/Calendar 22-23 for the most current dates and a more complete calendar.

FALL TERM 2022	
August 19	First day of instruction
September 5	Labor Day holiday
September 23	Native American Day holiday
November 11	Veterans Day holiday
November 24-25	Thanksgiving holiday
November 26-27	No classes
December 9	Last day of instruction
December 21- January 1	Winter recess
SPRING TERM 2023	
January 16	Martin Luther King Jr. Day holiday
January 23	First day of instruction
February 17	Lincoln Day holiday
February 18-19	No classes
February 20	Washington Day holiday
March 26-April 1	Spring recess
May 19	Last day of instruction
May 19	Graduation
May 29	Memorial Day holiday

ADMISSION REQUIREMENTS

There are a number of steps necessary for successful enrollment in classes at DVC. Students are encouraged to complete the matriculation process, which includes admission, placement, orientation, and advising prior to registering for classes. Please see page 36 for more information about the matriculation policy. For detailed information on how to enroll, please see our website. www.dvc.edu/apply

Admission eligibility

A student is eligible for admission if he or she:

- has graduated from a regionally accredited 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 (CHSPE) 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 and one day 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

Non-resident students must pay a non-resident tuition fee in addition to the other usual college fees. Please see page 10 for more information about student fees.



International students

International students interested in applying to DVC can find information on applying at 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/international/apply. International students pay the international tuition rate for courses in addition to the enrollment and college fees. International students must also pay the mandatory health insurance cost.

For admissions deadlines and more information please visit: www.dvc.edu/international or contact the International Student Office.

Transferring to DVC

DVC welcomes transfer students from other colleges. Transfer students should follow the general application procedures listed in the Student Resource Guide. Please see page 21 for more information about transfer credit.

Transcripts

Release of student records

Students may have their DVC records released to them only if they can show positive picture identification, in the form of a current student ID card, a California Driver's License, or a California ID 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. Please see page 11 for more information about transcript fees.



STUDENT FEES AND OTHER FINANCIAL OBLIGATIONS

Enrollment fee (CA residents)	\$46 per unit
Enrollment fee (U.S. citizens or permanent residents who are not California residents, or students who are not U.S. citizens)	\$346 per unit
Student union fee	\$1 per unit (maximum \$10 per student per academic year)
Student activity fee (fall and spring)	\$5 per term (fee is voluntary)*
Student representation fee (fall and spring)	\$2 per term (fee is voluntary)**
Parking fees	\$3 a day or \$48 for the fall or spring terms or \$25 mid-term (after the ninth week); \$25 for summer; \$25 per term for students who qualify for the California Promise Grant Free parking is available at the San Ramon Campus
Books, supplies, and course material fees	\$250-\$350 estimate per term for full-time students. Book and supply costs and requirements vary.
Course material fees	Some courses require additional materials fees. See schedule of classes for details.
Field trip fees	Students are expected to pay entrance fees for theaters, galleries, and other activities as well as provide their own transportation. (Alternate assignments given for students who cannot afford the cost.)
ASDVC Discount Sticker (fall and spring)	\$10 per term (optional) Purchase at Student Union Building, Book Center, or the Admissions and Records Office.



Transcript fees	<p>Standard: FREE for first two (within district) \$7.50 each thereafter</p> <p>Rush: \$17.50 each (processed within 24 hours)</p> <p>Express: \$32.50 each (processed within one hour)</p>
Verification of enrollment fees	<p>FREE for first two verifications (within district)</p> <p>\$2 fee for each request thereafter</p> <p>\$5 per verification for 24 hour express service</p>
<p>*Allows student government to provide funding for student-related activities and services.</p> <p>**Allows student government to provide support for governmental affairs representatives of local or state-wide student body organizations.</p> <p>Refund forms are available online, at the Cashier's Office, Student Life Office and Welcome/Information Center. Waiver/refund request forms must be submitted in person or by U.S. mail to the DVC Cashier's Office ONLY. Request for refund forms must be received within the first two weeks of instruction for a full term class, or before 10 percent of the class time for a short-term class. Refund checks will be issued monthly after the first two weeks of instruction each term.</p>	

Please note: All fees are subject to change by the state legislature. Check www.dvc.edu/fee for updated fee information.

Student debts to the college

Students are expected to pay their registration fees and all other financial debts at the time of registration. Students who owe enrollment fees or other debt will not be permitted to register for classes and will not receive a diploma until their debts are paid.

Refund of Fees

Enrollment fee and non-resident tuition refunds

To receive a fee refund, students must withdraw from school or drop class(es) by the deadline. To qualify for an enrollment fee refund, students must officially drop units:

- within the first two weeks of a term for full-term classes (fall and spring),
- within the first 10 percent of the length of the class for short-term and summer classes.

Refunds are issued automatically within this time period. The refund policy complies with and is based upon Title 5 regulation and the California Education Code.

Residency reclassification and adjustment of fees

Students who believe they are coded as nonresidents in error have the opportunity to request residency reclassification, and if approved, reduce the charges on their account. Documentation is required. Residency reclassification can only be made during the current academic year. Retroactive reclassification for a prior academic year is not permitted.

Parking permit refunds

In order to obtain a refund, students must:

- officially drop all units within the first two weeks of the term (fall and spring),
- return the parking permit to the Cashier's Office at the Pleasant Hill Campus.

Course material fee refunds

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 at the Pleasant Hill Campus or at the Admissions and Records Office in San Ramon.



STUDENT FINANCIAL AID

Diablo Valley College has a broad range of financial aid programs. Pleasant Hill students should go to the Financial Aid or Scholarship offices at the Pleasant Hill Campus, and San Ramon students can go to the West Lobby of the Administration Building. Students may also visit www.dvc.edu/financialaid.

The following programs are administered through the Financial Aid Office, and require students to complete a Free Application for Federal Student Aid (FAFSA) online at www.studentaid.gov or a California Dream Act Application (AB-540 students only) at <https://dream.csac.ca.gov>. Additional requirements apply to specific programs listed below. Students must adhere to satisfactory academic progress policies and may be subject to financial aid return of funds policies when receiving financial aid. Please visit the Financial Aid Office website for more information.

Grants

There are seven grants available to students. Qualifications, availability, and limits vary. Please visit the Financial Aid Office website for more information.

- California College Promise Grant
- Federal Pell Grant
- Federal Supplemental Educational Opportunity Grant (FSEOG)
- Cal Grant B (entitlement and competitive)
- Cal Grant C
- Student Success Completion Grant
- California Chafee Grant
- First-time + Full-time = Free Tuition (FT3 Program)

Work-Study

Federal Work-Study (FWS) - students can work 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, so check with the Financial Aid Office to see if you qualify for this program.

Loans

Federal loans are available and both students and parents can apply. Visit www.dvc.edu/financialaid for more information.

Other aid and benefits

All available financial aid and benefit opportunities are too numerous to list, and may be available through specific academic programs. Students should check with their instructors, division dean, the Financial Aid Office or Scholarship Office for other options that may apply.

Veterans benefits

Various federal and state agencies determine eligibility for veterans benefits, depending on whether the student is a veteran or a dependent of a veteran. Interested students should speak with a staff member in Veterans Services or contact the Department of Veterans Affairs at 925-313-1481 or 800-827-1000 or visit the website at www.va.gov, and DVC's website at www.dvc.edu/veterans.

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 established by local, state, and national organizations as well as individual sponsors. Call, email or visit the Scholarship Program Office for more information. www.dvc.edu/scholarships

LEARNING RESOURCES AND SERVICES

DVC offers a wide variety of resources and services to support and enhance student success. All of these services are described in greater detail on the DVC website. The web address and contact information are listed with each service below.

Learning resources and services	Program Description
Admissions and Records Office 925-685-1310 www.dvc.edu/admissions	The admissions and records office assist both new and returning students with enrollment into the college. In addition, have the ability to assist students when requesting/submitting documents to change or alter information on record.
Assessment Center 925-969-2132 www.dvc.edu/assessment	The assessment center, assist new students who have graduated high school or who have certain circumstances to be able to be placed in the appropriate class based on a placement test. The placement test allows students to help guide them to take classes in the categories of both Math and English based on their results.
CalWORKs Program 925-969-2120 www.dvc.edu/calworks	The CalWORKs program allows for students to undergo training that will allow them to gain skills to become self-sufficient / to reach personal goals. This would allow them to have the ability to use these newly learned skills in possible job environments or even just for self-improvement for possible future endeavors.
Career Services 925-969-2135 www.dvc.edu/career	<p>The career center strives to help students discover possible path they can take when they feel that they're unsure of what major they want.</p> <p>In addition, students will have the ability to take on possible internships they may be interested in that are posted by employers outside of our campus.</p> <p>This is not limited to student but, Faculty and Staff are able to get information that can be used to assist students when a meeting is held.</p>
Computer Center 925-969-2323 www.dvc.edu/computerlabs	
Cooperative Agencies Resources for Education (CARE) 925-969-2117 www.dvc.edu/eops	<p>The CARE's Program strive to assist single parent students with both financial and educational support in order for them to reach their personal goals.</p> <p>CARE's students can receive grants, vouchers for books, and many more essentials that will assist them in their academic career.</p>
Counseling Center 925-969-2140 www.dvc.edu/counseling	<p>The Counseling office provide students with a resource to get academic help and allow students to create an education plan that the student can use.</p> <p>Students can also receive other types of support in forms of emotional or even veteran status support.</p>

Learning resources and services

Learning resources and services	Program Description
<p>Disability Support Services 925-969-2182 www.dvc.edu/dss</p>	<p>Disability Support Services, provides students with disabilities additional assistance in order for them to achieve academic success. This includes needed equipment or even possible one on one counseling with one of the staff members in the DSS.</p> <p>Additional, help can be provided through DSS's counseling service, and if student believe that they may have a disability testing is provided to determine it.</p>
<p>Educational Talent Search 925-969-2189 www.dvc.edu/ets</p>	<p>DVC's Educational Talent Search Program is a federal funded program that assist students from the grade 6 – 12 and provide them with information about college and possible career paths they might be interested in.</p> <p>In addition, these students will undergo different types of activities/ workshops that will teach them skills they can use when applying to their desired college in the future.</p>
<p>Enrollment Lab www.dvc.edu/enrollmentlab</p>	<p>The enrollment lab is a space where new students can use computers to enroll for classes at DVC.</p> <p>The lab provided face to face assistance with the staff in order to receive quick answers for possible questions that need to be answered when enrolling.</p>
<p>Extended Opportunity Programs and Services (EOPS) 925-969-2117 www.dvc.edu/eops</p>	<p>The EOPS program wants to help students be successful by providing resources that they can used to ensure a safe environment for students</p> <p>These resources can range from financial support to overall the student's health in order for them to grow.</p>
<p>Financial Aid 925-969-2009 financialaid@dvc.edu www.dvc.edu/financialaid</p>	<p>The Financial Aid Office is here to help students learn about and apply for the resources available to pay for a DVC education. Financial assistance is available to eligible students in the form of grants, loans, and work-study opportunities.</p>
<p>International Student Office 925-969-2196 www.dvc.edu/international</p>	<p>The International Student Office provides those who enrolled to DVC internationally a place that can receive support when it comes to their academic semester.</p> <p>There will be support advisors that will assist international students with any needs or questions they might have about the school.</p>
<p>Library Services 925-969-2588 www.dvc.edu/library</p>	
<p>Media and Audiovisual 925-969-2576 www.dvc.edu/media</p>	

Learning resources and services	Program Description
PUMA Center 925-969-4320 www.dvc.edu/current/learning-community/puma/	The PUMA (Puente, Umoja, and MESA Achievement) Center is the home for three college access and success programs – Puente, Umoja, and MESA. PUMA was established in 2015. As a vibrant center, the PUMA Center serves students from underserved/underrepresented backgrounds by building and nurturing community through embracing and validating students’ cultural identity and humanity, with an emphasis on holistic development, equity, and social justice. The Center focuses on interdisciplinary collaboration, integrating instruction and support services to address the students’ various needs, while fostering student leadership, providing mentoring, and raising cultural awareness.
Scholarship Office 925-969-2094 scholarships@dvc.edu www.dvc.edu/scholarships	The Scholarship Office is available to assist students with applying for DVC and external scholarships. Scholarships may be awarded based on academic achievement, financial need, field of study, community service, or other criteria.
SRC Information Desk srcinfo@dvc.edu www.dvc.edu/sanramon	The San Ramon College Information Desk provides high school graduates/ current students with information about the DVC’s second location being San Ramon College. There are resources provided to students about the campus along with their own courses and program of information with staff, classes, etc.
Student Life Office 925-969-4270 www.dvc.edu/student-life	The Student Life Office supports student engagement opportunities in clubs, student government, workshops, leadership development and more. Stop by the Student Union Building to get your student ID card, relax, study, use the computer lab, or visit the Food Pantry.
Student Transition and Academic Retention Team (START) - Foster Youth Services 925-969-2203 www.dvc.edu/fosteryouth	The START program focuses on assistance those students that are under foster care and strive to help them to become academically successful. They look for ways to help you get an academic start to DVC and provide different resources that will relieve foster students from struggling. Staff of the program will also try to help foster student to engage in school events so that they can feel welcomes to the school along with other types of help.
Student Veteran Resource Center 925-969-2237 www.dvc.edu/veterans	DVC’s Veteran Resource Center provides student veterans with a chance to receive support for the sacrifice they made when out for service. So, DVC is giving back assisting Veterans with educational support so they can strive to reach aa higher education.
Study Abroad 925-969-2507 www.dvc.edu/studyabroad	

Learning resources and services

Learning resources and services	Program Description
<p>Transfer Services 925-969-2135 www.dvc.edu/transfer</p>	<p>DVC's Transfer Services assist students who are in the process of transferring to a 4-year college, and provide them with up to date information about the many 4-year colleges and what would need to be done to be able to smoothly transfer.</p> <p>There are both in person and online help that student can receive when it comes to the process of transferring and having possible questions before proceeding forward.</p>
<p>Tutoring Services www.dvc.edu/tutoring</p>	<p>With DVC's Tutoring Services students are able to receive academic assistance with possible questions they might have with different subjects like Math and Science.</p> <p>Students have full access to both online help or in person help depending on the subject they need assistance with and different locations like the MatLAB or English Tutoring Center.</p>
<p>Upward Bound 925-969-2189 925-969-2194 www.dvc.edu/ets</p>	<p>The Upward Bound Program assist specifically high school student grades 9th-12th with the process of being prepared for college when graduating.</p> <p>The program provides high school students with information about the process of entering college and the requirement that are needed in order to graduate college.</p> <p>Along with college trips and resources that allow for the students to have greater knowledge of the college the student may want to enroll at and be prepared to move forward with their choice.</p>
<p>Veteran Services 925-969-2121 www.dvc.edu/veterans</p>	<p>(See Student Veteran Resource Center)</p>
<p>Welcome Services 925-969-2106 www.dvc.edu/welcomeservices</p>	<p>The Welcome Services is the main center that most new students should start since it will provide guidance for new students that may have questions about the campus.</p> <p>Students have the opportunity learn more about the community that DVC has to offer with students just like them to guide them through the semester.</p>
<p>Work Experience Education 925-969-2026 www.dvc.edu/wrkx</p>	<p>Work Experience Education provides students with an opportunity to make what they do as job a class.</p> <p>This Program allows student to make their job a class and be able to earn college credits for the job / internship they are currently doing.</p>

COLLEGE POLICIES

chapter two

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NONDISCRIMINATION

Equal opportunity policy and grievance procedures

DVC does not discriminate on the basis of ethnic group identification, race, color, ancestry, religion, marital status, sex, national origin, gender, gender identification, gender expression, or within the limits imposed by law or District regulations, because of age, sexual orientation, physical or mental disability, medical condition, genetic information, military or veteran status, parental status, citizenship, or because they are perceived to have one or more of these characteristics or based on association with a person or group with one or more of these actual or perceived characteristics. District programs and activities include but are not limited to any that are administered or funded directly by or that receive any financial assistance from the Chancellor or Board of Governors of the California Community Colleges.

DVC is committed to nondiscrimination in compliance with the Civil Rights Act; Title IX of the Education Amendments of 1972; the Rehabilitation Act of 1973 (Section 503 and 504); the Americans with Disabilities Act of 1990; the Executive Orders 11246 and 11375; the Vietnam Era Veterans Readjustment Act of 1974; the Age Discrimination in Employment Act of 1967; the nondiscrimination laws of the State of California; and equal employment opportunity guidelines of the California Community College Chancellor's Office (which incorporates compliance with *Connerly v. State Personnel Board*), and CCCC 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.

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. For more information about the sexual harassment policy, please see: www.dvc.edu/harassment and for more information about equal opportunity policies and procedures, please see: www.dvc.edu/eoc.

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)
925-969-2005

Vice president of finance and administration
(ADA Coordinator)
925-969-2018

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.

ACADEMIC REQUIREMENTS AND POLICIES

Academic course requirements and credit

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

In fall or spring term, a full-time course load is considered to be at least 12 units. 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 prior to the start of the class. Request to exceed unit limits may be made online at www.dvc.edu/unitlimit.

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 term to maintain their F-1 status. Authorization to be below 12 units must be granted by a designated school official in the International Student Office.

Remedial unit limit

By state law, students are only allowed to enroll in a maximum of 30 units of remedial coursework. 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 instructor 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 with satisfactory grade

As a general rule, students may not enroll more than once in a credit course if the student received a satisfactory grade on the previous enrollment. An enrollment occurs when a student receives an evaluative or non-evaluative symbol in a credit course. Evaluative symbols include A, B, C, D, F, P, and NP. Non-evaluative symbols include I, IP, EW, and W. A satisfactory grade is an A, B, C, or P. Substandard work is course work for which the grading symbols D, F, NP, or NC have been recorded. A student receiving an A, B, C, or P typically cannot enroll in that course again, unless an exception to the general rule applies that allows the student an additional enrollment or enrollments in that course.

The following exceptions to the general rule permit a student receiving a satisfactory grade to enroll in the same credit course again:

- courses properly designated by a district as repeatable
- a subsequent enrollment due to significant lapse of time for:
 - legally mandated courses
 - courses necessary as a result of significant change in industry or licensure standards
 - courses needed due to recency requirements for a program
- variable-unit courses offered on an open-entry/open-exit basis
- documented extenuating circumstances
- occupational work experience courses
- students with disabilities repeating a special class

For an additional enrollment in the same course to be allowed, either the student must meet the circumstances specified for the exception or, in the case of repeatable courses, the course is properly designated as repeatable. Students must petition to be granted an exception that allows a subsequent enrollment. The petition is found online at: www.dvc.edu/petition-to-repeat. If permission to repeat is granted, both grades will appear on the transcript and will be used in the grade point average calculation. Only the first course completed will be applied towards a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

Repeating courses with substandard grade

Students are limited to enrolling in non-repeatable, credit courses a maximum of three times. When a substandard grade ("D", "F", or "NP") is earned or dropped with a "W". Students who have received a substandard grade in a course should see the "improving a grade point average" on page 31 for more information. Students must petition for a third enrollment. The petition is found online at: www.dvc.edu/petition-to-repeat.

Repeatable courses:

There are three types that may be designated as repeatable by all students:

1. courses for which repetition is necessary to meet the major requirement of California State University (CSU) or University of California (UC) for completion of a bachelor's degree,
2. intercollegiate athletics, and
3. intercollegiate academic or vocational competition.

See course descriptions to determine which courses may be repeated.

Limitations on enrollment

Enrollment limits have been placed on certain types of courses offered within the Contra Costa Community College District. Students are limited to a total of four enrollments in courses that are considered "active participatory courses that are related in content." At DVC, these limitations apply to certain courses with the subject codes:

- ART
- DANCE
- DRAMA
- KNACT
- KNCMB
- KNDAN
- MUSIC

Within these subjects, courses that are "active participatory courses that are related in content" have been assigned to "families" and students are limited to four aggregate enrollments within the "family". The "families" are district-wide and the limitation to four enrollments applies to courses taken at any college within the district. Refer to the discipline descriptions in this catalog for further information on "families" and enrollment limitations.

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 a 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.

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 in all courses.

Course prerequisites and/or co-requisites

Students enrolling in a course with a prerequisite must complete that prerequisite with a "C" grade or higher 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 has successfully completed the course in a prior term or is enrolled in the co-requisite course in the same term.

Please note: Dropping a class with a co-requisite will result in a drop from both classes.

If taken at an institution other than DVC, coursework used to meet a prerequisite must be completed at a regionally accredited institution (e.g., colleges, universities, or high schools) as recognized by the U.S. Department of Education. All coursework used from other institutions must be equated to a DVC course. Should it be determined that coursework is not equivalent to a DVC course, a student may opt to challenge the prerequisite by following the prerequisite challenge process.

To see which courses have prerequisites and/or co-requisites see the individual course offerings in the catalog.

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.

Challenging a prerequisite or co-requisite

Prerequisites and co-requisites may be challenged for the following conditions:

- 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.
- The student has the knowledge or ability to succeed in the course or program despite not meeting the prerequisite or co-requisite. The student has gained the knowledge and skills in another fashion, for example, through work or life experience.

Contact the Admissions and Records Office regarding information and forms for challenging prerequisites.

Acceptance of transfer credits and alternative credit

Transfer of credit and coursework

In order to evaluate for equivalent coursework, DVC accepts transcripts from institutions (e.g., colleges, universities, and high schools) from regional accrediting organizations as recognized by the U.S Department of Education. DVC also follows the recommendations of the American Association of Collegiate Registrars and Admissions and Records Officers. The official transcript from the other institution is required. Students must submit sealed unopened transcripts in person or by mail to the Admissions and Records Office of Diablo Valley College. Students must make a counseling appointment to review the evaluation of their transcripts. The appointment initiates the evaluation of the transcript by admissions and records; therefore, transcripts must be on file with admissions and records a minimum of two weeks prior to the scheduling of the appointment. It is recommended that students complete this process prior to or during their first term of enrollment at DVC.

Students are advised that:

1. Only courses and credit from accredited institutions (e.g., colleges, universities, and high schools) will be considered for transfer to DVC.
2. Upper division courses may be applied to degree, certificate, and transfer requirements under the following conditions:
 - a. Upper division coursework may be applied to satisfy DVC general education, major, and certificate requirements.
 - b. Upper division coursework may be applied to Intersegmental General Education Transfer Curriculum (IGETC) requirements under the following conditions:
 - I. When a University of California (UC) or California State University (CSU) campus has classified a course or series as upper-division but has requested that lower division transfer credit be allowed because an equivalent course is taught at a community college or because the preparation of the subject is desired prior to transfer. Current examples include economics, organic chemistry, and abnormal psychology.
 - II. When a non-California Community College (CCC) course is determined comparable to one taught and approved for IGETC at a CCC, it may be applied to IGETC regardless of its upper-division status.
 - III. When a CSU uses an upper-division course in its "lower division" General Educational pattern.
- c. Upper division coursework may be applied to California State University General Education (CSU GE) requirements under the following conditions:
 - I. When an upper-division course is equivalent to a lower-division course used to satisfy a CSU GE requirement.
 - II. When CSU uses an upper-division course in their CSU GE pattern.
3. Transfer credit and coursework may be applied towards the requirements of a degree or certificate program. Students are strongly encouraged to make a counseling appointment to determine applicability of courses taken elsewhere towards their program at DVC.
4. For Diablo Valley College general education requirements, DVC will accept any course approved as part of an IGETC agreement at any other accredited community college. Such coursework will be applied in the area or category for which it was approved at the college where the course was completed.
5. Courses completed at other community colleges as part of a Transfer Model Curriculum (TMC) aligned degree will be accepted for the requirements of the same TMC-aligned degree at Diablo Valley College. Courses with a Course Identification (C-ID) number are accepted to meet the area requirements of courses with the same C-ID number at DVC. Students are strongly encouraged to make a counseling appointment to determine whether there are specific course requirements at transfer institutions that will impact the courses they should select to meet their major requirements.
6. When courses completed at other institutions are determined to be equivalent to DVC courses but their unit value varies, students will not be required to "make up" missing units for DVC GE, major and/or certificate requirements. Students are always required to complete a minimum of 18 units for both major and general education requirements with three units in each GE area and 60 units for a degree.
7. Transfer coursework may be used to meet prerequisites at Diablo Valley College. See the information on prerequisites on page 17.
8. Transfer credit and DVC credit together determine the student's overall GPA when applied to academic program requirements and financial aid and athletic eligibility. DVC will use plus/minus grades in GPA calculation.
9. Transfer credit from colleges and universities with different credit systems (quarter units) are converted to semester hours of credit.

10. DVC may accept Advanced Placement (AP), International Baccalaureate (IB), and College Level Examination Program (CLEP) scores to meet DVC general education and Transfer Studies certificate of achievement requirements as well as CSU GE and IGETC requirements. See the information beginning on page 22 regarding how AP, IB, and CLEP examinations are accepted. In addition, such examinations may be accepted to meet the major requirements of local and transfer associate degrees and certificates, if approved through the course substitution process. Students are advised to meet with a counselor to determine how such substitutions fit into their educational plans for transfer. Students who wish to have AP, IB, or CLEP scores evaluated by DVC must submit official score reports for consideration.
11. Coursework and credits that may transfer will be determined based on an evaluation that may include but is not limited to: course content, objectives, student learning outcomes, units, grades, course level and applicability toward degree, certificate or prerequisite requirements as well as CSU GE and IGETC requirements. Should it be determined that coursework cannot be used for transfer, a student may explore other options (e.g., credit by exam, IGETC Certification in a Language Other than English). Students are encouraged to meet with a counselor to explore all possible options.
12. Foreign transfer credit may be applied toward the 60-unit requirement for the DVC associate degree only after an evaluation by an approved credential evaluation service (for a list see: www.naces.org). Students are advised to meet with a counselor and obtain guidelines from DVC admissions and records before requesting such an evaluation. Evaluations must include a course-by-course report with unit equivalencies, distinguishing between upper and lower division coursework and including letter grades. Students who wish foreign coursework to be used to meet specific course requirements for prerequisites, DVC majors, general education, or certificate requirements must provide detailed course descriptions. Foreign coursework cannot be used to certify California State University General Education (CSU GE) or IGETC requirements, except for the IGETC Language Other Than English requirement. Transfer of credit policy varies from institution to institution. Students who intend to transfer are advised to review the policy of the receiving institution.

Course substitution

Students may petition to substitute coursework completed within the Contra Costa Community College District and at a regionally accredited institution (e.g., colleges, universities, and high schools) as recognized by the U.S. Department of Education to meet DVC degree and certificate requirements. In order to initiate the process, students must submit the Petition for Course

Substitution to the DVC Admissions and Records Office. The Admissions and Records Office will forward the Petition for Course Substitution to the appropriate faculty for approval. Course substitutions may be granted for courses that may be comparable but are not equivalent in content to a program requirement.

Students who wish to transfer credit for a course completed at another community college as part of an associate degree for transfer (ADT) that does not have a course identification (C-ID) number or is not equivalent to a DVC course should complete the course substitution process. Students are strongly encouraged to make a counseling appointment to determine whether there are specific course requirements at transfer institutions that will impact the courses they should substitute to meet their major requirements.

Students are advised to meet with a counselor or program advisor to discuss the course substitution option and to complete the petition process well before they plan to apply for a degree or certificate. Students may be approved to substitute a course prior to completing the course. Students petitioning to substitute coursework from outside the district must provide official transcripts from such institutions; it is not necessary to provide documentation to substitute coursework completed within the Contra Costa Community College District.

Only courses and credit from a regionally accredited institution (e.g., colleges, universities, and high schools) as recognized by the U.S. Department of Education will be considered for application to DVC degree and certificate requirements. When courses are substituted and their unit value varies, students will not be required to “make up” missing units for DVC GE, major, and/or certificate requirements. Students are always required to complete a minimum of 18 units for major and general education requirements, with three units in each area, and 60 units for a degree.

For certificate programs, at least twenty-five percent of the required courses must be completed at DVC.

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

Students, because of their disabilities, may be 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. To initiate an application, please make a counseling appointment with a DSS counselor by calling 925-969-2140.

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.

Attendance policy

Students are expected to attend all class meetings, regardless of whether the instructor takes attendance. The instructor may drop students who miss more than the equivalent of two weeks of a term-length course. Students must contact the instructor to inform him or her of an absence. The college does not 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, the student will not be penalized for the absence. Students must be allowed to make up any class work or point earning opportunities that they have missed (including exams, quizzes, and participation points) provided they have notified their instructor a minimum of two weeks in advance of their impending absence (or as soon as possible if there are extenuating circumstances such as post-season intercollegiate competition, rain make-ups, or field trips within the first two weeks of the term).

CREDIT FOR PRIOR LEARNING

DVC recognizes that some students have already reached a portion of their educational objectives through prior learning and experiences. Credit for Prior Learning is college credit awarded for college-validated knowledge and skills gained outside the classroom. DVC is committed to providing students with equitable access to prior learning assessments that can help students to achieve program completion.

Criteria for Credit for Prior Learning

Students:

- The student must be currently registered in the college, in good standing, and have a current educational plan on file.
- A student who is a veteran or an active-duty member of the armed forces, holds industry-recognized credentials, or requests credit for a course based on their prior learning, will be referred to the college's authority for assessment of prior learning upon completion of an educational plan.

Courses:

- Credit may be awarded for prior experience or prior learning only for individually identified courses with subject matter similar to that of the individual's prior learning.
- The course must be listed in the current college catalog.
- The course must be designated as eligible for credit for prior learning by members of the division faculty and approved by the Curriculum Committee.
- The assessment must be approved by faculty in the course or program involved.

Restrictions:

- The determination to offer and award credit for prior learning rests solely on the discretion of the discipline faculty, including course-to-course award of credit for standardized exams such as AP, IB, and CLEP.
- The nature and content of assessments will be determined by faculty in the discipline who normally teach the course for which credit is to be granted.
- An assessment conducted at a location other than the college may be accepted.
- Credits acquired by assessment of prior learning will not be counted in determining the 12 semester hours of credit in residence required for an associate degree.
- Students must complete at least 25% of the required courses for a certificate program at DVC.
- Credits earned by prior learning assessment cannot be used to fulfill any requirements for federal financial aid.

Prior Learning may be obtained by one of the following:

- Achievement of a satisfactory score on an Advanced Placement (AP) examination administered by the College Entrance Examination Board
- Achievement of a satisfactory score on a high-level International Baccalaureate (IB) examination
- Achievement of a satisfactory score on the College-Level Examination Program (CLEP) examination
- Evaluation of Joint Services Transcripts
- Evaluation of a student-created portfolio
- Evaluation of industry-recognized credential documentation
- Satisfactory completion of an examination administered by the college in lieu of completion of a course listed in the current college catalog
- Achievement of an examination administered by other agencies approved by the college
- Assessment approved or conducted by proper authorities of the college

Upon a student's demonstration of sufficient mastery through an examination or assessment, award of credit will be considered for:

- California Intersegmental General Education Transfer Curriculum (IGETC),
- California State University General Education (CSUGE) Breadth
- Local community college general education requirements or requirements for a student's chosen program
- Electives for student who do not require additional general education or program credits to meet their goals

PRIOR LEARNING GRADING AND TRANSCRIPTION

- Grading will be according to the regular grading system, as specified in the College Catalog.
- Students may request a “pass-no pass” option if that option is available for the course. Credit limitations may apply at the UC/CSU.
- Students will be given the opportunity to accept, decline, or appeal the grade assigned by faculty.
- The student’s academic record will be clearly annotated to reflect that credit was earned through one of the assessments of prior learning options listed below.

PROCEDURES FOR STUDENTS TO ATTAIN CREDIT FOR PRIOR LEARNING

Students may request credit for prior learning by completing an education plan and submitting a Petition for Prior Learning form to the college Admissions and Records Office.

CREDIT FOR PRIOR LEARNING OPTIONS

Approved Standardized Examinations

Students requesting Credit for Prior Learning using Advanced Placement (AP), International Baccalaureate (IB), and/or College-Level Examination Program (CLEP) may receive credit for a satisfactory score in the following circumstances:

- Official AP, IB, and/or CLEP transcripts are on file in the Admissions and Records Office.
- The student achieved a minimum acceptable score on the examination as specified in the college catalog.

Credit by Examination

Students requesting Credit by Examination may receive credit for satisfactory completion of an examination administered by a college department in lieu of completion of a course listed in the current catalog in the following circumstances:

- The student demonstrates that s/he is qualified, through previous training, experience or instruction, to successfully complete such examination.
- A student may challenge a course for credit by examination only one time.
- The determination to offer credit by examination rests solely on the discretion of discipline faculty.
- A separate examination will be conducted for each course for which credit is to be granted.
- The student will be charged a fee for the examination equivalent to the enrollment fee for the course, with exception granted to adult school students who are eligible to receive college credit per an active articulation agreement with DVC.
- The student may not be enrolled in, nor have received credit for, a more advanced course in the same course sequence (may be waived by department).

Industry-Recognized Credentials

Students requesting Credit for Prior Learning using industry recognized credential(s) will receive credit as recommended by the appropriate department chair or faculty designee. The knowledge and skills validated by the industry-recognized credential(s) must align with the content of the course for which credit is being requested. Credit will be awarded in the following circumstances:

- The student’s industry-recognized credential is on file in the Admissions and Records Office.
- The discipline faculty has evaluated the industry-recognized credential and verified that it effectively demonstrates sufficient mastery of course content as set forth in the course outline of record.

Military Service/Training

Students requesting Credit for Prior Learning using Joint Service Transcripts shall receive credit as recommended by the American Council on Education (ACE) Directory and approved by the appropriate discipline faculty of the college under the following circumstances:

- Official transcripts must be on file in the Admissions and Records Office. These may include Joint Services Transcript (JST), Sailor/Marine American Council on Education Registry Transcript (SMART), Army and American Council on Education Registry Transcript Service (AARTS), Community College of the Air Force (CCAF), Coast Guard Institute (CGI), DANTES/US-AFI, Defense Language Institute Foreign Language Transcripts (DLIFLC), Defense Manpower Data Center (DMDC), DLPT Examinee Results, DA Form 330 Language Proficiency Questionnaire, or verified copies of DD214 or DD295 military records.
- Credit course equivalency shall be determined by the faculty of the appropriate discipline.
- 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:
 - 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 DD214 (separation papers) with a discharge other than dishonorable, to the Admissions and Records Office.
 - Three of the six elective units may be applied towards the fulfillment of CSU General Education requirement “E. Lifelong Understanding and Self Development.”

Student-Created Portfolio Assessment

Students requesting Credit for Prior Learning using a student-created portfolio will receive credit as recommended by the appropriate department chair or faculty designee in the following circumstances:

- A department-approved portfolio assessment rubric for the course is on file.

The department chair or faculty designee determines that the student-created portfolio adequately measures sufficient mastery of the course content as set forth in the course outline of record.

Diablo Valley College

Credit for Advanced Placement (AP) Exams

Students may earn credit for College Entrance Examination Board Advanced Placement (AP) Exams with scores of 3, 4, or 5. AP credit can be used to meet IGETC, CSU GE, and AA/AS general education (GE). Students must have the College Board send AP exam results to the Admissions Office (hand-carried copies will not be accepted) for use on the AA/AS or GE patterns. **A student petition must be submitted through the Admissions Office to use AP credit to satisfy prerequisites and/or apply for course equivalencies.** Note: A student planning to transfer to a four-year college or university should consult that transfer institution's catalog regarding its awarding of Advanced Placement credit. Credit awarded at Diablo Valley College for the completion of a CSU general education area and/or IGETC is as noted below. AP exams may not satisfy the requirements for specific majors at four-year colleges. Please consult with a counselor or university representative. **Information contained in this chart is subject to change at any time – Please consult with a counselor.**

All Units Denote Semester.

AP Exam	Minimum AP Score	AA/AS DVC GE Area Units	Units for DVC Associate Degree	CSU GE Certification Area Units	CSU Units Towards Transfer	IGETC GE Certification Area Units	UC Units Towards Transfer	UC Limitations Toward Transfer Units
Art History	3	Area III – Arts and Humanities 3 units	6	C1 or C2 3 units	6	3A or 3B 3 units	5.3	
Art, Studio	3	No GE Area	3	No GE Area	3	No GE Area	5.3	5.3 semester units max for all exams
2-D Design	3	No GE Area	3	No GE Area	3	No GE Area	5.3	
3-D Design	3	No GE Area	3	No GE Area	3	No GE Area	5.3	
Drawing	3	No GE Area	3	No GE Area	3	No GE Area	5.3	
Biology	3	Area II – Natural Sciences 4 units	6	B2 and B3 4 units	6	5B and 5C 4 units	5.3	
Chemistry	3	Area II – Natural Sciences 4 units	6	B1 and B3 4 units	6	5A and 5C 4 units	5.3	
Computer Science A¹	3	No GE Area	6 units max for both Computer Science exams	No GE Area	3 ¹	No GE Area	5.3 (2 semester units prior to fall 2018)	
Computer Science AB¹	3	No GE Area	6 units max for both Computer Science exams	No GE Area	6 ¹	No GE Area	2.6	
Computer Science Principles¹	3	Area 1B – Communication & Analytical Thinking Area 1C – Mathematical Comprehension 3 units	6	B4 3 units	6 ¹	No GE Area	5.3	
Economics	3	Area IV – Social and Behavioral Sciences 3 units	3	D 3 units	3	4 3 units	2.6	
Macroeconomics	3	Area IV – Social and Behavioral Sciences 3 units	3	D 3 units	3	4 3 units	2.6	
Microeconomics	3	Area IV – Social and Behavioral Sciences 3 units	3	D 3 units	3	4 3 units	2.6	
English	3	Area 1A – English Composition 3 units	6	A2 3 units	6	1A 3 units	5.3	5.3 semester units max for both English Language/Comp and English Lit/Comp
English Language and Composition	3	Area 1A – English Composition 3 units	6	A2 and C2 6 units	6	1A or 3B 3 units	5.3	
English Literature and Composition	3	Area 1A – English Composition and Area III – Arts and Humanities 6 units	6	A2 and C2 6 units	6	1A or 3B 3 units	5.3	
Environmental Science	3	Area II – Natural Sciences 4 units	4	B1 and B3 4 units	4	5A and 5C 3 units	2.6	
Government and Politics	3	Area IV – Social and Behavioral Sciences 3 units	3	D 3 units	3	4 3 units	2.6	
Comparative	3	Area IV – Social and Behavioral Sciences 3 units	3	D 3 units	3	4 3 units	2.6	
United States	3	Area IV – Social and Behavioral Sciences 3 units	3	D and US-2 3 units	3	4 and US-2 3 units	2.6	
European History	3	Area III – Arts and Humanities or Area IV – Social and Behavioral Sciences 3 units	6	C2 or D 3 units	6	3B or 4 3 units	5.3	
United States History	3	Area III – Arts and Humanities or Area IV – Social and Behavioral Sciences 3 units	6	(C2 or D) and US-1 3 units	6	(3B or 4) and US-1 3 units	5.3	
World History – Modern (Formerly World History)	3	Area III – Arts and Humanities or Area IV – Social and Behavioral Sciences 3 units	3 (6 units if taken prior to fall 2019)	C2 or D 3 units	3 (6 units if taken prior to fall 2019)	3B or 4 3 units	5.3	

¹ If a student passes more than one AP exam in calculus or computer science, only one examination may be applied to baccalaureate.

AP Exam	Minimum AP Score	AA/AS DVC GE Area Units	Units for DVC Associate Degree	CSU GE Certification Area Units	CSU Units Towards Transfer	IGETC GE Certification Area Units	UC Units Towards Transfer	UC Limitations Toward Transfer Units
Human Geography	3	Area IV - Social and Behavioral Sciences 3 units	3	D 3 units	3	4 3 units	2,6	
Language Other than English	3	Area III - Arts and Humanities 3 units	6	C2 3 units	6	3B and 6A 3 units	5,3	
Chinese Language and Culture	3	Area III - Arts and Humanities 3 units	6	C2 3 units	6	3B and 6A 3 units	5,3	
French Language and Culture	3	Area III - Arts and Humanities 3 units	6	C2 3 units	6	3B and 6A 3 units	5,3	
German Language and Culture	3	Area III - Arts and Humanities 3 units	6	C2 3 units	6	3B and 6A 3 units	5,3	
Italian Language and Culture	3	Area III - Arts and Humanities 3 units	6	C2 3 units	6	3B and 6A 3 units	5,3	
Japanese Language and Culture	3	Area III - Arts and Humanities 3 units	6	C2 3 units	6	3B and 6A 3 units	5,3	
Latin	3	Area III - Arts and Humanities 3 units	6	C2 3 units	6	3B and 6A 3 units	5,3 (2.6 units if taken prior to fall 2013)	
Spanish Language	3	Area III - Arts and Humanities 3 units	6	C2 3 units (6 units if taken prior to spring 2014)	6	3B and 6A 3 units	5,3	
Spanish Language and Culture (Only if taken prior to spring 2014)	3	Area III - Arts and Humanities 3 units	6	C2 3 units	6	3B and 6A 3 units	5,3	
Spanish Literature	3	Area III - Arts and Humanities 3 units	6	C2 3 units (6 units if taken prior to spring 2013)	6	3B and 6A 3 units	5,3	
Spanish Literature and Culture	3	Area III - Arts and Humanities 3 units	6	C2 3 units	6	3B and 6A 3 units	5,3	
Mathematics¹	3	Area IB - Communication & Analytical Thinking and Area IC - Mathematics Comprehension 3 units	3 6 units max for all Calculus exams	B4 3 units	3 ¹	2A 3 units	2,6	5,3 semester units max for both Math AB and the Math BC exams; 2,6 units for both Math AB and the Math AB subscore.
Calculus AB^{2,3}	3	Area IB - Communication & Analytical Thinking and Area IC - Mathematics Comprehension 3 units	6 6 units max for all Calculus exams	B4 3 units	6 ¹	2A 3 units	5,3	
Calculus BC/AB Subscore⁴	3	Area IB - Communication & Analytical Thinking and Area IC - Mathematics Comprehension 3 units	3 6 units max for all Calculus exams	B4 3 units	3 ¹	2A 3 units	5,3	
Music Theory	3	Area III - Arts and Humanities 3 units	6	No GE Area	6	No GE Area	5,3	Credit for full Music Theory exam. Students who earn only a subscore will not receive exam credit.

1 If a student passes more than one AP exam in calculus or computer science, only one examination may be applied to baccalaureate.
 2 Calculus AB Exam with a score of 3 or higher satisfies math prerequisite for DVC's MATH 140, 192, 193 and not course equivalency.
 3 Calculus BC Exam with a score of 3 or higher satisfies math prerequisite for DVC's MATH 140, 194, 195, 289, 292 and not course equivalency.
 4 Calculus BC/AB Subscore Exam with a score of 3 or higher satisfies math prerequisite for DVC's MATH 192, 193 and not course equivalency.

AP Exam	Minimum AP Score	AA/AS DVC GE Area Units	Units for DVC Associate Degree	CSU GE Certification Area Units	CSU Units Towards Transfer	IGETC GE Certification Area Units	UC Units Towards Transfer	UC Limitations Toward Transfer Units
Physics⁵	3	Area II - Natural Sciences 4 units	4 6 units max for all Physics exams	B1 and B3 ² 4 units	4	5A and 5C 4 units	5.3	5.3 semester units max for all Physics exams
		Area II - Natural Sciences 4 units	4 6 units max for all Physics exams	B1 and B3 ² 4 units	4	5A and 5C 4 units	5.3	
		Area II - Natural Sciences 4 units	6 6 units max for all Physics exams	B1 and B3 ² 4 units	6	5A and 5C 4 units	5.3	
		Area II - Natural Sciences 4 units	4 6 units max for all Physics exams	B1 and B3 ² 4 units	4	5A and 5C 3 units	2.6	
		Area II - Natural Sciences 4 units	4 6 units max for all Physics exams	B1 and B3 ² 4 units	4	5A and 5C 3 units	2.6	
Physics C: Electricity and Magnetism⁶	3	Area IV - Social and Behavioral Sciences 3 units	3	D 3 units	3	4 3 units	2.6	
		PSYCH 101 Course Equivalency and Satisfies Psych prerequisite for PSYCH 130, 215 Maximum credit for GE and course equivalent, 3 units ⁶						
Seminar	3	No GE Area	3	No GE Area	3			
Statistics	3	Area IB - Communication & Analytical Thinking and Area IC - Mathematics Comprehension 3 units	3	B4 3 units	3	2A 3 units	2.6	

⁵ If a student passes more than one AP exam in physics, only six units of credit may be applied to the baccalaureate, and only four units of credit may be applied to a certification in GE Breadth.
⁶ AP Psychology Exam with a score of 3 or higher satisfies psychology prerequisite for DVC's PSYCH 130, 215 and DVC's PSYCH 101 course equivalency. See a counselor about applying AP Psychology credits toward major requirements and/or prerequisites. Maximum credit for GE and course equivalent, 3 units.

Diablo Valley College Credit for College-Level Examination Program (CLEP) Exams

Students may earn credit for College-Level Examination Program (CLEP) exams with scores of 50 or higher. CLEP credit can be used to meet CSU GE and AA/AS general education (GE) and/or major requirements. Students must have College Board send CLEP exam results to the Admissions Office (hand-carried copies will not be accepted) for use on the AA/AS or GE patterns. **A student petition must be submitted through the Admissions Office to use CLEP credit to satisfy prerequisites.** Note: A student planning to transfer to a four-year college or university should consult that transfer institution's catalog regarding its awarding of CLEP credit. Credit awarded at Diablo Valley College for the completion of a CSU general education area is as noted below. CLEP exams may not satisfy the requirements for specific majors at four-year colleges. Please consult with a counselor or university representative. UC does not accept CLEP exams. **Information contained in this chart is subject to change at any time – Please consult with a counselor.**

All Units Denote Semester.

CLEP Exam	CLEP Score	AA/AS DVC GE Area Units	Units for DVC Associate Degree	CSU GE Certification Area Units	CSU Units Towards Transfer
American Government	50	Area IV - Social and Behavioral Sciences 3 units	3	D 3 units	3
Biology	50	Area II – Natural Sciences 3 units	3	B2 3 units	3
Business	50	No GE Area	3	No GE Area	3
Financial Accounting	50	No GE Area	3	No GE Area	3
Information Systems and Computer Applications	50	No GE Area	3	No GE Area	3
Introductory Business Law	50	No GE Area	3	No GE Area	3
Principles of Accounting	50	No GE Area	3	No GE Area	3
Principles of Management	50	No GE Area	3	No GE Area	3
Principles of Marketing	50	No GE Area	3	No GE Area	3
Chemistry	50	Area II – Natural Sciences 3 units	3	B1 3 units	3
Economics	50	Area IV - Social and Behavioral Sciences 3 units	3	D 3 units	3
Principles of Macroeconomics	50	Area IV - Social and Behavioral Sciences 3 units	3	D 3 units	3
Principles of Microeconomics	50	Area IV - Social and Behavioral Sciences 3 units	3	D 3 units	3
English¹	50	Area III – Arts and Humanities 3 units	3	C2 3 units	3
American Literature	50	Area III – Arts and Humanities 3 units	3	C2 3 units	3
Analyzing and Interpreting Literature	50	Area III – Arts and Humanities 3 units	3	C2 3 units	3
English Literature	50	No GE Area	3	No GE Area	3
United States I	50	Area IV - Social and Behavioral Sciences 3 units	3	D and US-1 3 units	3
United States II	50	Area IV - Social and Behavioral Sciences 3 units	3	D and US-1 3 units	3
Western Civilization I	50	Area III - Arts and Humanities or Area IV - Social and Behavioral Sciences 3 units	3	C2 or D 3 units	3
Western Civilization II	50	Area IV - Social and Behavioral Sciences 3 units	3	D 3 units	3
Human Growth and Development	50	Area IV - Social and Behavioral Sciences 3 units	3	E 3 units	3
Humanities	50	Area III – Arts and Humanities 3 units	3	C2 3 units	3

¹ CLEP College Composition, College Composition – Modular, English Composition (no essay), English Composition (with essay) and Freshman College Composition are not accepted for general education units or elective credits.

² CLEP Social Sciences and History exam is not accepted for general education units or elective credits.

CLEP Exam	CLEP Score	AA/AS DVC GE Area Units	Units for DVC Associate Degree	CSU GE Certification Area Units	CSU Units Towards Transfer	
Language Other than English ³	French Level I ³	No GE Area	6	No GE Area	6	
	French Level II ³	Area III – Arts and Humanities 3 units	9 (12 if taken prior to fall 2015)	C2 3 units	9 (12 if taken prior to fall 2015)	
	German Level I ³	No GE Area	6	No GE Area	6	
	German Level II ³	Area III – Arts and Humanities 3 units	9 (12 if taken prior to fall 2015)	C2 3 units	9 (12 if taken prior to fall 2015)	
	Spanish Level I ³	No GE Area	6	No GE Area	6	
	Spanish Level II ³	Area III – Arts and Humanities 3 units	9 (12 if taken prior to fall 2015)	C2 3 units	9 (12 if taken prior to fall 2015)	
	Spanish with Writing I ³	No GE Area	6	No GE Area	6	
	Spanish with Writing II ³	Area III – Arts and Humanities 3 units	9 (12 if taken prior to fall 2015)	C2 3 units	9 (12 if taken prior to fall 2015)	
	Mathematics ⁴	Calculus	Area IB – Communication and Analytical Thinking and Area IC – Mathematics Comprehension 3 units	3	B4 3 units	3
		College Algebra	Area IB – Communication and Analytical Thinking and Area IC – Mathematics Comprehension 3 units	3	B4 3 units	3
College Algebra – Trigonometry		Area IB – Communication and Analytical Thinking and Area IC – Mathematics Comprehension 3 units	3	B4 3 units	3	
Pre-Calculus ⁵		Area IB – Communication and Analytical Thinking and Area IC – Mathematics Comprehension 3 units Satisfies Math prerequisite for MATH 140, 192 ⁵	3	B4 3 units	3	
Natural Sciences			Area II – Natural Sciences 3 units	3	B1 or B2 3 units	3
		Introductory Psychology	Area IV – Social and Behavioral Sciences 3 units	3	D 3 units	3
		Introduction to Educational Psychology	No GE Area	3	No GE Area	3
Introductory Sociology			Area IV – Social and Behavioral Sciences 3 units	3	D 3 units	3

³ If a student passes more than one CLEP test in the same language other than English (e.g., two exams in French), then only one examination may apply to the baccalaureate. For each test in a language other than English, a passing score of 50 is considered "Level I" and earns six units of baccalaureate credit; the higher score listed for each test is considered "Level II" and earns additional units of credit and placement in Area C2 of GE Breadth, as noted.

⁴ CLEP College Mathematics exam is not accepted for general education units or elective credits.

⁵ CLEP Pre-Calculus Exam with a score of 50 or higher satisfies math prerequisite for DVC's MATH 140, 192 and not course equivalency.

Diablo Valley College Credit for International Baccalaureate (IB) Exams

Students may earn credit for International Baccalaureate (IB) Higher Level exams with scores of 5, 6, or 7. IB credit can be used to meet IGETC, CSU GE, and AA/AS general education (GE). Students must have the International Baccalaureate Organization send IB exam results to the Admissions Office (hand-carried copies will not be accepted) for use on the AA/AS or GE patterns. **Information contained in this chart is subject to change at any time – Please consult with a counselor.**

All Units Denote Semester.

IB Exam	Minimum IB Score	AA/AS DVC GE Area Units	Units for DVC Associate Degree	CSU GE Certification Area Units	CSU Units Towards Transfer	IGETC Certification Area Units	UC Units Towards Transfer	UC Limitations Toward Transfer Units
Biology HL	5	Area II - Natural Sciences 3 units	6	B2 3 units	6	5B 3 units	5.3	The units granted for IB exams are not counted toward the maximum number of credits required for declaration of a major or the maximum number of units a student may accumulate prior to graduation. Students who enter the UC with IB credit do not have to declare a major earlier than other students, nor are they required to graduate earlier.
Chemistry HL	5	Area II - Natural Sciences 3 units	6	B1 3 units	6	5A 3 units	5.3	
Economics HL	5	Area IV - Social and Behavioral Sciences 3 units	6	D 3 units	6	4 3 units	5.3	
Geography HL	5	Area IV - Social and Behavioral Sciences 3 units	6	D 3 units	6	4 3 units	5.3	
History (any region) HL	5	Area III - Arts and Humanities or Area IV - Social and Behavioral Sciences 3 units	6	C2 or D 3 units	6	3B or 4 3 units	5.3	
Language A Literature HL (Any language)	5 ¹	Area III - Arts and Humanities 3 units	6	C2 3 units	6	3B 3 units	5.3	Note: No credit is awarded for the Mathematics Applications and Interpretations exam offered 2021 and later.
Language A1 [any language] HL prior to fall (2013)	5 ¹	Area III - Arts and Humanities 3 units	6	C2 3 units	6	3B 3 units	5.3	
Language A Language and Literature HL (Any language)	5 ¹	Area III - Arts and Humanities 3 units	6	C2 3 units	6	3B and 6A 3 units	5.3	
Language A2 [any language] HL prior to fall (2013)	5 ¹	Area III - Arts and Humanities 3 units	6	C2 3 units	6	3B and 6A 3 units	5.3	
Language A Literature HL ² (Any language except English)	5 ¹	Area III - Arts and Humanities 3 units	6	C2 3 units	6	3B and 6A 3 units	5.3	
Language A Language and Literature HL ² (Any language except English)	5 ¹	Area III - Arts and Humanities 3 units	6	C2 3 units	6	3B and 6A 3 units	5.3	
Language B (any language except English) HL ²	5 ¹	No GE Area	6	No GE Area	6	6A 3 units	5.3	
Mathematics HL	5 ¹	Area IB - Communication and Analytical Thinking and Area IC - Mathematics Comprehension 3 units	6	B4 3 units	6	2A 3 units (If taken prior to fall 2020)	5.3	
Mathematics HL: Analysis and Approaches	5 ¹	Area IB - Communication and Analytical Thinking and Area IC - Mathematics Comprehension 3 units	6	B4 3 units	6	No Credit	5.3	
Mathematics HL: Applications and Interpretation ³	5 ¹	Area IB - Communication and Analytical Thinking and Area IC - Mathematics Comprehension 3 units	6	B4 3 units	6	No Credit	No Credit	
Physics HL	5	Area II - Natural Sciences 3 units	6	B1 3 units	6	5A 3 units	5.3	
Psychology HL	5	Area IV - Social and Behavioral Sciences 3 units	3	D 3 units	3	4 3 units	5.3	
Theatre HL	5 ¹	Area III - Arts and Humanities 3 units	6	C1 3 units	6	3A 3 units	5.3	

1 For CSU and DVC, an IB score of 4 or higher meets this requirement.
 2 The IB curriculum offers language at various levels for native and non-native speakers. Language B courses are offered at the intermediate level for non-natives. Language A1 and A2 are advanced courses in literature for native and non-native speakers, respectively.
 3 No credit awarded by UC for the IB Mathematics HL: Applications and Interpretations exam offered 2021 and later.

Leave of absence

Students who need to take a leave of absence during the term may obtain the request form from the DVC website at www.dvc.edu/studentleave and then receive written approval from each of their instructors. Then the student must discuss the petition with a counselor and obtain their signature, as well as the signature of 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 more than the equivalent of two weeks of instruction without an approved leave of absence.

Grading

Grade policy

The assignment of grades is the exclusive responsibility of the individual instructor. DVC grading policies are based on the faculty’s philosophy, California Administration Code, Title 5 (Sec. 51300-51325), and the Contra Costa Community College District Board Policy 4001.

DVC uses the following evaluative grades and non-evaluative symbols:

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

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:

An “I” followed by a grade of B, C, D, F, or N is an incomplete grade that has not yet expired. The grade that follows will be issued if the incomplete is not made up or the incomplete contract expires.

I — — Incomplete _____	0
IB	
IC	
ID	
IF	
IN	
P — — Pass _____	0
<i>(At least satisfactory or a C grade; units not counted in GPA)</i>	
NP — — No Pass _____	0
<i>(Less than satisfactory; units not counted in GPA)</i>	

The following are non-evaluative symbols:

W — — Withdrawal _____	0
<i>(Assigned to students who withdraw from a class within the allowed time.)</i>	
EW — — Excused Withdrawal _____	0
<i>(Assigned to students who withdraw due to documented extenuating circumstances - by appeal only)</i>	
MW — — Military Withdrawal _____	0
<i>(Assigned when a student who is a member of an active or reserve United States military service receives orders compelling a withdrawal from courses.)</i>	
IP — — In Progress _____	0
<i>(Indicates the course was in progress beyond the end of the term.)</i>	
RD — — Report Delayed _____	0
<i>(Indicates delay in reporting grade.)</i>	

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

Academic honors

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

Graduation honors

Graduation honors will appear on a student’s transcript if a 3.5 grade point average in all college work (excluding non degree applicable and upper division courses) is maintained at the end of the term in which the student has applied to graduate. A student intending to graduate in the spring 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 term to have honors appear on the student’s transcript.

Incomplete grades

Incomplete grades are assigned only in cases of emergency such as accident, illness, or family emergency. An incomplete contract must be completed by the instructor and accepted by the student at the time the grade is posted. The instructor, student, and division dean must all sign the contract, which is then submitted to the Admissions and Records Office. Students who receive an incomplete grade cannot register for the same course in which they received the incomplete. The incomplete grade must be resolved no later than one calendar year following the grade assignment or it will automatically revert to the alternate grade assigned by the instructor per the contract. Extensions to the one-year deadline may be granted for good cause with instructor approval. The instructor must notify the Admissions and Records Office of the extension prior to the expiration of the incomplete.

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" indicates that a student may decide to select the Pass/No Pass option rather than to receive a letter grade for the course. To select the P/NP option, students must submit a P/NP Request Form to Admissions and Records before the deadline. If students do not choose the P/NP option before the deadline, they will be issued a letter grade for the course. Students should discuss this choice with a counselor. After the deadline has passed, the grading choice may not be reversed.

Pass/No Pass Deadlines

- Full-term classes: the Friday before the last day of the course
- Short-term and summer classes: the second to last day of the course

Noncredit courses

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

Fairness in grading

During the first week of each class, instructors will give their students a copy of their class syllabus, which will include their grading policies. Students may expect instructors to:

- record the student's grade for each oral and written test or report that will affect the final grade, notify the student of the grade, and if necessary, review the results with the student;
- evaluate the student within the first quarter of the class and notify the student of the results of the evaluation;
- count a final examination for no more than half the course grade;
- base final grades on at least three of the student's tests and/or reports (exception in cases of violations of DVC's academic dishonesty procedure 4001.04).

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

Grade corrections

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

Note: Except in extenuating circumstances such as serious illness, grade corrections may not be made from "F" to "W." It is the student's responsibility to withdraw from a 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 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 Academic 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 semester, 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 semester. In this event, the committee shall meet within the first four weeks of the new semester. If time constraints prevent the meeting at the end of spring semester, the meeting shall be held within the first 20 instructional days of the fall semester. If this delay would result in hardship for the student or faculty member, 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 Academic 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 a student repeats the same course one time, the previous grade will not be used in the GPA calculation. Should the student repeat the same course two or more times, only the two previous grades may be disregarded from the GPA calculation. When a course is repeated all grades will appear on the transcript. An "R" notation will appear next to the first grade, (and a second grade if the course is attempted three times) indicating that the course has been repeated.

Academic renewal without course repetition

Academic renewal allows students to have up to 30 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 least 12 units of satisfactory work with 3.5 cumulative grade point average and up to 20 units of satisfactory work with 2.0 cumulative grade point average 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 term after the substandard grade is received, in-progress terms cannot be included). The student must not have received any "D's," "F's" or "NP" since the substandard work (minimum 2.0 since substandard work). RD and I grades must be resolved before submitting a petition. 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.

Once applied, academic renewal may not be reversed.

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 record in class using an audio or video device.

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

Instructors' 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 an Instructor Reinstatement 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. Requests to change a grade to a W due to extenuating circumstances follow the grade change policy time line and must be made within one year of the grade being assigned.

Alert and dismissal policy

Academic alert

Students are expected to make steady progress toward their educational goals by maintaining a "C" average or higher 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 alert. Students on stage one alert will be blocked from enrollment in future terms and are required to complete a workshop or schedule a meeting with a counselor. Students on stage two alert will be blocked from enrollment in future terms until they have either completed a workshop or arranged a meeting with a counselor to develop a plan for improvement.

Academic dismissal

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

Progress alert

Students are expected 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 alert. Students are placed on progress alert if the number of units given a "W," "I," or "NP" on the student's transcript amounts to at least 50 percent of the units attempted (this includes letter grades and units assigned the symbols "W," "I," "P," "NP," "IP," or "RD"). Students on stage one alert will be blocked from enrollment in future semesters and are required to complete the online student success workshop and complete a short quiz or schedule a meeting with a counselor. Students on stage two alert will be blocked from enrollment in future terms until they have either arranged a meeting with a counselor to develop a plan for improvement or complete the online student success workshop and complete a short quiz.

Progress dismissal

Students are subject to progress dismissal if, after they have been on progress alert 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 alert. Students on dismissal status may be prohibited from attending DVC for up to two consecutive terms.

Appeals and readmission

Students who are placed on alert or dismissal are notified in writing. The notification includes the process for appealing the dismissal to the dean of counseling and student success programs. Dismissed students who wish to appeal their dismissal status must file a "request for reinstatement" form with the dean of counseling and student success programs and meet with a counselor and develop an educational plan. 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.

STUDENT RIGHTS AND RESPONSIBILITIES

Academic integrity 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.

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. Copies of the district and college policies are available at the Student Life 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.

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. **Prerequisites:** A student may challenge a required course prerequisite as long as they meet the challenge conditions. (Please refer to the "prerequisite" section, page 17.)
2. **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 coursework;
- to complete a first-term 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 coursework on time and complete their courses each term. Students are expected to maintain regular progress toward their educational goal;
- to seek counseling at least once per term 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,
 - 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;
- is enrolled in a job-related course;
- 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;
- 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 counseling and enrollment services 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.

Sexual harassment policy

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

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

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

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

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

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

Student Code of Conduct - Student Services Procedure 3027

I. Introduction

The Student Code of Conduct is statements depicting the Contra Costa Community College District's expectations regarding student standards of conduct, in both academic and nonacademic environments. 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, discrimination, intimidation, and bullying.

The primary purpose of the Student Code of Conduct is to support and protect students and to ensure their academic and personal success throughout their attendance at any of the colleges within the District. In addition, the Student Code of Conduct intends to educate students about rights, responsibilities, and violations under the Student Code of Conduct and the associated consequences. The Student Code of Conduct includes a defined process for the fair and impartial review and determination of alleged improper student behavior. The Student Code of Conduct also specifies the various sanctions that may be imposed on District students for violations of the Student Code of Conduct.

The Student Code of Conduct is designed to be consistent with the principles of due process of law. Reasonable deviations from the Student Code of Conduct will not invalidate a decision or proceeding. The Student Code of Conduct is not intended to prevent or limit lawful exercise of academic freedom or constitutionally protected free speech or expression.

II. Definitions

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

- A. "Student" means all persons enrolled in any courses at the colleges in the district, regardless of where courses are taught, whether they are enrolled full-time or part-time, for credit or non-credit or not-for credit or contract education, and whether or not they are 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. "Instructor" means any academic employee of the District in whose class a student subject to discipline is enrolled, or counselor who is providing or has provided services to the student, or other academic employee who has responsibility for the student's educational program.
- C. "Governing Board" means the Governing Board of the Contra Costa Community College District.
- D. "District" means the Contra Costa Community College District, including but not limited to its administrative staff and each of its colleges.
- E. "College" means a college operated and maintained by the District.
- F. "Member of the College Community" means the District Trustees, the academic personnel, 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.
- G. "Day" refers to a college day during which the District is in session and classes are held.
- H. "Good Cause", as defined in Education Code, Section 76033, refers to student conduct that will result in disciplinary action or sanctions in accordance with this procedure. Resulting disciplinary action may include removal, suspension or expulsion.
- I. "Sexual harassment" is unwelcome conduct of a sexual nature, including (but not limited to) unwelcome sexual advances, requests for sexual favors, and other verbal, nonverbal, or physical conduct of a sexual nature.
- J. "Title IX Sexual harassment or Sexual Harassment under Title IX" is limited to the following:
 - 1. Unwelcome conduct determined by a reasonable person to be so severe, pervasive, and objectively offensive that it effectively denies a person equal access to the institution's education program or activity;
 - 2. Sexual assault (as defined in the Clery Act), dating violence; domestic violence, or stalking, as defined in the Violence Against Women Act (VAWA).

Title IX sexual harassment is also limited to conduct alleged to have occurred within an education program or activity (i.e. locations, events, or circumstances over which the institution exercises substantial control as to the respondent and the context in which the harassment occurred), against a person in the United States. Sexual harassment occurring outside the United States is not covered under Title IX sexual harassment. Sexual harassment that is not covered under Title IX sexual harassment will still be investigated and students will still be subject to disciplinary action. However, as outlined below, allegations of Title IX sexual harassment require additional procedural protections.

- K. "Sexual violence" means any physical sexual acts perpetrated against a person's will or where a person is incapable of giving consent due to the victim's use of drugs or alcohol. An individual also may be unable to give consent due to minority/or an intellectual or other disability. A number of different acts fall into the category of sexual violence, including rape, sexual assault, sexual battery, and sexual coercion. All such acts of sexual violence are forms of sexual harassment.
- L. "Complainant" means any member of the college community (student, faculty or staff member) who submits a charge alleging that a student violated this Code. A complainant who accuses a student of sexual harassment or sexual violence and who believes they are a victim of these prohibited actions will be guaranteed the same rights as the student accused, including the right to present witnesses and other evidence and to be accompanied by an advisor at a hearing, the right to be notified of the outcome of the complaint and the same appeal processes as are provided to the accused student. Complainants may not be entitled to know the exact level of discipline imposed due to privacy rights.
- M. "Preponderance of the evidence" means the greater weight of the evidence (i.e. it is more likely than not that misconduct occurred).
- N. "Hate violence" means any act of physical intimidation or physical harassment, physical force or physical violence, or the threat of physical force or physical violence, that is directed against any person or group of persons, or the property of any person or group of persons because of ethnicity, race, color, national origin, religion, sex, sexual orientation, gender identity expression, disability or political or religious beliefs of that person or group.
- O. "Affirmative Consent" means an affirmative, unambiguous, and conscious decision by each participant to engage in mutually agreed-upon sexual activity.
- P. "Supportive measures" means individualized services reasonably available that are non-punitive, non-disciplinary, and not unreasonably burdensome to the other party while designed to ensure equal educational access, protect safety, or deter sexual harassment. Supportive measures can include transfer of one party or another to different classes, counseling services, or other academic or transcript adjustments.

III. Complaints of violations of the student code of conduct

A. Complaint Filed/Incident Reported

The District, through the college President or President's designee, will investigate all reports of alleged violations of the Student Code of Conduct. Anyone who believes a section of the Student Code of Conduct has been violated should contact the President's designee identified at each District campus. Reports of allegations are entered into a District wide system where it is assigned to the appropriate President's designee.

Additional Title IX Requirements

For allegations of Title IX sexual harassment only, a complainant (defined as an alleged victim of sexual harassment) must be participating in, or attempting to participate in an educational activity at the college/District. Therefore, complaints from former students will not be processed under the special requirements for Title IX complaints. A Title IX coordinator may also sign a complaint on behalf of an apparent victim of sexual harassment. They may, however, still be processed as outlined herein. If, after filing a formal Title IX complaint, the complainant wishes to dismiss the complaint, they may notify the Title IX coordinator or investigator in writing of their desire to do so. However, the District, in its discretion, may still pursue the investigation process if it is not clearly unreasonable in light of known circumstances. The District also may, in its discretion, dismiss a Title IX sexual harassment complaint if it learns that the respondent is no longer enrolled.

Lastly, the District may, in its discretion, dismiss a Title IX sexual harassment complaint if specific circumstances prevent it from gathering evidence sufficient to reach a determination regarding responsibility. Dismissal of the formal complaint under Title IX does not preclude action under another policy or code of conduct. Where a previously filed formal complaint is dismissed prior to completion of the investigation process, the college/District must give the parties written notice thereof, and the reasons therefor.

The college/District may, in its discretion, consolidate formal complaints where the allegations arise out of the same facts.

B. Notice to Student

In all cases, the President’s designee, will provide written notice to the accused student(s), providing them with (1) a description of the alleged violation(s); (2) the date and location of the alleged incident(s); and (3) a required date and time for the student to contact the President’s designee to respond to the allegations.

Additional Title IX Requirements

With respect to allegations falling under the definition of “sexual harassment” under Title IX, the written notice to the student shall also include the identities of the parties involved. Additionally, both the accuser and the accused student must be informed in writing of their right to have an advisor or their choice present for the investigatory interview, and to review evidence obtained during the investigation. In addition, with respect to investigations involving allegations of Title IX sexual harassment, the written notice must include a statement that the respondent is presumed not responsible for the alleged conduct and that a determination regarding responsibility is made at the conclusion of the investigation process/appeal process. Lastly, the notice must include a statement informing the parties of any provision of the institution’s student code of conduct that prohibits knowingly making false statements or knowingly submitting false information during the investigation/appeal/hearing process.

C. Investigation of Allegations/Mediation

The investigator will conduct interviews as necessary to determine whether any violation of the Student Code of Conduct has occurred. Interviews may be conducted with the complainant, any witnesses, and the accused student. The investigator shall also review relevant documentation and other evidence.

For alleged violations of the Student Code of Conduct not subject to Title IX or California Senate Bill 493, the Student Conduct Officer may, in its discretion, determine whether informal resolution is appropriate

Additional Title IX Requirements

With respect to Title IX sexual harassment allegations, both the complainant and the respondent are permitted to have an advisor present during the interview. However, the advisor may not disrupt the investigation process and may not coach or answer on behalf of the party being interviewed,

Investigations should generally result in resolution within 90 calendar days after a complaint has been made, barring unexpected delays.

For allegations determined to be minor in nature by the President’s designee, a voluntary alternative to the formal investigation and hearing process, as mutually agreed upon by the President’s designee, the student, and any other involved individual, may be utilized as appropriate. The President’s designee will select a trained mediator to assist the Student and Reporting Party in attempting to resolve the allegation. The mediator can be the College Disciplinary Officer, or any other employee of the District as designated by the College Disciplinary Officer. The College Disciplinary Officer or Designee may also utilize the services of an external mediator.

D. Findings and Determination

The President’s designee will make one of the following findings following a thorough investigation of the allegations:

Not Responsible – The President’s designee determines that insufficient evidence exists, by the Preponderance of Evidence standard, for a Finding of Responsible for the alleged violation(s). The case is closed and a record is retained.

Responsible – The President’s designee determines that sufficient evidence exists, by the Preponderance of Evidence standard, for a Finding that the Student is Responsible for the alleged violation(s).

This determination may also be rendered through the Informal Administrative Resolution, where the student has admitted culpability for the alleged violation(s). The President’s designee may close the case.

E. Standard of Proof

In all cases involving alleged violations of the Student Code of Conduct, the standard of proof for determining whether a Student is Not Responsible or Responsible is the Preponderance of Evidence standard (e.g., more likely than not). This standard of proof applies to the determinations made by the College President/Designee, Hearing Authority, and Governing Board as well.

F. Additional Requirements for Title IX Sexual Harassment Allegations

Before concluding the investigation, the President/ Designee must provide the parties and their advisors, if any, equal opportunity to inspect and review any evidence obtained during the investigation that is directly related to the allegations raised in a formal complaint, even if the investigator has not relied on that evidence in reaching a determination. All inculpatory and exculpatory evidence must be included, except as provided for by law, and except for a party’s medical, psychological, or similar treatment records, unless the party has provided a voluntary and consensual release for such records.

The evidence must be provided to the parties in an electronic format or a hard copy, and the parties must be given 10 calendar days to submit a written response, which the investigator must consider before the completion of the investigative report. To the extent possible, the District shall use an electronic platform that prevents the downloading of the materials. Prior to permitting the review of such evidence, the investigator must obtain a signed nondisclosure agreement from the reviewing party to prevent the circulation of the evidence subject to inspection and review.

At the conclusion of the Title IX Sexual Harassment investigation, the investigator must create an investigative report that fairly summarizes relevant evidence. The investigator must send to the parties and their advisors, if any, the investigative report in an electronic format or a hard copy for their review and written response. The final investigative report must be provided at least 10 days before any hearing so the parties have time to review and provide written responses.

G. Additional requirements for all allegations of sexual harassment pursuant to California Senate Bill 493

In determining the appropriate sanction for violations of the Student Code of Conduct, the District's primary concern shall be student safety.

An individual who participates as a complainant or witness in any investigation related to sexual harassment/stalking will not be subject to disciplinary sanctions for violations of the Student Code of Conduct that occurred at the same time or near the time of the sexual harassment/stalking incident, unless the District determines that the violation of the complainant/witness was egregious. Offenses that the District considers "egregious" include, but are not limited to, actions that places the health or safety of any other person at risk or involve plagiarism, cheating, or academic dishonesty.

Any student who submits a complaint of sexual harassment, either verbally or in writing, shall be provided with a copy of this policy, along with HR Procedure 1040.07 and Board Policy 2002. The respondent shall also be provided with a copy of these policies, regardless of whether the accused is another student, or an employee.

The investigation and adjudication of alleged sexual misconduct is not an adversarial process between the complainant, the respondent, and the witnesses, but rather a process for the District to comply with its obligations under existing law. The complainant does not have the burden to prove, nor does the respondent have the burden to disprove, the underlying allegation or allegations of misconduct.

The District shall ensure trauma-informed and impartial investigation of complaints. Student parties shall be given an opportunity to identify witnesses and other evidence to assist the District in determining whether a policy violation has occurred, and shall be informed that any evidence available but not disclosed during the investigation might not be considered at a subsequent hearing.

Regardless of whether or not a complaint has been filed under the institution's grievance procedures, if the District knows, or reasonably should know, about possible sexual harassment involving individuals subject to the institution's policies at the time, the District shall promptly investigate to determine whether the alleged conduct more likely than not occurred, or otherwise respond if the District determines that an investigation is not required. If the District determines that the alleged conduct more likely than not occurred, it shall immediately take reasonable steps to end the harassment, address the hostile environment, if one has been created, prevent its recurrence, and address its effects.

The District shall consider and respond to requests for accommodations relating to prior incidents of sexual harassment that could contribute to a hostile educational environment or otherwise interfere with a student's access to education where both individuals are, at the time of the request, subject to District policies.

Requests for Confidentiality

If a complainant requests confidentiality, which could preclude a meaningful investigation or potential discipline of the potential respondent, or that no investigation or disciplinary action be pursued to address alleged sexual harassment, the District shall take the request seriously, while at the same time considering its responsibility to provide a safe and nondiscriminatory environment for all students, including for the complainant. The District shall generally grant the request. In determining whether to disclose a complainant's identity or proceed to an investigation over the objection of the complainant, the District may consider whether any of the following apply:

- There are multiple or prior reports of sexual misconduct against the respondent.
- The respondent reportedly used a weapon, physical restraints, or engaged in battery.
- The respondent is a faculty or staff member with oversight of students.
- There is a power imbalance between the complainant and respondent.
- The complainant believes that the complainant will be less safe if the
- complainant's name is disclosed or an investigation is conducted.
- The institution is able to conduct a thorough investigation and obtain relevant
- evidence in the absence of the complainant's cooperation.

If the District determines that it can honor the student's request for confidentiality, it shall still take reasonable steps to respond to the complaint, consistent with the request, to limit the effects of the alleged sexual harassment and prevent its recurrence without initiating formal action against the alleged perpetrator or revealing the identity of the complainant. These steps may include increased monitoring, supervision, or security at locations or activities where the alleged misconduct occurred; providing additional training and education materials for students and employees; or conducting climate surveys regarding sexual violence.

The District shall also take immediate steps to provide for the safety of the complainant while keeping the complainant's identity confidential as appropriate. These steps may include changing living arrangements or course schedules, assignments, or tests. The complainant shall be notified that the steps the District will take to respond to the complaint will be limited by the request for confidentiality.

If the District determines that it must disclose the complainant's identity to the respondent or proceed with an investigation, it shall inform the complainant prior to making this disclosure or initiating the investigation. The institution shall also take immediate steps to provide for the safety of the complainant where appropriate. In the event the complainant requests that the institution inform the respondent that the student asked the District not to investigate or seek discipline, the District shall honor this request.

Past Sexual History

The investigator or hearing officer shall not consider the past sexual history of a complainant or respondent except in the limited circumstances permitted below:

The investigator or hearing officer shall not consider prior or subsequent sexual history between the complainant and anyone other than the respondent for any reason unless directly relevant to prove that physical injuries alleged to have been inflicted by the respondent were inflicted by another individual.

The investigator or hearing officer shall not consider the existence of a dating relationship or prior or subsequent consensual sexual relations between the complainant and the respondent unless the evidence is relevant to how the parties communicated consent in prior or subsequent consensual sexual relations.

Where the investigator or hearing officer allows consideration of evidence about a dating relationship or prior or subsequent consensual sexual relations between the complainant and the respondent, the mere fact that the complainant and respondent engaged in other consensual sexual relations with one another is never sufficient, by itself, to establish that the conduct in question was consensual.

Before allowing the consideration of any evidence proffered pursuant to this subdivision, the investigator or hearing officer shall provide a written explanation to the parties as to why consideration of the evidence is consistent with this clause.

Additional Requirements for Questioning at Hearing

The District shall prohibit questions of either party or of any witness that are repetitive, irrelevant, or harassing.

The District shall decide whether or not a hearing is necessary to determine whether any sexual violence more likely than not occurred. In making this decision, the District may consider whether the parties elected to participate in the investigation and whether each party had the opportunity to suggest questions to be asked of the other party or witnesses, or both, during the investigation.

Any hearing shall be subject to the following rules:

Any cross-examination of either party or any witness shall not be conducted directly by a party or a party's advisor.

Either party or any witness may request to answer the questions by video from a remote location.

Student parties shall have the opportunity to submit written questions to the hearing officer in advance of the hearing. At the hearing, the other party shall have an opportunity to note an objection to the questions posed. The District may limit such objections to written form, and neither the hearing officer nor the District are obligated to respond, other than to include any objection in the record. The hearing officer shall have the authority and obligation to discard or rephrase any question that the hearing officer deems to be repetitive, irrelevant, or harassing. In making these determinations, the hearing officer is not bound by, but may take guidance from, the formal rules of evidence.

Generally, the parties may not introduce evidence, including witness testimony, at the hearing that the party did not identify during the investigation and that was available at the time of the investigation. However, the hearing officer has discretion to accept for good cause, or exclude, such new evidence offered at the hearing.

The preponderance of the evidence standard shall apply, and is met if the District determines that it is more likely than not that the alleged misconduct occurred, based on the facts available at the time of the decision.

The District shall provide a reasonably prompt timeframe for all of the major stages of the complaint process. These timelines may be extended for good cause only, and any need to extend the timelines shall be communicated to the complainant and respondent.

Investigations shall normally be completed within 90 days of the date the complaint was formally submitted. Both the respondent and complainant should be notified of the outcome within this 90 day period.

Appeals are governed by Title 5 of the California Code of Regulations and Title IX.

The District shall not unreasonably deny a student party's request for an extension of a deadline related to a complaint during periods of examinations or school closures.

The District shall provide a status update on the investigation if it is not possible to complete the investigation within the 90-day investigation timeline. Any extension of the 90-day timeline will be communicated to the complainant and respondent in writing, along with the reason for that extension.

The District will take steps to prevent recurrence of any harassment and to correct its discriminatory effects on the complainant and others, if appropriate.

Both the complainant and respondent will receive notice if the District is conducting a formal investigation. The notice shall include a brief summary of the allegations and the alleged District policy violations under review. Any new allegations that arise during the course of the investigation that could subject either party to new or additional sanctions shall be subject to the same notice requirements.

Student parties shall have the opportunity to each have a support person or adviser accompany the student party during any stage of the process.

Student parties have the right to consult with an attorney, at their own expense, at any stage of the process if they wish to do so. An attorney may serve as a support person or adviser.

The District has counseling resources available to student parties. Additional information regarding these resources may be obtained in the counseling departments of the individual colleges, or from the District/college Title IX Coordinators.

Both respondent and complainant, if both students, shall have equal rights to appeal if the outcome is a recommendation for suspension or expulsion, or any other penalty that results in a hearing.

Interim measures (e.g. stay away orders, counseling, academic accommodations, etc.) may be put in place during the pendency of an investigation. Supportive measures (e.g. stay away orders, counseling, academic accommodation) may be provided in the absence of an investigation as well.

The District shall not mandate mediation to resolve allegations of sexual harassment, and shall not allow mediation, even on a voluntary basis, to resolve allegations of sexual violence.

The District shall not require that the complainant enter a voluntary resolution agreement or any other form of resolution as a prerequisite to receiving remedial measures from the institution which safeguard the complainant's access to education.

When requested by a complainant or otherwise determined to be appropriate, the District shall issue an interim no-contact directive prohibiting the respondent from contacting the complainant during the pendency of the investigation. An institution shall not issue an interim mutual no-contact directive automatically, but instead shall consider the specific circumstances of each case to determine whether a mutual no-contact directive is necessary or justifiable to protect the noncomplaining party's safety or well-being, or to respond to interference with an investigation. A no-contact directive issued after a decision of responsibility has been made shall be unilateral and only apply against the party found responsible.

Upon the issuance of a mutual no-contact directive, an institution shall provide the parties with a written justification for the directive and an explanation of the terms of the directive. Upon the issuance of any no-contact directive, the institution shall provide the parties with an explanation of the terms of the directive, including the circumstances, if any, under which violation could be subject to disciplinary action.

H. Retaliation Prohibited

Retaliation is prohibited against any individual for exercising rights under Title IX or this procedure, including the participating in or refusing to participate in the filing of a complaint, the investigation, or any proceeding or hearing.

Examples of prohibited retaliation include intimidation, threats, coercion, or discrimination, and specifically include bringing charges against an individual for code of conduct violations that do not involve sex discrimination or sexual harassment, but arise out of the same fact or circumstances as a report or complaint of sex discrimination or sexual harassment.

IV. Grounds for disciplinary action

Students shall conduct themselves in a manner 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 in a manner 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.

Jurisdiction: Students may be disciplined for violations of the Student Code of Conduct wherever the District has jurisdiction under existing law, including, but not limited to, situations involving sexual harassment and sexual assault, regardless of where and when such offenses occurred. The college may have an obligation to respond to student-on-student harassment that initially occurred off campus. Because students often experience the continuing effects of off-campus harassment in the educational setting, colleges should consider the effects of off-campus conduct when evaluating whether the District has jurisdiction to process the complaint. The college should take steps to protect a student who was assaulted off campus from further harassment or retaliation from the perpetrator and their associates.

The Student Code of Conduct applies to off-campus conduct when the effects of the off-campus conduct create a hostile environment or impact a substantial District/college interest. A substantial District/college interest may include:

1. Any action that constitutes a criminal offense as defined by law. This includes, but is not limited to, a single or repeated violation(s) of any local, state, or federal criminal statute or ordinance;
2. Any situation where it appears that a student may present a danger or threat to the health or safety (including emotional safety) of themselves or others;
3. Any situation that significantly impinges upon the rights, property, or achievements of self or others, or that significantly breaches the peace or causes significant disruption; and
4. Any situation that is detrimental to the educational interest of the District/college.

B. The following conduct shall constitute good cause for discipline, including but not limited to the removal, suspension, or expulsion of a student.

1. Acts of academic dishonesty, including, but not limited to:
 - a. cheating defined as unauthorized copying or collaboration on a test or assignment, or the use or attempted use of unauthorized materials;
 - b. tampering defined as altering or interfering with evaluation instruments or documents;
 - c. fabrication defined as falsifying experimental data or results, inventing research or laboratory data or results for work not done, falsely claiming sources not used or fabricating or falsifying documentation to try to change a course grade;
 - d. lying;
 - e. plagiarism 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; or
 - f. assisting others in an act of academic dishonesty, 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, plagiarism, 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 on or off District property of teaching or of the District's educational process, administrative process, disciplinary procedures, or other District functions and activities, on or off District property;
6. Disruptive behavior, willful disobedience, habitual profanity or vulgarity, or the open and persistent defiance of the authority of, or persistent abuse of, college personnel

7. Engaging in intimidating conduct or bullying against another student through words or actions, including direct physical contact, verbal assaults, such as teasing or name-calling; social isolation or manipulation; and cyberbullying.
8. Engaging in harassing or discriminatory behavior based on disability, gender identity, gender expression, nationality, race or ethnicity, religion, sexual orientation, or any other status protected by law.
9. 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;
10. Assault, battery, violence or threat of violence, or any illful 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;
11. Theft of District property, or property in the possession of, or owned by, a member of the college community;
12. 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;
13. Failure to comply with the directions of 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;
14. The use, sale, distribution, or possession on District property of, or presence on District property while 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. Use of a prescription drug if the prescription was not issued to the student, or the distribution or sale of a prescription drug to a person to whom the prescription was not originally issued. Intentionally or recklessly inhaling or ingesting substances (e.g., nitrous oxide, glue, paint, etc.) that will alter a student's mental state is also prohibited. Possession of drug paraphernalia including, but not limited to, bong or glass pipes is prohibited. 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;
15. Possession, consumption, sale, distribution or delivery of any alcoholic beverage on District property in college buildings or on college grounds, or at college-sponsored or supervised activities, regardless of their location, unless authorized by college officials;
16. 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;
17. Engaging in lewd, indecent, or obscene behavior on District- owned or controlled property or at a District-sponsored or supervised function;
18. Rape, date rape, sexual harassment, sexual violence, 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;
19. Sexual misconduct, including sexual activity in the absence of affirmative consent. Sexual contact without affirmative consent is a form of sexual misconduct as is any intentional sexual touching with any object by a person upon another person, that is without affirmative consent and/or by force. Sexual contact includes intentional contact with the breast, buttock, groin, or genitals, or touching another with any of these body parts, or making another touch you or themselves with or on any of these body parts; or any other intentional bodily contact in a sexual manner, as well as non-consensual sexual intercourse, including vaginal or anal penetration by a penis, object, tongue, or finger, or oral copulation (mouth to genital contact), no matter how slight the penetration or contact;
20. Sexual assault, defined as actual or attempted sexual contact with another person without that person's consent, regardless of the victim's affiliation with the community college, including, but not limited to, any of the following:
 - a. Intentional touching of another person's intimate parts without that person's consent or other intentional sexual contact with another person without that person's consent.
 - b. Coercing, forcing, or attempting to coerce or force a person to touch another person's intimate parts without that person's consent.
 - c. Rape, which includes penetration, no matter how slight, without the person's consent, of either of the following:
 1. The vagina or anus of a person by any body part of another person or by an object.
 2. The mouth of a person by a sex organ of another person.

21. Sexual exploitation, defined as a person taking sexual advantage of another person for the benefit of anyone other than that person without that person's consent, regardless of the victim's affiliation with the community college, including, but not limited to, any of the following:
 - a. Prostituting another person.
 - b. Recording images, including video or photograph, or audio of another person's sexual activity, intimate body parts, or nakedness without that person's consent.
 - c. Distributing images, including video or photograph, or audio of another person's sexual activity, intimate body parts, or nakedness, if the individual distributing the images or audio knows or should have known that the person depicted in the images or audio did not consent to the disclosure and objected to the disclosure.
 - d. Viewing another person's sexual activity, intimate body parts, or nakedness in a place where that person would have a reasonable expectation of privacy, without that person's consent, and for the purpose of arousing or gratifying sexual desire.
22. 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, unauthorized use of, or misuse of District property;
23. Willful or persistent smoking in any area where smoking has been prohibited by law or by regulation of the Governing Board, or college policy;
24. Knowingly assisting another person in the commission of a violation of the Student Code of Conduct;
25. 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. It also includes unauthorized entry, use, transfer, or tampering with the communications of others, and interference with the work of others, and with the operation of computer and electronic communications facilities, systems, and services;
26. Stalking, which is defined as engaging in a repeated course of conduct directed at a specific person that would cause a reasonable person to fear for their or others' safety or to suffer substantial emotional distress. For the purpose of this definition, course of conduct means two or more acts, including, but not limited to acts in which the stalker directly, indirectly, or through third parties, by any action, method, device, or means follows, monitors, observes, surveys, threatens, or communicates to or about a person, or interferes with a person's property; reasonable person means a reasonable person under similar circumstances and with the same protected status as the victim; substantial emotional distress means significant mental suffering or anguish that may but does not necessarily require medical or other professional treatment or counseling.
27. Unauthorized Electronic/Digital Recording. Electronic/digital recording by any person on District Property without that person's knowledge or consent. This definition shall not apply to recordings conducted in public or a commonly recognized public event. Electronic/digital recordings or streaming are prohibited in classrooms, labs, during lectures, or on field trips without the prior approval of the Instructor or having proper authorization by the College DSPS Office.
28. Unauthorized Use of Course or Copyrighted Materials. Students of the District will abide by all aspects of United States copyright law, Title 17 of the United States Code, to the extent possible, under authoritative interpretation of the law. Students shall not reproduce copyrighted materials without prior permission of the copyright owner, except as allowed by the "fair use" doctrine.
29. Willful disruption of the orderly operation of a college campus or District site/facility;
30. Leading or inciting others to disrupt scheduled and/or normal authorized activities;
31. Obstruction of the free flow of pedestrian or vehicular traffic on College premises or at college sponsored or supervised events;
32. Unauthorized preparation, giving, selling, transfer, distribution, or publication, for any commercial purpose, of any contemporaneous recording of an academic presentation in a classroom or equivalent site of instruction, including but not limited to handwritten or typewritten class notes, except as permitted by any District policy or administrative procedure.
33. Endangering the welfare of others, including a violation of any state or federal law relating to the placing at risk of physical or emotional harm of a member of the District community.

34. Failure to appear before a District official when directed to do so.
 35. Failure to identify oneself to, or comply with the directions of, a District official, employee, policy, law enforcement, or other public official when requested to do so; or resisting or obstructing such District or other public officials in the performance of or the attempt to perform their duties.
 36. Failure to obtain a permit when a permit is required.
 37. Failure to: (a) repay debts to the District; (b) return District property; (c) return property of any member of the District community.
 38. Knowingly and purposefully, causing, making, and/or circulating a false report or warning of an emergency, such as a fire, explosion, crime, or other catastrophe.
 39. Participation in hazing or any method of initiation or pre-initiation into a campus organization or other activity engaged in by the organization or members of the organization at any time that causes, or is likely to cause, physical injury or personal degradation or disgrace which can inflict psychological or emotional harm to any Student or other person.
 40. Engaging in the inappropriate usage of social media. Using social media to harass, intimidate, or threaten other individuals. Usage of social media that will have indirect or direct impact on an individual or interference with the educational process.
 41. Misuse of identification, including transferring, lending, borrowing, altering or unauthorized creation of identification.
 42. Any other cause identified as good cause by Education Code section 76033, not identified above; or any applicable Penal Code sections, or other applicable local, state, or federal laws; and
 43. 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 (California Education Code Section 76036).**
- D. Nothing in these procedures shall preclude a student with a disability from receiving appropriate accommodations as identified by Disability Support Services.**

V. Responses to code of conduct violations

The following actions and sanctions may be imposed, individually or in various combinations, on any student alleged or found to have violated the Student Code of Conduct. With the exception of situations involving alleged sexual misconduct, the following designations of “subject to appeal” and “not subject to appeal” apply.

Non-Disciplinary Action – Not Subject to Appeal

WARNING – A warning is a written or oral notice to the student that continuation or repetition of certain conduct may result in disciplinary action.

REMOVAL FROM CLASS – Exclusion of the student from class by an instructor. The period of removal will not exceed the day of the removal and, if deemed necessary, the next class meeting.

SUPPORTIVE MEASURES – Measures taken to ensure equal educational access and protect safety. Measures may include transfer of one party or another to different classes, no contact orders, counseling services, or other academic adjustments.

Disciplinary Action – Not Subject to Appeal

WRITTEN OR ORAL REPRIMAND – An admonition to the student to cease and desist from conduct determined to violate the Student Code of Conduct.

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 community service, educational projects and essays, 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 that 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. Loss of privileges may also include facility access limitations. Violation of any condition or campus regulation during the period of sanction may result in far more serious disciplinary action, such as suspension or expulsion.

HOLD ON RECORDS – Hold on Records which consists of withholding of student records or adding administrative holds on student accounts that restrict registration activities. The President’s designee may impose such withholding when a student fails to repay debts to the District, return District equipment or make restitution to the District. A hold on records may also be asserted if a student does not comply to requests such as, but not limited to, required Administrative Review or appointments.

SHORT-TERM SUSPENSION – Exclusion of the student by the President’s designee for good cause from one or more classes for a period of up to ten consecutive days of instruction.

Disciplinary Action – Subject to Appeal

LONG-TERM SUSPENSION – Exclusion of the student by the College President for good cause from one or more classes for the remainder of the school term, or from all classes and activities of the college for one or more terms, up to a maximum of five years.

Disciplinary Action – Final Determination Made By Governing Board

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.

REVOCAION 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.

VI. Reciprocity of Sanctions

During a period of suspension from all classes at a college or expulsion, the suspension or expulsion shall apply to all colleges within the District. Other disciplinary actions or sanctions may apply to the student at all District colleges.

VII. Documentation and protection of alleged victims

Any disciplinary action imposed on a student, including oral warnings, must be documented in writing via written notice to the student, and in the student’s records, as outlined below. Where the conduct of the student appears to have caused, will cause, or may cause an ongoing threat to others, including students or staff, the District shall consider any measures that may be appropriate to protect those individuals, including written directives to the student, seeking of a temporary restraining order, report to the police, etc. Where the alleged misconduct involves violation of the District’s anti-discrimination and/or sexual harassment/sexual assault policies, the alleged victim must be provided with a copy of the District’s complaint policies and procedures. In evaluating the type of discipline to be imposed, the President’s designee must review the student’s past disciplinary record to determine whether the student has been previously disciplined in the past, particularly for similar offenses. Where the student has been disciplined in the past for similar offenses, a more severe consequence must be imposed.

VIII. Record of disciplinary action

A. Education Code Section 76220 Requirements:

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 federal and state law and District policy, and may be destroyed in a manner consistent with District Administrative Procedure 1900.01.

B. Education Code Section 76234 Requirements:

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, including rape, forced sodomy, forced oral copulation, rape by a foreign object, sexual battery, or threat of sexual assault, 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. The alleged victim shall keep the results of that disciplinary action and appeal confidential.

C. Title IX requirements:

For any complaints involving allegations of Title IX sexual harassment, as defined above, the District must maintain documentation for seven (7) years, as required below:

1. Investigations, including any determination regarding responsibility and any audio or audiovisual recording or transcript, any disciplinary sanctions imposed on the respondent, and any remedies provided to the complainant designed to restore or preserve equal access to the institution's education program or activity;
2. Any appeal and the result therefrom;
3. Any informal resolution; and
4. All materials used to train Title IX coordinators, investigators, decision-makers, and any person who facilitates an informal resolution process.
5. Records of any actions (including any supportive measures) taken in response to a report or formal complaint of sexual harassment. In each instance, the institution must document the basis for its conclusion that its response was not deliberately indifferent, and document that it has taken measures designed to restore or preserve equal access to the institution's education program or activity.
6. If no supportive measures were provided to the complainant in a Title IX sexual harassment matter, the President/designee must document the reasons why such a response was not clearly unreasonable in light of the known circumstances.

IX. Procedure for 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. (California Education Code Section 76032 and 76033.)

A. Procedures Before The Removal.

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

B. Procedures After The Removal.

1. Immediately following the removal, the instructor must notify the President's designee of the removal so that appropriate action can be taken.
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 from class, the student shall not be returned to the class without the concurrence of the instructor.
5. After the student returns to class, if there are additional incidents of disruption or other behavior constituting good cause, the faculty member will provide the necessary documentation to the President's designee so that more serious consequences, such as suspension from this particular class or from all classes for the rest of the semester, can be assigned.

X. Procedures for short-term suspension, long-term suspension, or expulsion

The following procedures shall be taken before suspension or expulsion except as noted in Section XIV Emergency/Interim Suspension.

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. Reporting Of Conduct. Alleged student misconduct shall be reported to the President's designee. The President's designee shall be an individual designated by the college President as being responsible for administration of matters relating to Student Conduct. Any official may be designated as the President's designee, whenever necessary for the efficient operation of the District.

C. Investigation. Upon receiving a report of alleged student misconduct, the President's designee shall initiate an investigation in accordance with Section III(C).

D. Notice. Before imposing discipline, the President's designee will provide the student with written notice of the conduct warranting discipline. The written notice will include the following:

1. The specific section of the Student Code of Conduct that the student is accused of violating
2. A short statement of the facts supporting the accusation
3. The right of the student to meet with the President's designee to discuss the accusation, or to respond in writing
4. The nature of the discipline that is being considered

If the student is a minor, the President's designee shall also notify the parent or guardian in writing of the investigation and charges.

E. Meeting. The student will be provided an opportunity to attend a meeting with the President's designee. The meeting will be scheduled within a reasonable period of time (normally within five (5) days following the delivery to the student of the notice referred to above). At the meeting, the student must again be told the facts leading to the accusation, and must be given the opportunity to respond verbally or in writing to the accusation. If a student chooses not to meet with the President's designee, or does not attend the scheduled meeting, the President's designee may proceed with proposed discipline without meeting with the student.

A student may elect to be accompanied by an advisor of their choosing. The role of the advisor is passive in this procedure. The advisor may be present at the meeting and may counsel the student. The advisor may not address the President's designee and shall not be permitted to participate in any way during the meeting except to offer counsel to the student

F. Determination and Notice to Student. After considering all of the information and evidence presented, including any explanation provided by the student (in the meeting and/or in writing), The President's designee shall decide whether or not to proceed with the proposed suspension or to recommend expulsion. The President's designee shall proceed as follows in accordance with the determined disciplinary action:

Short-Term Suspension – Within five (5) day after the meeting, the President's designee shall provide written notice of the decision to the student. The notice will include the length of time of the suspension. The President's designee's decision on a short-term suspension shall be final and cannot be appealed, except in situations in which the suspension is the result of a formal complaint of Title IX sexual harassment. In instances involving a formal complaint of Title IX sexual harassment, the student shall be entitled to appeal as outlined below.

Long-Term Suspension – Within five (5) after the meeting described above, the President or President's designee shall provide written notice of the decision to shall be provided to the student pursuant to (H) Notification of a Long-Term Suspension.

Expulsion – Within five (5) days after the meeting described above, the President or President's designee shall decide whether to recommend expulsion to the Board of Trustees. Written notice of the decision shall be provided to the student, pursuant to (I) Notification of a Recommendation for Expulsion.

G. Notice To The College President. The President's designee shall report any disciplinary action imposed to the college President.

H. Notification of a Long-Term Suspension. 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 decision regarding disciplinary action, and a description of facts related to the misconduct, including the evidence against the student, the date(s), time(s), and location(s) of the offense(s).
2. A copy of the Student Code of Conduct and Board Policy 3012.
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) business 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. An explanation that, if the student does not request a hearing within five (5) business days, the decision will be final and no longer subject to appeal.
5. 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 disciplinary process was prejudicial, arbitrary, or capricious);
 - b. New and significant information, not reasonably available at the time of the initial decision, has become available, and/or;
 - 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.
6. A statement that the student has the right to be accompanied at the 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.
7. The Notification may include terms that must be satisfied prior to reinstatement, as deemed necessary and appropriate by the President or President's designee.

I. Notification of a Recommendation for Expulsion

1. The appropriate District official 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:
 - a. A statement of the charges, the decision regarding disciplinary action, and a description of facts related to the misconduct, including the evidence against the student, the date(s), time(s), and location(s) of the offense(s).
 - b. A copy of Student Services Procedure 3027 and Board Policy 3012.
 - c. The date, time, and location of the expulsion hearing.

XI. Procedure for appeal of a long-term suspension

- A. **Student Right To Appeal.** The student may accept a long-term suspension without admitting the conduct charged. In such a case, the decision of the President's designee will be final. Should the student not accept the long-term suspension, the student has a right to appeal. An 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. The appeal must demonstrate acceptable grounds for an appeal, as described in the notification.
 - B. **Schedule of Hearing.** The President's designee shall schedule an Appeal Hearing to be held no later than working 30 days from the date of the statement of charges is sent/delivered to the student. The President's designee shall notify the student in writing of the date, time, and location of the Appeal Hearing.

XII. Hearing authority for long-term suspension 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 may be a college official, or may be a licensed California attorney with experience in student discipline and due process issues.
- 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 employee shall notify the Committee if he or she has a conflict of interest because he or she is involved in the discipline matter, or has a personal relationship with any of the involved parties, 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.

XIII. Long-term suspension appeal hearing procedures

- A. The President's designee shall submit to the Hearing Authority: a description of the charges, notices, request for hearing submitted by the student, evidence, and a copy of the proposed decision.

The Chair will call the Appeal Hearing to order, explain the procedures of the Appeal Hearing, and have all Parties introduce themselves.

- B. The Chair/Hearing Authority will present the rules governing the hearing. The Chair shall guarantee control of the hearing, making certain that all participants respect the right of others to make statements, and to ensure confidentiality of such statements.
- C. The President's designee shall present relevant evidence regarding the alleged misconduct. The evidence presented may include live witness testimony, declarations submitted under penalty of perjury, and documentary evidence. Following the testimony of each witness, the accused student and Hearing Authority will have the opportunity to cross-examine witnesses. The accused student may then present any relevant evidence, including live witness testimony, declarations submitted under penalty of perjury, and documentary evidence. The President's designee and Hearing Authority will then have the opportunity to cross-examine witnesses. Opening and closing statements shall be limited to five (5) minutes. The President's designee shall speak first, followed by the student.
- D. The Hearing Authority shall rule on all questions of procedure and admission of evidence. Only relevant and material evidence shall be presented to and considered by the Hearing Authority. Irrelevant, immaterial, and/or unduly repetitious evidence shall be excluded.
- E. Hearings need not be conducted in accordance with strict rules of evidence or formality of a court hearing.
- F. 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.
- G. 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 wishes to be represented by an attorney, a request must be submitted, in writing, not less than 14 days prior to the hearing. If the student is represented by an attorney, the President's designee may request legal assistance. Any legal advisor provided to the panel may act in an advisory capacity but shall not serve as a member of the panel nor participate in any vote.
- H. 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.
- I. An official audio or video 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.
- J. An accused student who fails to appear for the hearing after having been notified of an Appeal Hearing is deemed to have waived their rights to participate in the appeal. The Appeal Hearing shall be terminated and the Appeal Committee shall be dismissed. The initial recommendation for disciplinary action shall stand.
- K. Additional Requirements for Hearings Involving Title IX Sexual Harassment Allegations:
1. The Hearing Authority must be free from conflict of interest or bias and must have received training on (a) how to serve impartially (b) issues of relevance and how to rule on relevance objections; (c) how to apply the rape shield protections provided for complainants; and (d) any technology to be used at the hearing.
 2. Every witness at the hearing must be subject to cross-examination by the parties' advisors.
 3. The Hearing Authority must allow a party's advisor to directly and in real time present all relevant questions and follow up questions to another party or witness. Cross-examination must come from a party's advisor and may not come directly from a party.
 4. If a party does not have an advisor for the hearing, the District/College must provide that party with an advisor at no cost, for the purpose of conducting cross-examination on behalf of the party, or, in the discretion of the District/College, for the duration of the hearing in general.

5. If a party or witness does not submit to live cross-examination, the panel or hearing officer cannot rely on any statement made by that party or witness when making the decision about the respondent's responsibility. This includes statements made during the investigation process.
6. Police reports, sexual assault nurse examiner (SANE) reports, medical reports, and other documents and records may not be relied on to the extent they contain the statements of a party or witness who has not submitted for cross-examination. In addition, where the evidence is a text exchange or an email thread and one party has refused to submit to cross-examination, but the other has not, the panel or hearing officer may rely only upon the statements made by the party who was cross-examined. However, the panel or hearing officer is not prevented from relying on a description of the words allegedly used by a respondent if they constitute part of the alleged sexual harassment at issue because the verbal conduct does not constitute the making of a factual assertion to prove or disprove the allegations of sexual harassment.
7. The panel/hearing officer cannot draw any inference regarding responsibility based solely on a party's or witness's absence from the live hearing or refusal to answer cross-examination or other questions.
8. Questions posed to parties and witnesses at the hearing must be relevant. Before a complainant, respondent, or witness answers a cross-examination or other question, the panel/hearing officer must determine whether the question being asked is relevant and, upon objection on relevance grounds, provide an explanation as to any decision to exclude a question as not relevant.
9. Questions relating to a complainant's prior sexual behavior are deemed not relevant, unless the questions are offered to prove someone else was responsible for the alleged conduct or offered to prove consent.
10. At the request of either party, the District/College must provide for the entire hearing to occur with the parties located in separate rooms with technology enabling the parties to see and hear each other.

L. Additional Hearing Requirements For Sexual Misconduct Matters Not Subject to Title IX

In cases of student sexual misconduct that are not subject to Title IX, when an accused student is subject to severe disciplinary sanctions (e.g. suspension or expulsion), and the credibility of witnesses was central to the investigative findings, District student discipline procedures must provide an opportunity for the accused student to cross-examine witnesses indirectly at a live hearing, either in person or by video conference.

For purposes of this section, "indirect" cross-examination shall be conducted as follows: Any question to the witness shall be asked by a neutral party appointed by the District for the sole purpose of asking questions. The neutral party shall not be the accused student, the accused student's representative, or a member of the hearing panel. The accused student may submit written questions before and during the cross-examination, including any follow-up questions. The neutral party asking questions shall not exclude any questions unless there is an objection to the question by the hearing panel.

XIV. 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, and a copy to the complainant and the respondent, 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.
- D. The sanctions imposed on the respondent and the remedies provided to the parties, including the rights of the parties to appeal the decision, if applicable.

XV. 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 long-term suspension or recommend expulsion, uphold the recommendation by the Hearing Authority, or adopt a lesser or different 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 ten days of the college President's receiving the Hearing Authority's recommendation.
- B. The decision of the college President to suspend, recommend expulsion, or impose a lesser sanction shall be final and not subject to further appeal. However, as noted below, an expulsion is not final until it is approved by the Governing Board.
- C. The college President shall report a disciplinary suspension or expulsion recommendation of any student to the Governing Board at its next regular meeting. A copy of the suspension determination or expulsion recommendation, including the reasons for the disciplinary action, suspension, shall be placed in the student's permanent disciplinary record (not the transcript).
- D. If the college President determines that a student should be expelled, he or she will forward that recommendation through the Chancellor, to the Governing Board for final approval.
- E. In the event that a college President is or will be unavailable for the making of a prompt decision, the college President or Chancellor may appoint an unbiased designee to act on the appeal.
- F. For any hearing involving allegations of Title IX sexual harassment, both the complainant and the respondent shall have the right to appeal the decision to the Governing Board.

XVI. Emergency interim suspension/interim restriction

- A. Interim measures are in effect immediately and shall not be delayed. These Interim actions may include:
 - 1. Interim Suspension – A Student who is suspended on an interim basis is subject to all of the same restrictions as if they had been suspended as a final sanction.
 - 2. Interim Restriction – These restrictions may include but are not limited to:
 - a. Restricted access to District facilities and District events;
 - b. No-contact orders with specific individuals; or
 - c. Any other restrictions deemed by the College Disciplinary Officer
or Designee to be necessary to achieve the goals stated above.
- B. An emergency/summary suspension is an immediate suspension imposed upon a student for good cause. (California Education Code Section 66017.)
- C. The college President or the President's designee may impose an emergency interim suspension. It is an extraordinary measure and shall be utilized when necessary to protect lives or property and to ensure the maintenance of order pending a hearing. Prior to imposing these measures, the District/college shall do the following:
 - 1. Undertake an individualized safety and risk analysis to determine whether there is an immediate threat to the physical health or safety of any person;
 - 2. Make an affirmative determination that such an immediate threat exists based on its individualized safety and risk analysis;
 - 3. Provide the Respondent with notice and an opportunity to challenge the emergency decision immediately following the respondent's removal.
- D. A preliminary hearing shall be provided within ten (10) calendar days of an emergency interim suspension. (California Education Code Section 66017.) The procedures set forth in Section XIII shall apply to the preliminary hearing.
- E. An emergency interim suspension shall be reported to the Governing Board at its next regular meeting after such suspension has been imposed. A copy of the suspension may be placed in the student's permanent record at the discretion of the college President.

XVII. Notification of law enforcement

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

XVIII. Extensions of time

The college President or President’s designee shall, upon Calendar restraints may be extended with the agreement of both parties.

XIX. Expulsion

The Governing Board has the sole authority to expel a student. If the College President determines that a student should be expelled, he or she shall send the recommendation through the Chancellor to the Governing Board.

A. Within 30 instructional days of the receipt of the recommendation from the college President, and with the agreement of the Chancellor, the Governing Board shall conduct a review of the President’s decision on the expulsion in closed session.

1. Before commencement of the hearing, the 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 Governing Board shall consider no evidence other than that evidence received in the hearing process.
2. The college President (or the President’s designee) shall make a brief statement to the Governing Board, referring to relevant evidence regarding the alleged misconduct.
3. The accused student may then make a brief statement to the Governing Board and present any relevant evidence.
4. The statements shall be limited to five (5) minutes.
5. Upon completion of these statements, the Governing Board will have an opportunity to ask questions of both the student and the College President (or President’s designee).
6. The Governing Board will conclude the hearing, dismiss the parties, and privately deliberate as to a decision.
7. The Governing Board shall issue a statement of decision to either uphold the College President’s decision regarding the expulsion, or modify that decision. If the Governing Board’s decision is to modify the decision, it must include legal and factual support for that decision. The Governing Board may also recommend further investigation.

8. Pursuant to Education Code section 72122, the final action of the 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.
9. The Chancellor’s Office will send a written statement of the Governing Board’s decision via certified or registered mail to the student’s last known address within three (3) working days of the hearing.
10. If the 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.
11. The decision of the Governing Board is final, and not subject to further appeal.

XX. Board consideration of title IX hearing appeals

A. Grounds for Appeal

Under the August 2020 Title IX regulations, for any sexual harassment complaint governed by Title IX, as defined above, both the complainant and the respondent have the right to appeal the findings of the Hearing Authority to the Governing Board. The grounds for appeal of decisions on Title IX determinations made by the Hearing Authority are limited to the following:

1. Procedural irregularity that affected the outcome;
2. New evidence that was not reasonably available when the determination of responsibility was made that could affect the outcome; and
3. The Title IX Coordinator, investigator, or decision-maker had a general or specific conflict of interest or bias against the complainant or respondent that affected the outcome.

B. Procedures for Appeal

1. As outlined above, following the decision of the Hearing Authority, both complainant and respondent will be advised of the findings of the Hearing Authority and the right to appeal.
2. Either respondent or complainant have the right to submit an appeal and request for review by the Governing Board within 30 days of date of the Hearing Authority's decision.
3. The process for the Governing Board's consideration of any appeal shall be as outlined in Section XVII above, with the following exceptions:
 - a. When the complainant is appealing the Hearing Authority's decision, the respondent shall be advised of that fact, advised of the date of the Governing Board's meeting to consider the appeal, and shall be given a right to respond. When the respondent is appealing the Hearing Authority's decision, the complainant shall be advised of that fact, advised of the date of the Governing Board's meeting to consider the appeal, and shall be given a right to respond to the Board.
 - b. Arrangements shall be made to keep respondent and complainant separate during the Governing Board's consideration of the appeal.
 - c. Both respondent and complainant shall be given the same length of time (i.e. 5 minutes) to make oral presentations to the Board.

Education Code, Sections 66017, 66300, 66301, 76033, 72122, 76030-76037, 76220, 76234

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.

Directory information includes:

- student name,
- student participation in officially recognized activities and sports, including weight, height, and high school of graduation of athletic team members,
- degrees and awards received by students, including honors, scholarship awards, athletic awards, and dean's recognition.

For more information about FERPA regulations go to:

www.ed.gov/policy/gen/guid/fpco/ferpa/index.html

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 information about campus crime and safety issues at

<http://www.4cd.edu/crpa/pd/righttoknow.aspx>.

GRIEVANCE AND COMPLAINT PROCEDURES

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.

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, page 15). For further information, contact the office of the vice president of student services.

GENERAL COLLEGE POLICIES

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/alcohol-drugs. Any student who needs information about substance abuse may consult a campus counselor who can provide the student with information about available treatment resources.

Parking policy

All campus 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 Campus. For more information, contact police services, or visit www.4cd.edu/crpa/pd.

Service and other animals

Contra Costa Community College District fully supports students with disabilities who benefit from trained service animals. Per District Governing Board Policy 2058, individuals with a disability are permitted to use a trained service animal in all district facilities in compliance with state and federal law. Students using service animals should coordinate with Disability Support Services (DSS). To help ensure a safe and productive learning environment for all our students and the broader community, all other animals, including emotional support animals, are prohibited on all district property.

Tobacco-free policy

DVC is committed to promoting the good health of our students, staff, and broader community by providing a healthy environment in which to learn and work. Given the negative health impacts of tobacco and similar product use, per District Governing Board Policy 2045, DVC is designated as a tobacco-free institution. Therefore:

Smoking, smoking substitutes, smoke inducing devices, and vaping are considered a health hazard and are prohibited on all college property. This includes, but is not limited to, products containing tobacco or nicotine, e-cigarettes, cigars, clove cigarettes, smokeless tobacco, snuff, chew packets, hookah smoking, personal vaporizers/electronic smoking devices, marijuana, and controlled substances regulated under federal law.

The use of all smoking/tobacco/vaping products as defined is prohibited on campus grounds, playing fields, walkways, roadways, parking lots, in all vehicles on DVC property and in or around the perimeter of any building.

This policy shall apply to all students, employees, volunteers, vendors, consultants, agents, contractors, and visitors on DVC property as defined above. Consistent with Government Code 7597.1, the Governing Board has imposed fines and set enforcement standards for DVC in order to ensure a tobacco-free environment.

DVC recognizes the health hazards associated with tobacco addiction. DVC also recognizes the challenges faced by those addicted to tobacco products and therefore supports efforts of employees and students to quit using tobacco products. Any student who needs information about cessation programs may consult a college counselor, who can provide the student with information about available resources.

Adherence to our tobacco-free policy relies, in large part, on the initiative of students and staff to politely request that smokers comply and on the courtesy of smokers to acknowledge and observe the restrictions. DVC promotes the initiative of educating others about the hazards of smoking and will endeavor to educate rather than punish. In the absence of compliance, however, any student who violates the policy may be subject to citation and disciplinary measures in accordance with the provisions of the Student Code of Conduct and Governing Board policy. Visitors to DVC who do not comply with this policy may be cited and/or asked to leave DVC property.

TRANSFER, DEGREES AND CERTIFICATES

chapter three

catalog 2022-2023



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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 key to our students' success is that they understand which transferable courses are required:

- for admission to their major;
- for general education at their chosen four-year college or university.

The requirements to transfer can be complex and necessitate that 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 institution 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 institution to institution 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 Career and Transfer Services, on college and university websites, in print materials, from college representatives, on the ASSIST website, and in our workshops.

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;
- at least 30 of those units must be GE courses from the IGETC or CSU GE requirements (listed as General Education Options 2 and 3 at the end of this chapter 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. (Areas A and B4 from the CSU GE requirements or Areas 1 and 2 from IGETC).

CSU transferable courses

CSU transferable courses are designated in the course descriptions of this catalog. This information is also available at www.assist.org.

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 website or www.assist.org or calstate.edu/apply 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 requirements (CSU GE)

Completion of the pattern of courses listed as General Education Option 3 on page 68 ensures that students will have completed all of their lower division general education courses toward their bachelor's degree at CSU. After a student has completed this pattern, he or she must request certification of its completion. With this certification, students will be responsible for an additional nine upper division semester units in general education after transfer.

The current list of courses approved for meeting CSU GE is available in the DVC Counseling Center or at www.assist.org. See page 68 for more information about the pattern of courses listed as General Education Option 3.

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

Students must submit a CSU GE or IGETC certification request form to the DVC Admissions and Records Office. Once the Admissions and Records Office evaluates the student transcript and certifies completion of requirements, students can request the CSU GE certification be sent to the CSU institution that they will be attending.

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. 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 may not be the right choice for all students planning to transfer. The IGETC is just 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. It is recommended that the entire IGETC pattern be completed prior to transfer. If a student does not complete all the general education requirements of the IGETC with a grade of "C" or higher before transferring, they will be subject to the regulations regarding general education requirements of the school or college of the campus to which they have been admitted.

The current list of courses approved for meeting IGETC is available in the DVC Counseling Center or at www.assist.org. Please see page 66 for information about the pattern of courses listed as General Education Option 2.

Students must submit an IGETC certification request form to the DVC Admissions and Records Office. Once the Admissions and Records Office evaluates the student transcript and certifies completion of requirements, students can request the IGETC certification be sent to the four-year institution that they will be attending.

Transfer to the University of California (UC)

To transfer as a junior to UC students must complete 60 units of UC-transferable college credit with a grade point average of at least 2.4 (2.8 for non-residents) including the following 7-course pattern:

- two UC-transferable college courses (three units each) in English composition; and
- one UC-transferable college course (three units) in mathematical concepts and quantitative reasoning; and
- four UC-transferable college courses (three 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. The full list of approved courses for the 7-course pattern can be found at www.assist.org. The minimum requirements for UC transfer admission can be found at admission.universityofcalifornia.edu

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, major, 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.

UC transferable courses

UC-transferable courses are designated in the course descriptions of this catalog. This information is also available at www.assist.org.

Selection for admission to UC

Many campuses of the UC 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 - Transfer admission guarantee (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: Davis, Irvine, Merced, Riverside, Santa Barbara, and Santa Cruz. The admission agreements offered by these campuses vary according to their requirements. Contact a counselor 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. Admission 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. Some independent and out-of-state colleges and universities will accept IGETC and CSU GE to fulfill lower-division general education requirements. To make transfer to an independent or out-of-state college or university as smooth as possible, students are advised to contact the school directly early in their academic career to inquire about their admissions and general education requirements.

DVC ASSOCIATE DEGREES

DVC offers associate degrees in arts and science. These degrees are comprised of specific general education, 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 different majors 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: English and English as a Second Language courses numbered below 122/122A have limited or no degree applicability. Only one of the following courses may be applied to the units required for an associate degree: ENGL-116, 117, 118, 121 or ESL-117A. ENGL-122AL, 122AM, 122L, and 122M are college-level courses, three units of which will apply to general education and/or transfer. Any additional units from one course may be applied to the total units required for a degree. Students should carefully review each specific course description and meet with a counselor to ensure that the selected courses will satisfy requirements for transfer, degree, or certificate goals.

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 determining whether there are courses whose requirements the student may have already met and initiating appropriate procedures to transfer credit or substitute coursework.

Graduation

It is the student's responsibility to file a petition for the associate degree by the deadline during the term 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 general education pattern under one academic year and major program requirements from a different academic year. The academic year(s) chosen must be declared on the application for the degree.

Former students who completed their requirements prior to leaving but failed to petition for degree or certificate may petition and choose the catalog requirements in effect at the time of petition or those in effect at the time of their last enrollment. Under special circumstances, exceptions to this catalog rights policy may be considered through a petition process initiated through the Admissions and Records Office.

The college reserves the right to change catalog rights or program requirements based upon legal mandate and accreditation standards at any time. Catalog rights do not apply to IGETC certification. Students must follow the IGETC pattern in effect when they petition for certification. Courses used for CSU GE or IGETC certification must be on the approved list at the time they are completed.

Associate degrees for transfer

California Community Colleges offer associate degrees for transfer to the CSU. These may include Associate in Arts (AA-T) or Associate in Science (AS-T) degrees. These degrees are designed to provide a clear pathway to a CSU major and baccalaureate degree. California Community College students who are awarded an AA-T or AS-T degree are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU campus or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or campuses.

Students who have been awarded an AA-T or AS-T are able to complete their remaining requirements for the 120-unit baccalaureate degree within 60 semester or 90 quarter units.

To view the most current list of Diablo Valley College associate degrees for transfer and to find out which CSU campuses accept each degree, please go to <https://www.calstate.edu/apply/>. Current and prospective community college students are encouraged to meet with a counselor to review their options for transfer and to develop an educational plan that best meets their goals and needs.

ASSOCIATE DEGREE REQUIREMENTS FOR STUDENTS ENTERING FALL 2022

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

1. Degree requirements

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

**Associate degrees for transfer require completion of 60 CSU transferable units.*

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 may complete one of the three different general education patterns. General education Option 1 (DVC GE) is recommended for students who do not intend to transfer. Some courses may apply toward Option 2 and Option 3. Students intending to transfer to four-year institutions are advised to select Option 2 (IGETC) or Option 3 (CSU GE). Students completing an associate degree for transfer must select Option 2 (IGETC) or Option 3 (CSU GE).

Option 1 – Diablo Valley College general education; 18 units of general education courses from areas I-IV.

Option 2 – IGETC – Intersegmental General Education Transfer Curriculum

Option 3 – CSU GE– California State University General Education

Option 1 DVC general education philosophy statement/general education program learning outcomes

A. English composition

In English composition, students will be able to compose coherent essays that demonstrate their ability to advance their own ideas and engage meaningfully with other sources. Through reading and critical thinking, students will learn to express their own opinions and use a variety of rhetorical strategies.

Students will be able 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 and analyze how meaning is created in works of fiction and non-fiction.

B. Communications and analytical thinking

Students will appreciate and use principles of communication and analytical thinking in whatever symbol system the student uses, such as mathematics, computer science, or written or spoken language.

Students will be able to:

- demonstrate logical and analytical thinking;
- express concepts clearly and precisely;
- critically evaluate the expression of concepts in a variety of forms

C. Mathematics comprehension

Students will understand mathematical abstraction and the use of mathematical symbols. They will be able to apply principles of mathematics leading toward an understanding and appreciation of the power and relevance of mathematics.

Students will be able to:

- recognize and examine mathematical relationships in the form of equations, graphs, and tables;
- apply mathematical methods to solve quantitative problems in the sciences, in their vocations, and in their daily lives as citizens and consumers;
- use appropriate technology to help solve mathematical problems.

II. Natural sciences

Students will recognize humans as seekers of fact and makers of meaning through abstraction and generalization.

By studying disciplines within biological and physical sciences, students will be able to:

- explain the basic concepts of biological and/or physical sciences;
- interpret and criticize information from a variety of sources to distinguish between opinions based upon preconception and controlled scientific experiments;
- solve problems in a wide range of contexts utilizing scientific methods.

III. Arts and humanities

Students will be able to evaluate the human experience as it is reflected and shaped by the arts and humanities.

Students will be able to:

- utilize an integrated and analytical approach to the study of art, humanities, languages, theater, film, literature and music within historical, political, and sociological contexts;
- critically examine the relationships between the ways people from different times and cultures live and the arts forms they create;
- evaluate aesthetic and cultural ideas and ethical standards by engaging the arts and humanities.

IV. Social and behavioral sciences

Students will better understand the cultural and social organizations in which they live as well as those of other human societies. Students will also be able to employ the scientific methodologies through which society and the greater world are examined and understood.

By studying disciplines within social and behavioral sciences, students will be able to:

- demonstrate an understanding of the complexity of social and behavioral phenomena;
- evaluate the scope and functions of social institutions;
- interpret and critically analyze information from a variety of sources to distinguish between generalizations based on preconceptions and those based on research.

DVC GE

Option 1 for DVC AA/AS GE

Diablo Valley College General Education Requirements Effective Fall 2022 through Summer 2023

NOTE: Subject to change. See a counselor for more information.

Associate in Arts / Associate in Science

The requirements listed on this worksheet are those in effect for 2022-2023. A student remaining in continuous enrollment at Diablo Valley College, Contra Costa College, or Los Medanos College may elect to meet the graduation requirements in effect at the college from which the student will graduate either at the time the student first enrolled or any subsequent year of continuous enrollment. Continuous enrollment is maintained when a student receives an A, B, C, D, F, P, NP, I, W, or EW at DVC, CCC, or LMC in at least one class in each academic year (fall or spring or summer).

Basic Degree Requirements:

- 18 units of general education courses from Areas I through IV.
- Satisfactory completion of a minimum of **sixty (60)** units of degree-applicable coursework.
All courses numbered **below 100** are non-degree applicable. Note: English and English as a Second Language courses numbered below 122/122A have limited or no degree applicability.
English 116, 117, 118, 121; English as a Second Language 117A combined: maximum credit, one course.
English 122AL, 122AM, 122L, 122M, 122X are college-level courses, three units of which will apply to general education and/or transfer.
Any additional units from one course may be applied to the sixty units required for a degree.
- Overall grade point average of 2.0 (C) or higher in degree-applicable coursework.
Note: Some majors may require a higher-grade point average in major coursework. See catalog.
- At least 12 units of degree-applicable coursework earned at Diablo Valley College.
- Major requirements as listed in the catalog or addendum.

A course or exam may be listed in more than one area but may be used to satisfy only one subject requirement (exception: Areas IB and IC).

See a counselor or DVC catalog for use of AP, CLEP or IB exams to meet these requirements.

I - LANGUAGE AND RATIONALITY

IA - English Composition - 1 course, 3 semester units, grade of "C" or higher required.

English 122, 122A, 122AL, 122AM, 122L, 122M, 122X

Note: All English Writing courses limited to 3 units for Area IA and transfer.

From other accredited colleges: Equivalent course or any course approved for IGETC Area 1A.

IB - Communications and Analytical Thinking - 1 course, 3-5 semester units

Art History 191

Business 240, 250

Communication Studies 120, 121, 123, 130

Computer Science 101, 110, 165, 255

English 123, 126

History 122

Mathematics 124, 135, 135SP, 142, 144, 181,

182, 183, 191, 191SP, 192, 193, 194, 195, 292, 294

Philosophy 130, 170

Psychology 145, 214

Sociology 122

Math courses used to fulfill this requirement also meet course requirement in Area IC Mathematics Comprehension.

From other accredited colleges: Equivalent course or any course approved for IGETC Area 1B and 1C and Area 2.

IC - Mathematics Comprehension - 1 course, 0-5 semester units, grade "C" or higher.

Business 240

Engineering Technology 111

Psychology 214

Mathematics 114, 119, 119SP, 121, 124, 125, 135, 135SP,

142, 144, 181, 182, 183, 191, 191SP, 192, 193, 194, 195,

292, 294

OR

Satisfy one of the following:

- Receive a "C" grade or higher in both semesters of a high school Algebra II course.
- 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, Calculus BC, Calculus BC/AB Subscore, Computer Science Principles or Statistics.

From other accredited colleges: Equivalent course or any course approved for IGETC Area 2.

II - NATURAL SCIENCES - 1 course, 3-5 semester units	
Anthropology 115, 140 Astronomy 110, 112, 120 Biological Science 101, 102, 107, 116, 117, 119, 120, 126, 130, 131, 139, 140, 146, 161, 162, 170, 171 Chemistry 106, 107, 108, 109, 120, 121, 226, 227	Geography 120, 140 Geology 120, 121, 125, 130 Oceanography 101, 102 Physical Science 112 Physics 110, 112, 113, 120, 121, 129, 130, 230, 231
From other accredited colleges: Equivalent course or any course approved for IGETC Area 5A and 5B.	
III - ARTS AND HUMANITIES - 1 course, 3-5 semester units	
Arabic 121 Architecture 156, 157, 158, 160 Art 151 Art Digital Media 214 Art History 100, 193, 195, 196, 197, 199 Chinese 121, 220, 221 Dance 200, 201 Drama 114, 139, 142 English 150, 151, 152, 153, 154, 162, 163, 164, 166, 167, 168, 170, 172, 173, 175, 176, 177, 178, 180, 190, 252, 253, 262, 263, 272, 273 Film, Television and Electronic Media 200, 205, 210, 260, 280, 281, 282, 283 French 121, 220, 221, 230, 231	German 121, 220, 221, 230, 231 History 120, 121, 124, 125, 126, 127, 128, 129, 135, 136, 140, 141, 142, 150, 151, 170, 171, 180, 181 Humanities 105, 108, 110, 111, 112, 115, 116, 118, 123, 124 Italian 121, 220, 221, 230, 231 Japanese 121, 220, 221 Music 110, 112, 114, 115, 117, 118, 119 Music Industry Studies 110 Persian 121 Philosophy 120, 122, 140, 141, 145, 160, 220, 224, 225 Russian 121, 220, 221 Sign Language 282, 283 Spanish 121, 220, 221, 230, 231, 241
From other accredited colleges: Equivalent course or any course approved for IGETC Area 3A and 3B.	
IV - SOCIAL AND BEHAVIORAL SCIENCES - 1 course, 3 semester units	
Administration of Justice 120, 126 Anthropology 120, 125, 130, 135 Communication Studies 125, 180 Early Childhood Education 124 Economics 101, 200, 210, 220, 221 Education – Special Education 101, 102 Engineering 130, 131 Ethnic Studies 101 Film, Television and Electronic Media 240 Geography 130, 135 History 120, 121, 124, 125, 126, 127, 128, 129, 135, 136, 140, 141, 142, 150, 151, 170, 171, 180, 181	Journalism 110 Kinesiology 248 Nutrition 130 Political Science 120, 121, 122, 123, 127, 151, 210, 220, 240, 250, 252 Public Health 127, 130, 135, 137, 140, 164, 170 Psychology 101, 122, 130, 140, 141, 160, 190, 195, 200, 220, 225, 230, 240 Social Science 101, 110, 111, 120, 123, 220 Sociology 120, 121, 123, 124, 125, 131, 135
From other accredited colleges: Equivalent course or any course approved for IGETC Area 4.	
General Education	Total 18 Units
Additional courses may be necessary to complete the minimum of 18 units required for the Associate degree. Additional courses to be selected from Areas IB through IV.	
Major/Area of Emphasis	
This requirement is satisfied by completing the courses listed as the major/area of emphasis under various disciplines in the DVC catalog.	
Electives	
Elective courses may be necessary to complete the minimum of 60 degree-applicable units required for the Associate degree. Any degree-applicable course may be selected as an elective.	
Total units required for AA/AS degree	60

Full completion of IGETC (Option 2) or CSU GE (Option 3) may also be used in place of this pattern of courses.

IGETC for CSU or UC

Option 2 for DVC AA/AS GE

Diablo Valley College
Intersegmental General Education Transfer Curriculum
Effective Fall 2022 through Summer 2023

NOTE: Subject to change. See a counselor for more information.

Upon completion of this pattern of courses, DVC will certify that a student's lower division general education requirements are completed for any of the 23 CSU or 9 UC campuses that accept IGETC. **Certification is not automatic; you must request certification with your final transcript through the DVC Admissions Office.**

IGETC is not recommended for all majors. See www.assist.org, check the individual campus website, or meet with a counselor for UC campus and/or major specific IGETC information.

TO TRANSFER AS A JUNIOR TO CSU OR UC YOU MUST:

- Complete at least 60 CSU or UC-transferable units.
- **Courses used for IGETC must be completed with a minimum grade of 'C' or higher.**

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

See a counselor or DVC catalog for use of IB exams to meet these requirements.

AREA 1 - ENGLISH COMMUNICATION CSU - 3 courses required, 1 each from Group A, B, and C. UC - 2 courses required, 1 each from Group A and B.	
1A - English Composition - 1 course, 3 semester units	
English 122+, 122A+, 122AL+, 122AM+, 122L+, 122M+, 122X+	
<i>Note: All English Writing courses limited to 3 units for Area 1A certification and transfer.</i>	
1B - Critical Thinking - English Composition - 1 course, 3 semester units	
Art History 191	Philosophy 130
Communication Studies 121	Psychology 145
English 123, 126	Sociology 122
History 122	
1C - Oral Communication - 1 course, 3 semester units, CSU REQUIREMENT ONLY (required if pursuing AA-T/AS-T degree).	
Communication Studies 120, 123, 130	
AREA 2 - MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING - 1 course, 3 semester units	
Business 240+	
Math 124, 135+, 135SP+, 142+, 144+, 181, 182+, 183+, 191+, 191SP+, 192+, 193+, 194, 195, 292, 294	
Psychology 214+	
AREA 3 - ARTS AND HUMANITIES - 3 courses, 9 semester units, 1 Arts course, 1 Humanities course, and 1 course from either Arts or Humanities.	
3A - Arts - 1 course, 3 semester units	
Architecture 156, 157, 158	Drama 114, 139, 142
Art 151	Film, Television and Electronic Media 200, 205, 210, 280, 281, 282, 283
Art Digital Media 214	Music 110, 112, 114, 115, 117, 118, 119
Art History 100, 193, 195, 196, 197, 199	Music Industry Studies 110
Dance 200, 201	
3B - Humanities - 1 course, 3 semester units	
Arabic 121	History 120, 121, 124, 125, 126, 127, 128, 129, 135, 136, 140, 141, 142, 150, 151, 170, 171, 180, 181
Architecture 160	Humanities 105, 108, 110, 111, 112, 115, 116, 118, 123, 124
Chinese 121, 220, 221	Italian 121, 220, 221, 230, 231
English 150, 151, 152, 153, 154, 162, 163, 164, 166, 167, 168, 170, 172, 173, 175, 176, 177, 178, 180, 190, 252, 253, 262, 263, 272, 273	Japanese 121, 220, 221
Film, Television and Electronic Media 260	Persian 121
French 121, 220, 221, 230, 231	Philosophy 120, 122, 140, 141, 145, 160, 220, 224, 225
German 121, 220, 221, 230, 231	Russian 121, 220, 221
	Sign Language 282, 283
	Spanish 121, 220, 221, 230, 231, 241
Arts and Humanities Area 3A or 3B - 1 course, 3 semester units	
AREA 4 - SOCIAL AND BEHAVIORAL SCIENCES - 3 courses, 9 semester units, courses must be chosen from at least 2 disciplines.	
Administration of Justice 120, 126	History 120, 121, 124, 125, 126, 127, 128, 129, 135, 136, 140, 141, 142, 150, 151, 170, 171, 180, 181
Anthropology 120, 125, 130, 135	Journalism 110
Communication Studies 125, 180	Kinesiology 248
Early Childhood Education 124	Nutrition 130
Economics 101+, 200+, 210, 220, 221	Political Science 120, 121, 122, 123, 127, 151, 210, 220, 240, 250, 252
Education - Special Education 101, 102	Public Health 127+, 130, 135, 137, 140, 164, 170+
Engineering 130, 131	Psychology 101, 122, 130, 140, 141, 160, 190, 195, 200, 220, 225, 230, 240
Ethnic Studies 101	Social Science 101, 110, 111, 120, 123, 220
Film, Television and Electronic Media 240	Sociology 120, 121, 123, 124, 125, 131, 135
Geography 130, 135	

AREA 5 - PHYSICAL AND BIOLOGICAL SCIENCES - 2 courses, 7-9 semester units, 1 Physical Science course and 1 Biological Science course; at least 1 course must include a matching laboratory.	
5A - Physical Science - 1 course, at least 3 semester units, courses with a matching laboratory component are underlined.	
Astronomy 110+ (add Astronomy <u>130</u> for lab), <u>112+</u> , 120+ (add Astronomy <u>130</u> for lab), <u>130</u> Chemistry <u>106+</u> , <u>107+</u> , <u>108+</u> , <u>109+</u> , <u>120</u> , <u>121</u> , <u>226</u> , <u>227</u> Geography 120 (add Geography <u>121</u> for lab), <u>121</u> , 140 (add Geography <u>141</u> for lab), <u>141</u>	Geology 120 (add Geology <u>122</u> for lab), 121 (add Geology <u>124</u> for lab), <u>122</u> , <u>124</u> , 125, <u>130</u> Oceanography 101+, <u>102+</u> Physical Science 112+ Physics 110+ (add Physics <u>111+</u> for lab), <u>111+</u> , <u>112+</u> , 113, <u>120+</u> , <u>121+</u> , <u>129+</u> , <u>130+</u> , <u>230+</u> , <u>231+</u>
5B - Biological Science - 1 course, at least 3 semester units, courses with a matching laboratory component are underlined.	
Anthropology 115 (no lab), 140 (add Anthropology <u>141L</u> for lab), <u>141L</u>	Biological Science 101+, <u>102+</u> , <u>107</u> , 116+, <u>117+</u> , <u>119+</u> , <u>120+</u> , <u>126</u> , <u>130</u> , <u>131</u> , <u>139+</u> , <u>140+</u> , <u>146+</u> , 161+, <u>162+</u> , 170+, <u>171+</u>
5C - Science Laboratory - 1 course underlined in Area 5A or 5B with a matching lecture course as stated above.	
AREA 6 - LANGUAGE OTHER THAN ENGLISH - UC REQUIREMENT ONLY (not required by CSU).	
Students shall demonstrate proficiency in a language other than English by completing ONE of the following:	
<ol style="list-style-type: none"> 1. Satisfactory completion of two years of high school coursework or the second level of high school instruction (United States high school or high school in country where the language of instruction is English) in a language other than English, with a grade of "C-" or better in each course. The two years must be in the same language. Two years of high school study in American Sign Language (ASL). (Please submit official transcript to DVC Admissions Office). 2. One of the following: Arabic 120; Chinese 120; French 120; German 120; Italian 120; Japanese 120; Persian 120; Russian 120; Sign Language 281; Spanish 120. (This requirement can be validated by more advanced course.) 3. Satisfactory score in the SAT II: Subject Test in languages other than English. (See counselor for required scores.) 4. Score of 3 or higher on the AP exams in languages other than English. 5. Score of 5 or higher on the International Baccalaureate Higher Level Exams in languages other than English. 6. Language other than English "O" level exam with a grade of "C" or higher. 7. Language other than English International "A" Level exam with a grade of "C" or higher. 8. Satisfactory completion of a proficiency test administered by a community college, university, or other college in a language other than English. 9. Satisfactory completion with "C" grades or higher, of two years of formal schooling at the sixth-grade level or higher in an institution where the language of instruction is not English. Appropriate documentation of attendance at the secondary school must be presented to DVC Admissions Office. 	

CSU Graduation Requirement

U.S. HISTORY, CONSTITUTION AND AMERICAN IDEALS REQUIREMENT: GRADUATION REQUIREMENT ONLY. The following pairs of classes fulfill the US History, Constitution, and American institutions (AH&I) requirement. This CSU graduation requirement may be fulfilled, but is not required, prior to transfer. Courses used to fulfill this requirement also meet course requirement in IGETC Areas 3 or 4. **See a counselor or DVC catalog for the use of AP and CLEP examinations to meet this requirement.**

One of the following pairs (2 courses):

HIST 120 AND HIST 121 OR 124 OR 128 OR 171 OR POLSC 121 OR 122 OR 123 OR 151 OR SOCSC 111 OR 220	HIST 129 AND POLSC 121 OR 122 OR 123 OR SOCSC 111 OR 220	POLSC 151 AND HIST 120 OR 127 OR 170 OR SOCSC 120
HIST 121 AND HIST 120 OR 127 OR 170 OR POLSC 121 OR 122 OR 123 OR SOCSC 111 OR 120 OR 220	HIST 170 AND HIST 121 OR 124 OR 128 OR 171 OR POLSC 121 OR 122 OR 123 OR 151 OR SOCSC 111 OR 220	SOCSC 111 AND HIST 120 OR 121 OR 125 OR 126 OR 127 OR 128 OR 129 OR 170 OR 171 OR SOCSC 120
HIST 124 AND HIST 120 OR 127 OR 170 OR SOCSC 120	HIST 171 AND HIST 120 OR 127 OR 170 OR POLSC 121 OR 122 OR 123 OR SOCSC 111 OR 120 OR 220	SOCSC 120 AND HIST 121 OR 124 OR 128 OR 171 OR POLSC 121 OR 122 OR 123 OR 151 OR SOCSC 111 OR 220
HIST 125 AND POLSC 121 OR 122 OR 123 OR SOCSC 111 OR 220	POLSC 121 AND HIST 120 OR 121 OR 125 OR 126 OR 127 OR 128 OR 129 OR 170 OR 171 OR SOCSC 120	SOCSC 220 AND HIST 120 OR 121 OR 125 OR 126 OR 127 OR 128 OR 129 OR 170 OR 171 OR SOCSC 120
HIST 126 AND POLSC 121 OR 122 OR 123 OR SOCSC 111 OR 220	POLSC 122 AND HIST 120 OR 121 OR 125 OR 126 OR 127 OR 128 OR 129 OR 170 OR 171 OR SOCSC 120	U.S. HIST AP EXAM + POLSC 121 U.S. HIST AP EXAM + POLSC 122 U.S. HIST AP EXAM + POLSC 123 U.S. HIST AP EXAM + SOCSC 111 U.S. HIST AP EXAM + SOCSC 220
HIST 127 AND HIST 121 OR 124 OR 128 OR 171 OR POLSC 121 OR 122 OR 123 OR 151 OR SOCSC 111 OR 220	POLSC 123 AND HIST 120 OR 121 OR 125 OR 126 OR 127 OR 128 OR 129 OR 170 OR 171 OR SOCSC 120	U.S. GOVT & POLITICS AP EXAM + HIST 121 U.S. GOVT & POLITICS AP EXAM + HIST 128 U.S. GOVT & POLITICS AP EXAM + HIST 171
HIST 128 AND HIST 120 OR 127 OR 170 OR POLSC 121 OR 122 OR 123 OR SOCSC 111 OR 120 OR 220		

+ UC credit limits may apply – please see a counselor.

Full completion of this pattern will also fulfill the general education requirements for the DVC AA/AS degree (Option 2).

CSU GE

Option 3 for DVC AA/AS GE

**Diablo Valley College
California State University General Education Breadth Requirements
Effective Fall 2022 through Summer 2023**

NOTE: Subject to change. See a counselor for more information.

Upon completion of this pattern of courses, DVC will certify that a student’s lower division general education requirements are completed for any of the 23 campuses within the CSU system. **Certification is not automatic; you must request certification with your final transcript through the DVC Admissions Office.**

See www.assist.org for information specific to your major.

TO TRANSFER AS A JUNIOR TO CSU YOU MUST:

- Complete at least 60 CSU-transferable units with a "C" average (2.0).
- Complete at least 30 of the 39 units from the GE courses listed below, including one course from each of the following areas: A1, A2, A3 and B4, with grades of "C" or higher.

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

See a counselor or DVC catalog for use of AP, CLEP or IB exams to meet these requirements.

AREA A - ENGLISH LANGUAGE COMMUNICATION AND CRITICAL THINKING - 3 courses, 9 semester units, grade of "C" or higher required.	
A1 - Oral Communication - 1 course, 3 semester units Communication Studies 120, 123, 130	
A2 - Written Communication - 1 course, 3 semester units. English 122, 122A, 122AL, 122AM, 122L, 122M, 122X <i>Note: All English Writing courses limited to 3 units for GE Certification and transfer.</i>	
A3 - Critical Thinking - 1 course, 3 semester units Art History 191 Communication Studies 121, 123 English 123, 126 History 122 Philosophy 130, 170 Psychology 145 Sociology 122	
AREA B - SCIENTIFIC INQUIRY AND QUANTITATIVE REASONING (including Mathematics) - 3 courses, at least 9 semester units required, 1 Physical Science course and 1 Life Science course; at least 1 course must include a matching laboratory. At least 1 Mathematics/Quantitative Reasoning course also required.	
B1 - Physical Science - 1 course, at least 3 semester units, courses with a matching laboratory component are underlined. Astronomy 110 (add Astronomy <u>130</u> for lab), <u>112</u> , 120 (add Astronomy <u>130</u> for lab), <u>130</u> Chemistry 106, <u>107</u> , <u>108</u> , <u>109</u> , <u>120</u> , <u>121</u> , <u>226</u> , <u>227</u> Geography 120 (add Geography <u>121</u> for lab), <u>121</u> , 140 (add Geography <u>141</u> for lab), <u>141</u> Geology 120 (add Geology <u>122</u> for lab), 121 (add Geology <u>124</u> for lab), <u>122</u> , <u>124</u> , 125, <u>130</u> Oceanography 101, <u>102</u> Physical Science 112 Physics 110 (add Physics <u>111</u> for lab), <u>111</u> , <u>112</u> , 113, <u>120</u> , <u>121</u> , <u>129</u> , <u>130</u> , <u>230</u> , <u>231</u>	
B2 - Life Science - 1 course, at least 3 semester units, courses with a matching laboratory component are underlined. Anthropology 115 (no lab), 140 (add Anthropology <u>141L</u> for lab), <u>141L</u> Biological Science 101, <u>102</u> , <u>107</u> , 116, <u>117</u> , <u>119</u> , <u>120</u> , <u>126</u> , <u>130</u> , <u>131</u> , <u>139</u> , <u>140</u> , <u>146</u> , 161, <u>162</u> , 170, <u>171</u>	
B3 - Laboratory Activity - 1 course underlined in Area B1 or B2 with a matching lecture course as stated above.	
B4 - Mathematics/Quantitative Reasoning - 1 course required, grade of "C" or higher required for certification. Business 240 Mathematics 121, 124, 125, 135, 135SP, 142, 144, 181, 182, 183, 191, 191SP, 192, 193, 194, 195, 292, 294 Psychology 214	
AREA C - ARTS AND HUMANITIES - 3 courses, 9 semester units, 1 Arts course, 1 Humanities course and 1 course from either Arts or Humanities for a total of at least 9 semester units.	
C1 - Arts: (Arts, Cinema, Dance, Music, Theater) - 1 course, 3 semester units Architecture 120, 121, 130, 156, 157, 158, 160 Art 151 Art Digital Media 214 Art History 100, 193, 195, 196, 197, 199 Communication Studies 148 Dance 200, 201 Drama 114, 122, 139, 142, 150 English 152 Film, Television and Electronic Media 200, 205, 210, 280, 281, 282, 283 Music 110, 112, 114, 115, 117, 118, 119, 122 Music Industry Studies 110	
C2 - Humanities: (Literature, Philosophy, Languages Other than English) - 1 course, 3 semester units Arabic 121 Architecture 160 Chinese 121, 220, 221 Drama 142 English 150, 151, 152, 153, 154, 162, 163, 164, 166, 167, 168, 170, 172, 173, 175, 176, 177, 178, 180, 190, 222, 223, 224, 225, 252, 253, 262, 263, 272, 273 Film, Television and Electronic Media 210, 260 French 121, 220, 221, 230, 231 German 121, 220, 221, 230, 231 History 120, 121, 124, 125, 126, 127, 128, 129, 135, 136, 140, 141, 142, 150, 151, 170, 171, 180, 181 Humanities 105, 108, 110, 111, 112, 115, 116, 118, 123, 124 Italian 121, 220, 221, 230, 231 Japanese 121, 220, 221 Persian 121 Philosophy 120, 122, 140, 141, 145, 160, 220, 224, 225 Russian 121, 220, 221 Sign Language 281, 282, 283 Spanish 121, 220, 221, 230, 231, 240, 241	
Arts and Humanities Area C1 or C2 - 1 course, 3 semester units	

AREA D - SOCIAL SCIENCES - 2 courses, 6 semester units, it is recommended to choose courses from 2 different disciplines. Students enrolled in DVC prior to fall 2021, who also maintain continuous enrollment, can complete 3 courses, 9 semester units, from at least 2 disciplines in lieu of the Area F requirement.

Administration of Justice 120, 126, 139	History 120, 121, 124, 125, 126, 127, 128, 129, 135, 136, 140, 141, 142, 150, 151, 170, 171, 180, 181
Anthropology 120, 125, 130, 135	Journalism 110
Communication Studies 125, 180	Kinesiology 248
Early Childhood Education 124, 130, 144	Nutrition 130
Economics 101, 200, 210, 220, 221	Political Science 120, 121, 122, 123, 127, 151, 210, 220, 240, 250, 252
Education – Special Education 101, 102	Psychology 101, 122, 130, 140, 141, 160, 190, 195, 200, 215, 220, 225, 230, 240
Engineering 130, 131	Public Health 127, 130, 135, 137, 140, 164, 170
Ethnic Studies 101	Social Science 101, 110, 111, 120, 123, 220
Film, Television and Electronic Media 240	Sociology 120, 121, 123, 124, 125, 131, 135
Geography 130, 135	

AREA E - LIFELONG LEARNING AND SELF-DEVELOPMENT - at least 3 semester units required, not all in physical activity. Military service may be used to fulfill this requirement. DD-214 must be submitted through the DVC Admissions and Records Office.

Career 110	Kinesiology – Activity 100A – 195C
Counseling 120, 125, 140	Nutrition 115, 130, 160, 170
Dance 100-130B, 160A-170B	Psychology 122, 140, 141, 160, 195, 200
Early Childhood Education 124	Public Health 124, 127, 130, 135, 140, 164, 170
Kinesiology 100, 246	

AREA F - ETHNIC STUDIES - 1 course, 3 semester units; CSU GE Breadth requirements were revised to include Area F - Ethnic Studies. This revision applies to new students beginning fall 2021. Students enrolled in DVC prior to fall 2021, who also maintain continuous enrollment, are not required to complete Area F, but are subject to the 3-course requirement in Area D.

Ethnic Studies 101

U.S. HISTORY, CONSTITUTION AND AMERICAN IDEALS REQUIREMENT:

GRADUATION REQUIREMENT ONLY. The following pairs of classes fulfill the US History, Constitution, and American institutions (AH&I) requirement. This CSU graduation requirement may be fulfilled, but is not required, prior to transfer. Courses used to fulfill this requirement also meet course requirement in CSU GE Areas C or D. See a counselor for the use of AP and CLEP examinations to meet this requirement.

One of the following pairs (2 courses):

HIST 120 AND HIST 121 OR 124 OR 128 OR 171 OR POLSC 121 OR 122 OR 123 OR 151 OR SOCSC 111 OR 220	HIST 129 AND POLSC 121 OR 122 OR 123 OR SOCSC 111 OR 220	POLSC 151 AND HIST 120 OR 127 OR 170 OR SOCSC 120
HIST 121 AND HIST 120 OR 127 OR 170 OR POLSC 121 OR 122 OR 123 OR SOCSC 111 OR 120 OR 220	HIST 170 AND HIST 121 OR 124 OR 128 OR 171 OR POLSC 121 OR 122 OR 123 OR 151 OR SOCSC 111 OR 220	SOCSC 111 AND HIST 120 OR 121 OR 125 OR 126 OR 127 OR 128 OR 129 OR 170 OR 171 OR SOCSC 120
HIST 124 AND HIST 120 OR 127 OR 170 OR SOCSC 120	HIST 171 AND HIST 120 OR 127 OR 170 OR POLSC 121 OR 122 OR 123 OR SOCSC 111 OR 120 OR 220	SOCSC 120 AND HIST 121 OR 124 OR 128 OR 171 OR POLSC 121 OR 122 OR 123 OR 151 OR SOCSC 111 OR 220
HIST 125 AND POLSC 121 OR 122 OR 123 OR SOCSC 111 OR 220	POLSC 121 AND HIST 120 OR 121 OR 125 OR 126 OR 127 OR 128 OR 129 OR 170 OR 171 OR SOCSC 120	SOCSC 220 AND HIST 120 OR 121 OR 125 OR 126 OR 127 OR 128 OR 129 OR 170 OR 171 OR SOCSC 120
HIST 126 AND POLSC 121 OR 122 OR 123 OR SOCSC 111 OR 220	POLSC 122 AND HIST 120 OR 121 OR 125 OR 126 OR 127 OR 128 OR 129 OR 170 OR 171 OR SOCSC 120	U.S. HIST AP EXAM + POLSC 121 U.S. HIST AP EXAM + POLSC 122 U.S. HIST AP EXAM + POLSC 123 U.S. HIST AP EXAM + SOCSC 111 U.S. HIST AP EXAM + SOCSC 220
HIST 127 AND HIST 121 OR 124 OR 128 OR 171 OR POLSC 121 OR 122 OR 123 OR 151 OR SOCSC 111 OR 220	POLSC 123 AND HIST 120 OR 121 OR 125 OR 126 OR 127 OR 128 OR 129 OR 170 OR 171 OR SOCSC 120	U.S. GOVT & POLITICS AP EXAM + HIST 121 U.S. GOVT & POLITICS AP EXAM + HIST 128 U.S. GOVT & POLITICS AP EXAM + HIST 171
HIST 128 AND HIST 120 OR 127 OR 170 OR POLSC 121 OR 122 OR 123 OR SOCSC 111 OR 120 OR 220		

Full completion of this pattern will also fulfill the general education requirements for the DVC AA/AS degree (Option 3).



DVC CAREER EDUCATION PROGRAMS

DVC offers more than 30 career education programs and over 100 certificates and degrees that provide students with the educational background and training they need to achieve their career goals. By completing a career education program, students demonstrate to employers that they have acquired appropriate and up-to-date skills. Changing technologies affect 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 education certificate and degree programs vary in length; most certificate programs require less than two years of full-time study to complete. Many programs may be completed on a part-time basis. DVC offers two types of credit certificates: certificates of achievement and certificates of accomplishment. In most 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 coursework 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 descriptions 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

Department	noncredit certificate	cert of accomplishment	cert of achievement	degree - major	AA/AS/AA-T/AS-T	Department	noncredit certificate	cert of accomplishment	cert of achievement	degree - major	AA/AS/AA-T/AS-T
Addiction Studies - ADS			•	•		Geology - GEOL				•	•
Administration of Justice - ADJUS	•	•	•	•	•	German - GRMAN			•	•	
Anthropology - ANTHR					•	Heating, Ventilation, Air Conditioning, Refrigeration - HVACR		•	•	•	
Architecture - ARCHI			•	•		History - HIST					•
Art - ART			•	•	•	Horticulture - HORT		•	•		•
Art Digital Media/Graphic Design - ARTDM	•	•	•	•		Humanities - HUMAN				•	
Art History - ARTHS					•	Industrial Design - IDSGN			•	•	
Biological Science/Allied Health - BIOSC			•	•	•	Interdisciplinary - INTD	•				
Business - BUS / BUSMG / BUSMK		•	•	•	•	Italian - ITAL			•	•	
Business Accounting - BUSAC			•	•	•	Japanese - JAPAN			•	•	
Chemistry - CHEM			•			Journalism - JRNL					•
Chinese - CHIN			•	•		Kinesiology- KINES			•	•	•
Communication Studies - COMM			•		•	Library Technology - LT			•	•	
Computer Information Systems - CIS	•	•	•	•		Mathematics - MATH					•
Computer Network Technologies - CNT			•	•		Mechanical Technology - ENGTC		•	•	•	
Computer Science - COMSC			•	•		Music - MUSIC				•	•
Construction - CONST	•	•	•	•		Music Industry Studies - MUSX			•	•	
Culinary Arts - CULN	•	•	•	•	•	Nutrition - NUTRI			•		•
Dance - DANCE				•		Philosophy - PHILO			•	•	•
Dental Assisting - DENTL			•	•		Physics - PHYS					•
Dental Hygiene - DENHY				•		Plumbing - PLUMB		•	•	•	
Drama - DRAMA			•	•	•	Political Science - POLSC					•
Early Childhood Education - ECE			•	•	•	Public Health - PH				•	•
Economics - ECON					•	Psychology - PSYCH					•
Education - EDUC					•	Real Estate - RE (see Business)		•	•		
Electrical/Electronics Technology - ELECT/ELTRN	•	•	•	•		Respiratory Therapy** - RT				•	
Energy Systems - ENSYS	•	•	•	•		Russian - RUSS			•	•	
Engineering - ENGIN				•		Social Science - SOCSC		•			•
Engineering Technology - ENGTC	•	•	•	•		Sociology - SOCIO					•
English - ENGL				•	•	Spanish - SPAN			•	•	•
English as a Second Language - ESL	•	•				Special Education - EDUSP			•	•	
Environmental Science - ENVSC				•	•	Steamfitting - STMFT		•	•	•	
Film, Television and Electronic Media - FTVE	•	•	•	•	•	Transfer Studies - CSU			•		
French - FRNCH			•	•		Transfer Studies - IGETC			•		
Geography - GEOG		•	•	•	•	Workforce Preparation - WRKP	•				

** offered in collaboration with Ohlone College, which grants the degree

For the most up to date listing of programs and degrees, visit: www.dvc.edu/programs

PROGRAM AND COURSE DESCRIPTIONS

chapter four

catalog 2022-2023



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Geography	298	Real estate (see business real estate)	154
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UNDERSTANDING THE COURSE DESCRIPTIONS

Availability of course offerings

The courses listed in the catalog may not be offered every term or every year. Refer to the schedule of classes for courses offered in 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. Most courses with numbers between 100 and 299 are college-level freshman and sophomore level courses. Exceptions apply in English. English and English as a Second Language courses numbered below 122/122A/122AM/122L/122M/122AL/122X have limited or no degree applicability. Only one of the following courses may be applied to the units required for an associate degree: ENGL-116, 117, 118, 121 or ESL-117A. Students should carefully review each specific course description and meet with a counselor to ensure that the selected courses will satisfy requirements for transfer, degree, or certificate goals.

Prerequisites/co-requisites

When a course description lists a prerequisite, it means that the prerequisite must be successfully completed before the student may enroll in that course. If the course lists a co-requisite, students must have successfully completed the course in a prior term or be enrolled in the co-requisite course in the same term. See page 20 for more information about course prerequisites and/or co-requisites.

Advisories

When a course description lists an advisory, students are advised to complete the advisory course or courses before enrolling in the selected course. Advisories increase the student's ability to succeed.

Course codes

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

Grade Codes

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 fourth week of the term for full-term classes. See page 31 for more information about the grade policy.

Transferability codes

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, not as a major or general education requirement. Students should seek the advice of a counselor for complete information about the transferability of courses toward meeting general education or major requirements. Lists of CSU-transferable courses are available at www.assist.org.

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.

California Course Identification Numbering System (C-ID)

The Course Identification Numbering System (C-ID) is a statewide numbering system independent from the course numbers assigned by local California community colleges. A C-ID number signals that participating California colleges and universities have determined that courses offered by other California community colleges are comparable in content and scope to courses offered on their own campuses, regardless of their unique titles or local course number. Thus, if a schedule of classes or catalog lists a course bearing a C-ID number, for example COMM 110, students at that college can be assured that it will be accepted in lieu of a course bearing the C-ID COMM 110 designation at another community college. In other words, the C-ID designation can be used to identify comparable courses at different community colleges. However, students should always go to www.assist.org to confirm how each college's course will be accepted at a particular four-year college or university for transfer credit.

The C-ID numbering system is useful for students attending more than one community college and is applied to many of the transferable courses students need as preparation for transfer. Because these course requirements may change and because courses may be modified and qualified for or deleted from the C-ID database, students should always check with a counselor to determine how C-ID designated courses fit into their educational plans for transfer.

Students may consult the ASSIST database at www.assist.org for specific information on C-ID course designations. Counselors can help students interpret or explain this information. See course descriptions for C-ID course designations.

COURSEWORK AND STUDY TIME PER UNIT

Units of credit are established based on the minimum amount of time students will need to achieve the intended learning outcomes as described by Title 5, section 55002.5. Units of credit established by the faculty for each course reflect generally accepted norms or equivalencies in higher education. In general, for a full-term, three-unit lecture class, students spend three plus hours each week in class and six plus hours of study time out of class totaling a minimum of 9 hours each week. The number of units established for laboratory courses is based on the number of hours of laboratory work alone, although many laboratory courses may also require study outside of laboratory hours.

Expected total hours of study outside of class apply equally to short-term and summer classes; students should carefully plan their schedules to include these hours of study during accelerated terms. Online classes require more hours of independent work in lieu of face-to-face meetings and students are advised that total hours of study for such courses will exceed minimums.

The following examples reflect the minimum expected hours of study per term:

Sample Course	Units	Lecture hours	Laboratory Activity hours	Minimum out of class study hours	Total hours	Typical hours week for a full term class
HIST-120	3	54	0	108	162	9+
COMSC-210	4	54	54	108	216	12+
KNACT-110A	1	0	54	0	54	3+
MATH-135	4	72	0	144	216	12+

A unit load of 12 units is generally considered full-time. In the examples provided above, a student enrolling in HIST-120, COMSC-210, KNACT-110A and MATH-135 would expect to devote a minimum of 36 hours to study (in and out-of-class).

PROGRAM LENGTH

Most degree programs at DVC can be completed in two years, assuming students take an average of 15 units per term. Certificate programs vary in length; most certificate programs require less than two years of full-time study to complete and many programs may be completed on a part-time basis. DVC offers two types of credit 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 are advised to meet with a counselor or program advisor to develop an educational plan as not all courses are offered every term.

PROGRAM AND COURSE DESCRIPTIONS

ACCOUNTING

See Business accounting - BUSAC

ADDICTION STUDIES – ADS

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

Christine Worsley, Dean
Kinesiology, Athletics, and Health Sciences Division
Kinesiology Offices, Room 1

Possible career opportunities

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

Associate in science degree Addiction counseling

Students completing the program will be able to...

- compare and contrast the efficacy of various assessment tools, motivational strategies, and substance abuse treatment approaches.
- describe the importance of cultural competence and how it relates to becoming an effective addiction counselor.
- demonstrate basic listening skills.
- discuss the legal and ethical issues that workers may encounter in the addiction treatment field.
- explain how addiction affects family systems.
- compare and contrast various assessment tools, treatment plans and charting protocols.

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 ensure 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. Certain courses may satisfy both a major and other general education 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.

<i>major requirements:</i>		<i>units</i>
ADS-102	Introduction to Motivational Interviewing Skills	3
ADS-151*	Ethical and Legal Concerns for ADS Counselors	1.5
ADS-152	Relapse Prevention	3
ADS-154	Dual Disorders.....	3
ADS-168*	Group Process and Leadership.....	3
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
PH-127	Drugs, Health, and Society	3
PH-137	Cultural Competence in Health and Social Service.....	3
total minimum units for the major		33.5

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

Associate in science degree Addiction studies

Students completing the program will be able to...

- compare and contrast the prevalence, impact, and cost of substance use, abuse, and dependence to the individual and society.
- identify the general terminology related to addiction and recovery.
- analyze common family patterns of behavior and the influence addiction has within the family system.
- describe ways addiction affects family systems.

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 ensure that the requirements for transfer to appropriate institutions are met. Certain courses may satisfy both major and general education 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.

<i>major requirements:</i>		<i>units</i>
ADS-102	Introduction to Motivational Interviewing Skills	3
ADS-152	Relapse Prevention	3
ADS-154	Dual Disorders.....	3
ADS-170	Introduction to Codependency and Family Issues	3
PH-127	Drugs, Health, and Society	3
PH-137	Cultural Competence in Health and Social Service.....	3
total minimum units for the major		18

Certificate of achievement Addiction counseling

Students completing the program will be able to...

- compare and contrast the efficacy of various assessment tools, motivational strategies, and substance abuse treatment approaches.
- describe the importance of cultural competence and how it relates to becoming an effective addiction counselor.
- demonstrate basic listening skills.
- identify the legal and ethical issues that workers may encounter in the addiction treatment field.
- demonstrate an understanding of how addiction affects family systems.

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.

<i>required courses:</i>		<i>units</i>
ADS-102	Introduction to Motivational Interviewing Skills	3
ADS-151*	Ethical and Legal Concerns for ADS Counselors	1.5
ADS-152	Relapse Prevention	3
ADS-154	Dual Disorders.....	3
ADS-168*	Group Process and Leadership.....	3
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
PH-127	Drugs, Health, and Society	3
PH-137	Cultural Competence in Health and Social Service.....	3
total minimum required units		33.5

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

Certificate of achievement Addiction studies

Students completing the program will be able to...

- compare and contrast the prevalence, impact, and cost of substance use, abuse, and dependence to the individual and society.
- identify the general terminology related to addiction and recovery.
- analyze common family patterns of behavior and the influence addiction has within the family system.
- describe ways addiction affects family systems.

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.

Addiction studies

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.

<i>required courses:</i>	<i>units</i>
ADS-102 Introduction to Motivational Interviewing Skills	3
ADS-152 Relapse Prevention	3
ADS-154 Dual Disorders.....	3
ADS-170 Introduction to Codependency and Family Issues	3
PH-127 Drugs, Health, and Society.....	3
PH-137 Cultural Competence in Health and Social Service.....	3
total minimum required units	18

ADS-102 Introduction to Motivational Interviewing Skills

- 3 units SC
- 54 hours lecture per term
 - *Advisory: College-level reading and writing are expected.*

This course presents an overview of basic communication skills, motivational interviewing techniques, and the theories of Change. Charting protocols and treatment planning techniques will also be covered. CSU

ADS-150 Topics in Addiction Studies

- .3-4 units SC
- *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 Counselors

- 1.5 units SC
- 27 hours lecture per term
 - *Prerequisite: ADS-102 (may be taken concurrently) and PH-127 or equivalents*
 - *Advisory: College-level reading and writing are expected.*

This course is designed to familiarize students with the legal and ethical issues related to addiction counseling in the state of California. Reporting laws, requirements related to maintaining client confidentiality and boundaries, and recognizing the differing levels of legal and ethical obligations for licensed mental health practitioners and certified addiction counselors versus other voluntary recovery support providers will also be examined. CSU

ADS-152 Relapse Prevention

- 3 units SC
- 54 hours lecture per term
 - *Advisory: College-level reading and writing are expected.*

This course provides an overview of the progressive and predictable warning signs of relapse in the addiction and recovery process. Skills and techniques used to develop a relapse prevention program will be covered. CSU

ADS-154 Dual Disorders

- 3 units SC
- 54 hours lecture per term
 - *Advisory: College-level reading and writing are expected.*

This course presents an overview of the concepts and definitions related to co-occurring (dual) disorders, and the impact that co-occurring disorders have on addiction treatment and recovery. Emphasis will be placed on the various strategies that mental health and substance abuse professionals use to address co-occurring disorders with reference to the Diagnostic Statistical Manual of Mental Disorders (DSM). CSU

ADS-155 Diverse Communities and Social Services

- 3 units SC
- 54 hours lecture per term
 - *Advisory: College-level reading and writing are expected.*

This course investigates the impact of health status, lifestyle and behavioral patterns, communication styles, socioeconomic status, personal prejudices, ethnic stereotyping, and cultural beliefs on individual and group access to social services. An evaluation of existing social services programs and effective strategies for cross- and inter-cultural work in social services, with particular emphasis on addiction prevention, intervention, and treatment services will be examined. CSU

ADS-168 Group Process and Leadership

- 3 units SC
- 54 hours lecture per term
 - *Prerequisite: ADS-102 and PH-127 or equivalents*
 - *Advisory: ADS-151 and 170 or equivalents*

This course explores the theories and practices of group process, group dynamics, and group facilitation. Administrative tasks related to group leadership responsibilities, facilitating various types of addiction groups, and the stages of cohesion are presented. Basic observation and communication skills needed for facilitating support groups for people with histories of substance abuse, co-dependence, and other addictive behaviors will be developed. CSU

ADS-170 Introduction to Codependency and Family Issues

3 units SC

- 54 hours lecture per term
- Advisory: College-level reading and writing are expected. PH-127 or equivalent

This course examines the biological, psychological, and sociological aspects of family systems, and the influence of addiction on the family. Close examination of family system variables, such as family structure, family roles, communication, and emotional bonding with a focus on how addiction impacts functional and dysfunctional patterns of behavior is provided. CSU

ADS-171 ADS-Field Work I

5.5 units SC

- 54 hours lecture/135 hours laboratory per term
- Prerequisite: ADS-102, PH-127 or equivalents
- Advisory: College-level reading and writing are expected.
- Note: It is highly recommended that a student complete at least 10 units in the addiction studies program before entering this course.

Students will gain first-hand experience by working in community clinical settings that serve clients with various substance abuse problems. Emphasis is placed on the development of clinical competency through assisting in assessment, treatment planning, group facilitation, record-keeping, and general agency procedures. Students will have on-site supervision and then debrief their experiences with fellow students by sharing what they learned, as well challenges of providing substance abuse services in a community clinic setting. Additionally, students will explore possible locations for employment, learn interviewing skills, and develop an understanding of the necessary requirements for state and other professional certifications. CSU

ADS-172 ADS-Field Work II

5.5 units SC

- 54 hours lecture/135 hours laboratory per term
- Prerequisite: ADS-171 or equivalent
- Co-requisite: ADS-151 or equivalent (may be taken previously)

Students will continue to gain first-hand experience by working in community clinical settings that serve clients with various substance abuse problems to develop clinical competency by facilitating groups, utilizing case-management skills, and examining the clinical procedures related to addiction treatment. Students will have on-site supervision, and then debrief their experiences with fellow students by sharing what they learned, as well as the challenges of providing substance abuse services in a community clinic setting. Students will also prepare for state certification and employment by reviewing Technical Assistance Publication (TAP) 21 addiction counseling competency guidelines and refining interview skills. CSU

ADS-299 Student Instructional Assistant

.5-3 units SC

- 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

ADMINISTRATION OF JUSTICE – ADJUS

Obed Vazquez, Dean

Social Sciences Division

Faculty Office Building, Room 136

Possible career opportunities

Law enforcement study prepares students for a career as a police officer, sheriff's deputy, 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, judge or bailiff.

Associate in science degree**Administration of justice****Students completing the program will be able to...**

- demonstrate an understanding of the three parts of the criminal justice system and how they interrelate.
- demonstrate a working knowledge of the theory and practice of criminal law.
- demonstrate an understanding of the legal procedures of the United States and California criminal justice systems.

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.

Administration of justice

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. Certain courses may satisfy both major and general education requirements; however, the units are only counted once.

<i>major requirements:</i>	<i>units</i>
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 Cultural Diversity in Criminal Justice.....	3
ADJUS-221 Legal Aspects of Evidence	3
ADJUS-284 Interviewing and Counseling.....	3

<i>plus at least 7-9 units from:</i>	
ADJUS-125 Report Preparation for Criminal Justice.....	3
ADJUS-139 Gangs and Threat Groups in America.....	3
ADJUS-203 Crime Scene Investigation	4
ADJUS-222 Criminal Investigation.....	3
ADJUS-230 Juvenile Procedures.....	3
ADJUS-250 Terrorism and Homeland Security.....	3
ADJUS-260 The Police: Roles, Methods, and Operations.....	3
ADJUS-270 Personal Self Defense and Firearms	2
ADJUS-280 Community-Based Corrections.....	3
ADJUS-298 Independent Study.....	0.5-3

total minimum units for the major 28

Associate in science in administration of justice for transfer

Students completing the program will be able to...

- achieve an advanced level of understanding about the administration of justice, the law, crime and delinquency, and working with diverse communities.
- identify and increase understanding of major social issues relating to crime, criminals, prevention and control, and victims.
- focus on police and social control, law and courts, corrections, juvenile justice, and special problems, trends, and contemporary topics in this field.

A DVC administration of justice student who has earned the associate in science in administration of justice for transfer (AS-T) will be granted priority admission to the CSU into a similar baccalaureate (BA) degree program as long as the student meets all prescribed admission requirements.

The associate in science in administration of justice for transfer is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major.

In order to earn the degree, students must:

- Complete 60 CSU-transferable units.
- Complete the California State University-General Education pattern (CSU GE); or the Intersegmental General Education Transfer Curriculum (IGETC) pattern, including the Area 1C requirement for Oral Communication.
- Complete a minimum of 18 units in the major.
- Attain a minimum grade point average (GPA) of 2.0.
- Earn a grade of “C” or higher in all courses required for the major.

Students transferring to a CSU campus that accepts the degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system, or those students who do not intend to transfer.

Some courses in the major satisfy both major and CSUGE/IGETC general education requirements; however, the units are only counted once toward the 60 unit requirement for an associate degree. 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.

<i>major requirements:</i>	<i>units</i>
ADJUS-120 Introduction to the Administration of Justice	3
ADJUS-121 Criminal Law.....	3

<i>plus at least 6 units from:</i>	
ADJUS-122 Criminal Procedure	3
ADJUS-124 Elements of Corrections	3
ADJUS-130 Cultural Diversity in Criminal Justice.....	3
ADJUS-203 Crime Scene Investigation	4
ADJUS-221 Legal Aspects of Evidence	3
ADJUS-222 Criminal Investigation.....	3
ADJUS-230 Juvenile Procedures.....	3

<i>plus at least 6 units from:</i>	
<i>any course not used above or:</i>	
ADJUS-250 Terrorism and Homeland Security.....	3
POLSC-121 Introduction to United States Government	3
PSYCH-101 Introduction to Psychology	3
SOCIO-120 Introduction to Sociology.....	3
BUS-240 Business Statistics.....	3
or	
MATH-142 Elementary Statistics with Probability.....	4
or	
MATH-144 Statway II.....	4

total minimum units for the major 18

Certificate of achievement Administration of justice

Students completing the program will be able to...

- demonstrate a working knowledge of the basic components of the criminal justice system.
- demonstrate a working knowledge of the theory and practice of criminal law.
- demonstrate an understanding of the legal procedures of the United States and California criminal justice systems.

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

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

<i>required courses:</i>	<i>units</i>
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 Cultural Diversity in Criminal Justice	3
ADJUS-221 Legal Aspects of 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 Crime Scene Investigation	4
ADJUS-222 Criminal Investigation.....	3
ADJUS-230 Juvenile Procedures.....	3
ADJUS-250 Terrorism and Homeland Security	3
ADJUS-260 The Police: Roles, Methods, and Operations.....	3
ADJUS-270 Personal Self Defense and Firearms	2
ADJUS-280 Community-Based Corrections.....	3
ADJUS-298 Independent Study.....	0.5-3

total minimum required units 28

Certificate of achievement Administration of justice Police/Law enforcement

Students completing the program will be able to...

- demonstrate an understanding of the three parts of the criminal justice system and how they interrelate.
- gather, organize and prepare written reports for law enforcement and correctional activities.
- demonstrate proficiency with handguns and shotguns, an understanding of personal safety and defensive tactics and their legal ramifications.

This certificate of achievement program prepares students for entry-level careers as law enforcement officers in federal, state, and local agencies, as well as in private and corporate security. After completing this certificate, students enrolling in a POST police academy will have a solid foundation that will help to ensure their successful completion and high achievement in the academy. Students entering private security will attain the knowledge, skills, and training to be successful and effective in these careers. Completion of this certificate will also improve opportunities for employment and provide for advancement and promotion for those currently employed in these fields.

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 be completed by a combination of day, evening, or weekend courses listed in the Administration of Justice (AJ) Program. Successful completion of coursework for this certificate counts towards the requirements of the certificate of achievement in administration of justice.

<i>required courses:</i>	<i>units</i>
ADJUS-120 Introduction to the Administration of Justice	3
ADJUS-125 Report Preparation for Criminal Justice	3
ADJUS-222 Criminal Investigation.....	3
ADJUS-260 The Police: Roles, Methods, and Operations.....	3
ADJUS-270 Personal Self Defense and Firearms	2

plus at least 6 units from:

ADJUS-126 Leadership and Ethics	3
ADJUS-130 Cultural Diversity in Criminal Justice	3
ADJUS-139 Gangs and Threat Groups in America	3
ADJUS-250 Terrorism and Homeland Security	3
ADJUS-281 Community Policing and Problem Solving	3
ADJUS-284 Interviewing and Counseling.....	3

total minimum required units 20

Certificate of accomplishment Administration of justice Community relations specialist

Students completing the program will be able to...

- demonstrate an understanding of the three parts of the criminal justice system and how they interrelate.
- demonstrate an understanding of the theoretical and conceptual overview of multicultural concepts and issues as they relate to the criminal justice system.
- demonstrate an understanding of the history, culture, organization of criminal gangs and their social and criminal impact upon society.

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

Administration of justice

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.

<i>required courses:</i>	<i>units</i>
ADJUS-120 Introduction to the Administration of Justice	3
ADJUS-130 Cultural Diversity in Criminal Justice.....	3
ADJUS-139 Gangs and Threat Groups in America.....	3

<i>plus at least 3 units from:</i>	
ADJUS-280 Community-Based Corrections.....	3
ADJUS-284 Interviewing and Counseling.....	3
total minimum required units	12

Certificate of accomplishment Administration of justice Correctional specialist

Students completing the program will be able to...

- demonstrate familiarity with the basic components of the criminal justice system with special emphasis on the correctional system.
- demonstrate an understanding of the history, culture, organization of criminal gangs and their social and criminal impact on society.
- demonstrate a working knowledge of the organization, functions and jurisdiction of juvenile agencies and processing and detention of juveniles.

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.

<i>required courses:</i>	<i>units</i>
ADJUS-120 Introduction to the Administration of Justice	3
ADJUS-124 Elements of Corrections	3
ADJUS-139 Gangs and Threat Groups in America.....	3
ADJUS-284 Interviewing and Counseling.....	3
total minimum required units	12

Certificate of accomplishment Administration of justice Crime scene investigator

Students completing the program will be able to...

- demonstrate an understanding of the three parts of the criminal justice system and how they interrelate.
- identify, collect, package and analyze physical evidence from a crime scene.
- conduct a successful criminal investigation using interviews, interrogation, and case preparation.

This certificate prepares students for entry-level careers as crime scene investigators, fingerprint examiners, crime scene photographers, private security investigators, and criminal investigators. It also is a foundation for those students who wish to pursue advanced careers as criminalists or criminal profilers. Completion of this certificate can lead to employment in these fields or provide advancement and promotion to those currently employed 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.

<i>required courses:</i>	<i>units</i>
ADJUS-120 Introduction to the Administration of Justice	3
ADJUS-203 Crime Scene Investigation	4
ADJUS-206 Advanced Crime Scene Forensics	4
ADJUS-222 Criminal Investigation.....	3
total minimum required units	14

Certificate of accomplishment Administration of justice Criminal law specialist

Students completing the program will be able to...

- demonstrate an understanding of the three parts of the criminal justice system and how they interrelate.
- demonstrate a working knowledge of the theory and practice of criminal law.
- demonstrate an understanding of the legal procedures of the United States and California criminal justice systems.

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.

<i>required courses:</i>	<i>units</i>
ADJUS-120 Introduction to the Administration of Justice	3
ADJUS-121 Criminal Law.....	3
ADJUS-122 Criminal Procedure	3
ADJUS-221 Legal Aspects of Evidence	3
total minimum required units	12

Certificate of accomplishment Administration of justice Juvenile counseling

Students completing the program will be able to...

- demonstrate an understanding of the three parts of the criminal justice system and how they interrelate.
- demonstrate an understanding of the history, culture, organization of criminal gangs and their social and criminal impact on society.
- demonstrate a working knowledge of the organization, functions and jurisdiction of juvenile agencies and processing and detention of juveniles.

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.

<i>required courses:</i>	<i>units</i>
ADJUS-120 Introduction to the Administration of Justice	3
ADJUS-124 Elements of Corrections	3
ADJUS-139 Gangs and Threat Groups in America.....	3
ADJUS-230 Juvenile Procedures.....	3
ADJUS-284 Interviewing and Counseling.....	3
total minimum required units	15

Noncredit - certificate of completion Public safety employment preparation

Students completing this program will be able to...

- successfully complete an employment and background application process.
- successfully pass a written entry-level examination process.
- successfully pass an entry-level oral interview process.
- successfully pass an entry-level physical agility exam.

This noncredit program will assist and support students with the key components of the hiring process to attain careers in public safety. The program will provide the instruction and hands-on training, coaching, and support for students through the police and public safety career application and hiring process, including the entry level application and background process, successfully passing written tests and the oral interview, as well as fitness preparation and passing the physical agility entry test.

<i>Complete a minimum of two of the following courses:</i>	<i>units</i>
ADJUS-010NC Public Safety Employment Application and Personal History Statement – NC.....	0
ADJUS-020NC Public Safety Written Exam and Writing Skills Preparation – NC	0
ADJUS-030NC Public Safety Oral Interview Preparation – NC.....	0
ADJUS-040NC Public Safety Physical Fitness and Testing – NC.....	0
total minimum required units	0

ADJUS-010NC Public Safety Employment Application & Personal History Statement-NC

0 units P/NP

- 9 hours lecture/9 hours laboratory per term

This noncredit course will assist and support students with the key components of the hiring process to attain careers in public safety. Students will be instructed and supported through the public safety application and hiring process, which includes the preparation of the employment application, resume writing, completing the personal history statement, and the background investigation process. This course also creates a pipeline to employment for students and will include contact and access to police, fire, and emergency medical services employers and recruiters.

ADJUS-020NC Public Safety Written Exam and Writing Skills Preparation-NC

0 units P/NP

- 9 hours lecture/9 hours laboratory per term

This noncredit course will assist and support students with the key components of the hiring process to attain careers in public safety. Students will be instructed and supported through the public safety application and hiring process, which includes essential writing skills and success strategies for the written entry-level examination. This course also creates a pipeline to employment for students and will include contact and access to police, fire, and emergency medical services employers and recruiters.

ADJUS-030NC Public Safety Oral Interview Preparation-NC

0 units P/NP

- 9 hours lecture/9 hours laboratory per term

This noncredit course will assist and support students with the key components of the hiring process to attain careers in public safety. Students will be instructed and supported through the public safety application and hiring process, which includes essential verbal presentation skills and passing the entry-level oral board examination. This program also creates a pipeline to employment for students and will include contact and access to police, fire, and emergency medical services employers and recruiters.

ADJUS-040NC Public Safety Physical Fitness and Testing-NC

0 units P/NP

- 9 hours lecture/9 hours laboratory per term

This noncredit course will assist and support students with the key components of the hiring process to attain careers in public safety. Strategies to prepare for and pass the basic police/public safety physical agility test for most California agencies will be presented. Students will develop a fitness plan including basic health and nutrition, participate in physical fitness training, and receive coaching. This program also creates a pipeline to employment for students and will include contact and access to police, fire, and emergency medical services employers and recruiters.

ADJUS-100 Public Safety Career Academy

2 units SC

- 18 hours lecture/54 hours laboratory per term
- Note: This course is open to all, but is particularly appropriate for high school students entering 10th, 11th, or 12th grade in the fall term. Participation in vigorous physical activity will be required.

This course will offer students an overview of current and emerging career opportunities in public safety. Topics include the roles and functions of police officers, firefighters, paramedics and other public safety career professionals. It provides hands-on instructional experience where students will perform basic public safety services. The course will be instructed by public safety professionals. The preparation, education, training, and testing required of applicants for these careers will be explored. CSU

ADJUS-120 Introduction to the Administration of Justice

3 units SC

- IGETC: 4; CSU GE: D; DVC GE: IV
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.
- Note: Credit by examination option available

This course presents the evolution, history and philosophy of the administration of justice. Topics presented include the American system of justice and the various subsystems, the roles and interrelationships of criminal justice agencies, concepts of crime accusations, punishments, and rehabilitation, and issues pertaining to ethics, education, and training for participants in the criminal justice system. C-ID AJ 110, CSU, UC

ADJUS-121 Criminal Law

3 units SC

- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.
- Note: Credit by examination option available

This course presents the historical development and philosophy of American law, statutory law, including classification, definitions and legality, case and constitutional law as it applies to situations and individuals in the justice system, and methodology and concepts of law and their role as a social force. The course emphasizes California criminal statutes. C-ID AJ 120, CSU, UC

ADJUS-122 Criminal Procedure

3 units SC

- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.
- Note: Credit by examination option available

This course examines legal processes from pre-arrest, arrest, 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. C-ID AJ 122, CSU

ADJUS-124 Elements of Corrections

3 units SC

- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This course is an introduction to major types of criminal behavior, patterns of career offenders, causal factors of crime and delinquency, and methods used in the justice system to deal with violators. Emphasis is placed on the changing roles of corrections as practiced by law enforcement, courts, and correctional agencies. C-ID AJ 200, CSU

ADJUS-125 Report Preparation for Criminal Justice

3 units SC

- 54 hours lecture per term
- *Advisory: College-level reading and writing are expected.*

This course introduces the practical aspects of gathering, organizing, and preparing written reports used in the criminal justice system. Topics include various techniques of communicating facts, information, and ideas in a simple, clear, and logical manner. Students practice note-taking, report writing, and presenting testimony in court. CSU

ADJUS-126 Leadership and Ethics

3 units SC

- *IGETC: 4; CSU GE: D; DVC GE: IV*
- 54 hours lecture per term
- *Advisory: College-level reading and writing are expected.*

This course is an in-depth analysis of ethics and leadership within the criminal justice system and its various public service organizations. Topics include the history, philosophy, theories, and evolution of leadership, ethics, and professional standards and their impact on employees and the individuals and communities they serve. The critical importance of decision making and discretion within the criminal justice system and the interplay of values, ethics, morals and professional standards is emphasized. This course examines the theories of leadership within various institutions, the supervision and leadership interconnections with ethics and professional standards within organizations, the practical aspects of leadership and the reality of obstacles and challenges faced by employees, and the legal and civil ramifications of leadership and professional conduct and standards within criminal justice and public organizations. The course also investigates recent negative national trends and aberrational incidents in criminal justice agencies and studies what the future holds for these organizations. C-ID LPPS 120, CSU, UC

ADJUS-127 Youth Law Enforcement Academy

3 units LR

- 40 hours lecture/40 hours laboratory per term
- *This course is open to all, but is particularly appropriate for high school students.*
- *Participation in vigorous physical activity will be required*

This is a career planning course primarily for high school students and recent high school graduates who are interested in or are currently in positions such as police explorers, police cadets, police aids, and community service officers in local police departments. The functions of law enforcement agencies and their relationship to the Criminal Justice System will be explored. Students will examine community-involved policing and general police practices. CSU

ADJUS-130 Cultural Diversity in Criminal Justice

3 units SC

- 54 hours lecture per term
- *Advisory: College-level reading and writing are expected.*
- *Note: Credit by examination option available*

This course presents a theoretical and conceptual overview of multicultural concepts and issues, including those related to gender, age and sexual preference, as applied in the criminal justice system. Challenges related to an increasingly diverse population and strategies to overcome them, particularly in relation to the maintenance of social order, are examined. C-ID AJ 160, CSU, UC

ADJUS-139 Gangs and Threat Groups in America

3 units SC

- *CSU GE: D*
- 54 hours lecture per term
- *Advisory: College-level reading and writing are expected.*

This course presents an introduction to modern criminal gangs and terrorist organizations, their philosophy, history, structure, impact on the community and the criminal justice system. Legal codes and prosecution of gang, terrorist and other criminal organization members will be covered. This course also explores the evaluation of prison gangs and their impact on the community. Also covered is an examination of prevention and treatment programs in the community and in the criminal justice institutions. CSU

ADJUS-150 Topics in Administration of Justice

.3-4 units SC

- *Variable hours*

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

ADJUS-203 Crime Scene Investigation

4 units LR

- 54 hours lecture/54 hours laboratory per term
- *Advisory: College-level reading and writing are expected.*

This course presents an in-depth analysis and discussion of the nature and significance of various types of physical evidence commonly found at crime scenes. The course combines theoretical concepts associated with the use of physical evidence in the forensic setting with student involvement in the processing of simulated 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. C-ID AJ 150, CSU

ADJUS-206 Advanced Crime Scene Forensics

4 units LR

- 54 hours lecture/54 hours laboratory per term
- Prerequisite: ADJUS-203 or Equivalent
- Advisory: College-level reading and writing are expected. ADJUS-120, ADJUS-222 or equivalent

This advanced course presents the analysis and discussion of crime scene reconstruction and the forensic examination of evidence. Areas of emphasis include the use of physical evidence, types of physical evidence, advanced recording techniques, specialized collection techniques, evidence collection for autopsy, firearm and bloodstain analysis, and techniques for courtroom testimony. This course combines the theoretical concepts of analysis of forensic evidence and crime scene reconstruction and applies these advanced principles in the laboratory. CSU

ADJUS-221 Legal Aspects of Evidence

3 units SC

- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.
- 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. C-ID AJ 124, CSU

ADJUS-222 Criminal Investigation

3 units SC

- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.
- Note: Credit by examination option available

This course presents 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; ethical issues for investigators; and case preparation. C-ID AJ 140, CSU

ADJUS-230 Juvenile Procedures

3 units LR

- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.
- Note: Credit by examination option available

This course examines the organization, function, and jurisdiction of juvenile agencies; the processing and detention of juveniles; juvenile case disposition; juvenile statutes and court procedures. C-ID AJ 220, CSU

ADJUS-250 Terrorism and Homeland Security

3 units SC

- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This course is an introduction to contemporary terrorism and its relation to homeland security. There will be an emphasis on the growing threat of homegrown violent extremism and weapons of mass destruction. Motivational factors of international and domestic terrorism organizations, the basic elements of government intelligence, prevention measures, responses to terrorism, and disciplines within the counter-terrorism profession will be discussed. This course meets the California Bureau of Security and Investigative Services requirement for training in weapons of mass destruction. CSU

ADJUS-260 The Police: Roles, Methods, and Operations

3 units LR

- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.
- Note: Credit by examination option available

This course presents the responsibilities, techniques, purpose and methods of the police. Topics include routine patrol, crisis intervention, officer survival and investigation techniques. The effect of the police officer's decision making and judgment on the community will also be examined. CSU

ADJUS-270 Personal Self Defense and Firearms

2 units SC

- 18 hours lecture/54 hours laboratory per term
- Advisory: College-level reading and writing are expected.
- Note: Participation in vigorous physical activity and a payment of a mandatory range fee required. Felony conviction prohibits enrollment.

This course provides training in personal self-defense and the use of handguns, pepper spray and Electronic Immobilization Devices (EID.) This course is appropriate for anyone desiring knowledge and proficiency in personal safety, defensive tactics, and firearms and is similar in design to police academy training. The course will also include legal and moral aspects of the use of force and weapons with an emphasis on safety. CSU

ADJUS-280 Community-Based Corrections

3 units SC

- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This course presents an introduction to the philosophy and history of community-based corrections including legal mandates, relations to courts, basic procedures, and common treatment approaches. Topics include legal codes affecting probation and parole, evaluation of the prison system and inmate community, parole supervision, and the examination of the outcomes of the contemporary prison and parole system. There will be a specific emphasis on California's probation, institutions and parole system. CSU

ADJUS-281 Community Policing and Problem Solving

3 units SC

- 54 hours lecture per term

This course focuses on the history and evolution of the relationship between the criminal justice system and the community in the United States. The roles and interrelationship of all criminal justice agencies, public and private agencies, and the community will be addressed. Topics include the concepts of crime control and prevention, police and government transparency, community partnerships, input and oversight, community-based prosecution, incarceration and rehabilitation, and social justice. There will be open discussion of issues pertaining to ethics, education, and collaboration between participants in the community and the criminal justice system. CSU

ADJUS-284 Interviewing and Counseling

3 units LR

- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This course introduces the concepts and techniques of communication, casework and counseling as utilized by practitioners in the administration of justice field. It is recommended for students planning to enter, or for those already employed, within the administration of justice field. Emphasis is placed on interview and interrogation skills and methods as applied to investigation, counseling, and social work functions in policing and corrections. CSU

ADJUS-295 Occupational Work Experience Education in ADJUS

2-4 units SC

- May be repeated eight times
- Variable hours
- Note: In order to enroll in ADJUS-295, students must be employed, register for the course, complete an online Employment Form, and participate in an orientation. Incomplete grades are not awarded for this course.

ADJUS-295 is supervised employment that extends classroom learning to the job site and relates to the student's chosen field of study or area of career interest. Under the supervision of a college instructor, students will engage in on-the-job and other learning experiences that contribute to their employability skills and occupational or educational goals. Each unit represents five hours work per week or 75 hours of work per term. Students may earn up to a total of 16 units in any combination of WRKX courses. Repetition allowed per Title 5 Section 55253. CSU

ADJUS-296 Internship in Occupational Work Experience Education in ADJUS

2-4 units SC

- May be repeated eight times
- Variable hours
- Note: In order to enroll in the ADJUS-296 course, students must be interning or volunteering, register for the course, complete an online Employment Form, and participate in an orientation. Incomplete grades are not awarded for this course.

ADJUS-296 is a supervised internship in a skilled or professional level assignment in the student's major field of study or area of career interest. Under the supervision of a college instructor, students will engage in on-the-job and other learning experiences that contribute to their employability skills and occupational or educational goals. Internships may be paid, non-paid, or some partial compensation provided. Each unit represents five hours of paid work or four hours of unpaid work per week or 75 hours of paid work or 60 hours of unpaid work per term. Students may earn up to a total of 16 units in any combination of WRKX courses. Repetition allowed per Title 5, Section 55253. CSU

ADJUS-298 Independent Study

.5-3 units SC

- Variable hours
- Note: Submission of acceptable educational contract to department and Instruction Office is required.

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. CSU

ADJUS-299 Student Instructional Assistant

.5-3 units SC

- 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

ALLIED HEALTH

See Biological science - BIOSC

ANTHROPOLOGY – ANTHR

Obed Vazquez, Dean
 Social Sciences Division
 Faculty Office Building, Room 136

Possible career opportunities

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

Associate in arts in anthropology for transfer

Students completing the program will be able to...

- A. demonstrate an understanding of core knowledge within the anthropology discipline.
- B. demonstrate the ability to communicate ideas clearly and persuasively in writing.
- C. demonstrate the ability to analyze a problem and draw correct inferences using qualitative and/or quantitative analysis.
- D. demonstrate the ability to evaluate theory and critique research within the anthropology discipline.

The anthropology program at Diablo Valley College offers students the opportunity to study humankind from the broadest biological, historical, and geographical perspectives. Anthropology is a multidisciplinary and yet holistic way to study all aspects of humanity, from biological origins to ways of social behavior, past and present. Anthropology presents to the student a world view that is personally enriching as well as practical. Courses in the program offer knowledge of social and cultural aspects of behavior, as well as the biological nature of humans. Courses included in the anthropology major are intended to give a general understanding of human biology, ecology, evolution, prehistory, and the nature of human cultures.

This curriculum is designed to provide an opportunity for the anthropology major to achieve an associate in arts degree while completing the requirements for transfer to a California State University (CSU) or other four-year college or university to earn a bachelor's degree in anthropology. A baccalaureate degree is recommended preparation for those considering professional careers in anthropology. Completion of this curriculum will demonstrate commitment to the field and provide comprehensive preparation for upper-division work.

The associate in arts in anthropology for transfer is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major.

In order to earn the degree, students must:

- Complete 60 CSU-transferable units.
- Complete the California State University-General Education pattern (CSU GE); or the Intersegmental General Education Transfer Curriculum (IGETC) pattern, including the Area 1C requirement for Oral Communication.
- Complete a minimum of 18 units in the major.
- Attain a minimum grade point average (GPA) of 2.0.
- Earn a grade of "C" or higher in all courses required for the major.

Students transferring to a CSU campus that accepts the degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system, or those students who do not intend to transfer.

Some courses in the major satisfy both major and CSUGE/IGETC general education requirements; however, the units are only counted once toward the 60 unit requirement for an associate degree. 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.

<i>major requirements:</i>	<i>units</i>
ANTHR-125 Introduction to Archaeology and Prehistory	3
ANTHR-130 Cultural Anthropology	3
ANTHR-140 Biological Anthropology.....	3

<i>plus at least 3 units from:</i>	
ANTHR-120 Magic, Witchcraft, and Religion in the Americas.....	3
ANTHR-135 Native Americans	3
ANTHR-141L Biological Anthropology Laboratory.....	1
GEOG-120 Physical Geography	3
BUS-240 Business Statistics.....	3
or	
MATH-142 Elementary Statistics with Probability	4

<i>plus at least 3 units from any course not used above or:</i>	
BIOSC-139 Human Anatomy.....	5
GEOG-125 Introduction to Geographic Information Systems (GIS).....	3
GEOL-120 Physical Geology.....	3
GEOL-122 Physical Geology Laboratory.....	1
PSYCH-215 Introduction to Research Methods in Psychology	3
SOCIO-123 Introduction to Social Research	3

plus at least 3 units from any course not used above or:

ANTHR-115 Primate Evolution and Adaptation	3
GEOG-130 Cultural Geography	3
MUSIC-114 World Music	3
SOCIO-120 Introduction to Sociology.....	3
total minimum units for the major	18

ANTHR-115 Primate Evolution and Adaptation

- 3 units SC
- IGETC: 5B; CSU GE: B2; DVC GE: II
 - 54 hours lecture per term
 - Advisory: College-level reading and writing are expected.

This course introduces the biology, behavior, ecology, and evolutionary history of the primate order. Emphasis is placed on the following topics: evolutionary theory; mammalian biology, anatomy, and osteology; primate behavior, ecology, and biogeography; primate evolutionary history; Paleoanthropology. CSU, UC

ANTHR-120 Magic, Witchcraft, and Religion in the Americas

- 3 units SC
- IGETC: 4; CSU GE: D; DVC GE: IV
 - 54 hours lecture per term
 - Advisory: College-level reading and writing are expected.

This course presents a cross-cultural, multi-cultural 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. CSU, UC

ANTHR-125 Introduction to Archaeology and Prehistory

- 3 units SC
- IGETC: 4; CSU GE: D; DVC GE: IV
 - 54 hours lecture per term
 - Advisory: College-level reading and writing are expected.

This course is an introduction to the study of concepts, theories, data and models of anthropological archaeology that contribute to our knowledge of the human past. Students will study the nature of scientific inquiry; the history and interdisciplinary nature of archaeological research; dating techniques; methods of survey, excavation, analysis, and interpretation; cultural resource management; professional ethics; and selected cultural sequences. Emphasis is placed on reconstructing the ways of ancient life in order to understand the development of social and technological complexity in the prehistoric and the historic past. C-ID ANTH 150, CSU, UC

ANTHR-130 Cultural Anthropology

- 3 units SC
- IGETC: 4; CSU GE: D; DVC GE: IV
 - 54 hours lecture per term
 - Advisory: College-level reading and writing are expected.

This course explores how anthropologists study and compare human culture to understand the broad arc of human experience focusing on a set of central issues. Topics include how people around the world: make their living; organize themselves socially, politically and economically; communicate; relate to each other through family and kinship ties; develop belief systems; apply gender, racial and ethnic identity labels; have shaped and been shaped by social inequalities such as colonialism; and navigate cultural change and processes of globalization that affect us all. Ethnographic case studies will be utilized to highlight similarities and differences. C-ID ANTH 120, CSU, UC

ANTHR-135 Native Americans

- 3 units SC
- IGETC: 4; CSU GE: D; DVC GE: IV
 - 54 hours lecture per term
 - Advisory: College-level reading and writing are expected.

This course is a survey of the Native American cultures that developed in North America. The course 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 Biological Anthropology

3 units SC

- *IGETC: 5B; CSU GE: B; DVC GE: II*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course introduces the concepts, methods of inquiry, and scientific explanations for biological evolution and their application to the human species. Issues and topics will include, but are not limited to, genetics, evolutionary theory, human variation and biocultural adaptations, comparative primate anatomy and behavior, and the fossil evidence for human evolution. The scientific method and the theory of biological evolution serve as foundations of the course. C-ID ANTH 110, CSU, UC

ANTHR-141L Biological Anthropology Laboratory

1 unit SC

- *IGETC: 5C; CSU GE: B3*
- *54 hours laboratory per term*
- *Prerequisite: ANTHR-140 (may be taken concurrently) or equivalent*
- *Advisory: College-level reading and writing are expected.*

This introductory laboratory course presents scientific methodology that is used to explore/experiment with topics found in introductory biological anthropology and primate evolution courses. Topics will include: paleontology, hands-on study of fossils, Mendelian and population genetics, human variability, forensics, medical anthropology, epidemiology, nonhuman primates, primate dental and skeletal anatomy, primatology, paleoanthropology, hominid dietary patterns, the study of hominids as bio-culturally adapted animals, and a survey of general methodologies utilized in biological anthropological research. C-ID ANTH 115L, CSU, UC

ANTHR-155 Topics in Anthropology

.3-4 units SC

- *Variable hours*

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

ANTHR-298 Independent Study

.5-3 units SC

- *Variable hours*
- *Note: Submission of acceptable educational contract to department and Instruction Office is required.*

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. CSU

ANTHR-299 Student Instructional Assistant

.5-3 units SC

- *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

Janette Funaro, Dean

Arts and Communication Division

Possible career opportunities

The study of Arabic 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.

ARABC-120 First Term Arabic

5 units SC

- *IGETC: 6A*
- *90 hours lecture per term*

This course provides an introduction to the Arabic language and the culture of Arabic-speaking countries. Topics include the four language skills: speaking, listening, reading, and writing. Emphasis is placed on active use of the language in class as well as basic communicative functions and structures. CSU, UC

ARABC-121 Second Term Arabic

5 units SC

- IGETC: 3B, 6A; CSU GE: C2; DVC GE: III
- 90 hours lecture per term
- Prerequisite: ARABC-120 or two years of high school study or equivalent
- Note: Students may meet equivalency in a variety of ways. Students should seek assistance at Admissions and Records.

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

- 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

- 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

ARCHITECTURE – ARCHI

Despina Prapavessi, Dean

Mathematics and Engineering Division

Mathematics Building, Room 267

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.

**Associate in science degree
Architecture design****Students completing the program will be able to...**

- communicate architectural concepts using graphic conventions and representational methods.
- demonstrate an understanding of drawing methods and graphic compositional techniques.
- construct physical models of architectural elements and spaces.
- demonstrate an understanding of building components, structures and systems in relation to design.
- identify notable architects, design concepts, canonical buildings and precedents in architecture.
- identify the historical and contemporary role of architects in the profession and related design fields.
- describe the role of environmental design, energy use and sustainable design practices in the profession and in buildings.
- utilize digital means of production, representation and/or digital fabrication methods for the creation and manipulation of architectural images and forms.

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 GE). Option 1 (DVC General Education) is not generally advised.

Architecture

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 "C" grade or higher, maintain an overall GPA of 2.5 or higher and complete all general education 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. Certain courses may satisfy both major and general education requirements; however, the units are only counted once.

<i>major requirements:</i>	<i>units</i>
ARCHI-120 Introduction to Architecture and Environmental Design	3
ARCHI-121 Architectural Design I.....	4
ARCHI-130 Architectural Graphics I	3
ARCHI-131 Architectural Graphics II	3
ARCHI-135 Digital Tools for Design	3
ARCHI-136 Digital Tools for Architecture	3
ARCHI-207 Environmental Control Systems	3
ARCHI-220 Architectural Design II.....	4
ARCHI-221 Architectural Design III.....	4
ARCHI-244 Architectural Practice and Working Drawings.....	3
CONST-144 Materials of Construction.....	3
 <i>plus at least 3 units from:</i>	
ARCHI-156 History of World Architecture: Early Civilizations to Middle Ages.....	3
ARCHI-157 History of World Architecture: Middle Ages to 18th Century.....	3
ARCHI-158 History of World Architecture: 18th Century to Present	3
ARCHI-160 History of American Architecture	3
total minimum units for the major	39

Associate in science degree Architecture technology

Students completing the program will be able to...

- communicate architectural concepts using graphic conventions and representational methods.
- demonstrate an understanding of drawing methods and graphic compositional techniques.
- construct physical models of architectural elements and spaces.
- demonstrate an understanding of building components, structures and systems in relation to design.
- identify notable architects, design concepts, canonical buildings and precedents in architecture.
- identify the historical and contemporary role of architects in the profession and related design fields.
- describe the role of environmental design, energy use and sustainable design practices in the profession and in buildings.
- utilize digital means of production, representation and/or digital fabrication methods for the creation and manipulation of architectural images and forms.

The DVC architecture technology degree program offers students the opportunity to earn an associate in science degree 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, interior designers, and engineers.

To earn an associate in science with a major in architecture technology, 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 major and general education requirements; however, the units are only counted once.

<i>major requirements:</i>	<i>units</i>
ARCHI-120 Introduction to Architecture and Environmental Design	3
ARCHI-126 Computer Aided Design and Drafting - AutoCAD.....	3
ARCHI-130 Architectural Graphics I	3
ARCHI-244 Architectural Practice and Working Drawings.....	3
CONST-124 Construction Details and Specifications	3
CONST-135 Construction Processes: Residential	4
CONST-144 Materials of Construction.....	3

plus at least 6 units from:

ARCHI-131 Architectural Graphics II	3
ARCHI-226 Computer Aided Drafting Design, Advanced Concepts - AutoCAD	3
ARCHI-296 Internship in Occupational Work Experience Education in ARCHI.....	2-4
CONST-116 Plane Surveying.....	4
CONST-181 Building Code Interpretation: Non-Structural	3
CONST-183 Title 24: Energy Conservation Codes	3

total minimum units for the major 28

**Certificate of achievement
Architecture design**

Students completing the program will be able to...

- A. communicate architectural concepts using graphic conventions and representational methods.
- B. demonstrate an understanding of drawing methods and graphic compositional techniques.
- C. construct physical models of architectural elements and spaces.
- D. demonstrate an understanding of building components, structures, and systems in relation to design.
- E. identify notable architects, design concepts, canonical buildings, and precedents in architecture.
- F. identify the historical and contemporary role of architects in the profession and related design fields.
- G. describe the role of environmental design, energy use and sustainable design practices in the profession and in buildings.
- H. utilize digital means of production, representation and/or digital fabrication methods for the creation and manipulation of architectural images and forms

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. This certificate provides a foundational core curriculum that prepares students for both accredited and non-accredited architectural degree programs at four-year colleges and universities, and also provides a strong foundation in core subjects for those who seek a career in the design field.

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. 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.

<i>required courses:</i>	<i>units</i>
ARCHI-120 Introduction to Architecture and Environmental Design	3
ARCHI-121 Architectural Design I	4
ARCHI-130 Architectural Graphics I	3
ARCHI-131 Architectural Graphics II	3
ARCHI-135 Digital Tools for Architecture I	3
ARCHI-136 Digital Tools for Architecture II	3
ARCHI-220 Architectural Design II	4
total minimum required units	23

**Certificate of achievement
Architecture technology**

Students completing the program will be able to...

- A. communicate architectural concepts using graphic conventions and representational methods.
- B. demonstrate an understanding of drawing methods and graphic compositional techniques.
- C. construct physical models of architectural elements and spaces.
- D. demonstrate an understanding of building components, structures and systems in relation to design.
- E. identify notable architects, design concepts, canonical buildings and precedents in architecture.
- F. identify the historical and contemporary role of architects in the profession and related design fields.

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.

<i>required courses:</i>	<i>units</i>
ARCHI-120 Introduction to Architecture and Environmental Design	3
ARCHI-126 Computer Aided Design and Drafting - AutoCAD	3
ARCHI-130 Architectural Graphics I	3
ARCHI-244 Architectural Practice and Working Drawings.....	3
CONST-124 Construction Details and Specifications	3
CONST-135 Construction Processes: Residential	4
CONST-144 Materials of Construction.....	3
 <i>plus at least 6 units from:</i>	
ARCHI-131 Architectural Graphics II	3
ARCHI-226 Computer Aided Drafting Design, Advanced Concepts - AutoCAD	3
ARCHI-296 Internship in Occupational Work Experience Education in ARCHI.....	2-4
CONST-116 Plane Surveying.....	4
CONST-181 Building Code Interpretation: Non-Structural	3
CONST-183 Title 24: Energy Conservation Codes	3
total minimum required units	28

ARCHI-110 Design-Build Workshop

1 unit SC

- *May be repeated three times*
- *72 hours laboratory per term*
- *Advisory: IDSGN-105 or equivalent*
- *Note: During spring term students will participate in the Cal Poly San Luis Obispo Design Village Competition. This allows each group of two-six students to design, build and live in their structure for three days in Poly Canyon. Multiple teams allowed, entry fees and material fees may apply.*

This is a design-build course for full-scale projects in wood, metal, and other materials to be designed and constructed by students working in teams in consultation with faculty. The course explores drawing, modeling, fabrication and assembly of full-scale architectural projects utilizing manual and computer controlled tools. CSU

ARCHI-119 Introduction to Technical Drawing

3 units SC

- *36 hours lecture/72 hours laboratory per term*
- *Note: Same as ENGTC-119. Credit by examination option available.*

This course presents an introduction to technical drawing. Topics include technical lettering and line work, geometric constructions, sketching and shape description, orthographic projection, dimensioning, section views, and auxiliary views. Students will gain experience using computers to produce technical drawings utilizing 3D modeling and orthographic computer aided design (CAD) drafting. An introduction to computer numerical control (CNC) prototyping and 3D printing is also covered. CSU, UC (credit limits may apply to UC - see counselor)

ARCHI-120 Introduction to Architecture and Environmental Design

3 units LR

- *CSU GE: C1*
- *36 hours lecture/72 hours laboratory per term*

This course is an introduction to the professional field of architecture, environmental design, landscape design, and urban planning. An overview of the practice of environmental design with concepts in design methods and theory, analysis and problem solving, history of design, and the profession is presented. An emphasis on beginning design projects utilizing drawing, model making and computers is covered in class. CSU, UC

ARCHI-121 Architectural Design I

4 units SC

- *CSU GE: C1*
- *36 hours lecture/108 hours laboratory per term*
- *Prerequisite: ARCHI-120 or equivalent and ARCHI-130 (may be taken concurrently) or equivalent*
- *Advisory: ARCHI-135 or equivalent*

This first-year studio design course focuses on development of fundamental design skills and spatial theory. Topics include spatial qualities of architecture, composition and ordering systems, circulation and movement through space, daylighting, introductory structural systems, precedent studies and architectural theory. CSU, UC

ARCHI-126 Computer Aided Design and Drafting - AutoCAD

3 units SC

- *36 hours lecture/72 hours laboratory per term*
- *Advisory: ARCHI-119 or ENGTC-119 or equivalent*
- *Note: Same as ENGTC-126. Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree. Credit by examination option available.*

This introductory course covers the fundamentals of AutoCAD, and its application to the creation of technical drawings. Hands-on training utilizing a comprehensive overview of the software package and its applications to technical drafting is emphasized. CSU, UC (credit limits may apply to UC - see counselor)

ARCHI-127 Introduction to Revit

3 units SC

- *36 hours lecture/54 hours laboratory per term*
- *Note: Credit by examination option available.*

This course presents an introduction to Revit software. Topics include fundamentals of the Revit operating environment, file structure, creation and organization of three-dimensional and two-dimensional construction models and documents. CSU

ARCHI-130 Architectural Graphics I

3 units LR

- *CSU GE: C1*
- *36 hours lecture/72 hours laboratory per term*
- *Advisory: ARCHI-119 or ENGTC-119 or equivalent*

This course is an introduction to architectural graphics related to projection systems, representation of architectural forms, rendering and shadow casting. An overview of history and methods of graphic representation used by architects and an application of drafting, drawing and rendering methods is presented. Problem-solving in orthographic and pictorial projection and drawing, architectural lettering, shades and shadows, and color rendering techniques are covered. There is an emphasis on mechanical drafting with pencil and beginning introduction to other art media. CSU, UC

ARCHI-131 Architectural Graphics II

3 units LR

- *36 hours lecture/72 hours laboratory per term*
- *Prerequisite: ARCHI-130 or equivalent*

This course is an advanced exploration of drawing techniques utilizing freehand and mechanical drawing methods of representation. Emphasis is placed on perspective drawing, shade and tone, color theory and composition. A continuing exploration of media for architectural rendering and representation is included. CSU, UC

ARCHI-135 Digital Tools for Design

3 units SC

- 36 hours lecture/72 hours laboratory per term
- Note: ARCHI-135 and ARCHI-136 may be taken in any order.

This course is an introduction to the use of computers in design communication and representation. Topics presented include two-dimensional and three-dimensional graphics utilizing Adobe Illustrator, InDesign, Photoshop, AutoCAD, Sketchup and other related programs. Students will be introduced to additional concepts in processing digital images, digital photography, scanning and printing. CSU

ARCHI-136 Digital Tools for Architecture

3 units SC

- 36 hours lecture/72 hours laboratory per term
- Note: ARCHI-135 and ARCHI-136 may be taken in any order.

This course covers the use of computers in architectural design for advanced architectural graphics, three-dimensional modeling, rendering, and fabrication. Topics include Rhinoceros 3-D modeling software and V-Ray rendering software for architectural presentations, modeling of complex non-orthogonal geometries and architectural forms, fabrication utilizing a laser cutter, and current computer graphics and architectural rendering standards. CSU

ARCHI-150 Topics in Architecture

.3-4 units SC

- 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-156 History of World Architecture: Early Civilizations to Middle Ages

3 units SC

- IGETC: 3A; CSU GE: C1; DVC GE: III
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.
- Note: ARCHI-156, 157 and 158 may be taken in any order

This course presents a survey of world architecture and urbanism prehistory to the Middle Ages. The social, cultural, and physical conditions that influence the built environment in the Mediterranean region, Europe, Asia, Africa, and Pre-Columbian Americas will be explored. 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

ARCHI-157 History of World Architecture: Middle Ages to 18th Century

3 units SC

- IGETC: 3A; CSU GE: C1; DVC GE: III
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.
- Note: ARCHI-156, 157 and 158 may be taken in any order

This course presents a survey of world architecture and urbanism from the Middle Ages until the end of the 18th Century. The social, cultural, and physical conditions that influence the built environment of Europe, Asia and the Colonial Americas will be explored. Topics include 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

ARCHI-158 History of World Architecture: 18th Century to Present

3 units SC

- IGETC: 3A; CSU GE: C1; DVC GE: III
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.
- Note: ARCHI-156, 157 and 158 may be taken in any order

This course presents a survey of world architecture and urbanism from the 18th Century to the present. The social, cultural, and physical conditions that influence the built environment of Europe, Asia, and the Americas will be explored. Topics include American architectural contributions of Frank Lloyd Wright and the Chicago School of Architecture, Art Nouveau and the work of Gaudi, the influence of industrialization in architecture as well as topics in Russian Constructivism, 20th Century Modernism, Post-modernism and Deconstructivism. CSU, UC

ARCHI-160 History of American Architecture

3 units SC

- IGETC: 3B; CSU GE: C1, C2; DVC GE: III
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This course is a survey of American architectural history from Native American dwellings to the present. The architectural influence of immigrant groups is presented, as well as the influences of architectural design movements in the United States through the course of history. CSU, UC

ARCHI-207 Environmental Control Systems

- 3 units SC
 • 54 hours lecture per term

This course covers the theory and application of climate, energy use and comfort as determinants of architectural form in small-scale buildings. Methods of ventilating, cooling, heating, and lighting will be discussed. Topics include passive solar techniques, cross and stack ventilation, daylighting and an introduction to various passive systems for environmental control in buildings. There will be an emphasis on green building technology and sustainable practices in design. CSU

ARCHI-220 Architectural Design II

- 4 units LR
 • 36 hours lecture/108 hours laboratory per term
 • Prerequisite: ARCHI-121 and 135 or equivalents
 • Advisory: ARCHI-136 or equivalent

This course is a second-level studio design class continuing the study of architectural design. Students will develop fundamental design skills utilizing concepts related to site planning and site analysis with projects of greater complexity. A continuing investigation of topics in material qualities, general methods of assembly and construction, and human factors in design are covered. Methods of presentation and design development include drawing, model making, and architectural reviews and critiques are utilized. CSU, UC

ARCHI-221 Architectural Design III

- 4 units LR
 • 36 hours lecture/108 hours laboratory per term
 • Prerequisite: ARCHI-136 (may be taken concurrently) or equivalent and ARCHI-220 or equivalent

This course is a third-level studio design class continuing the study of architectural design. Focus is placed on the application of advanced design skills and spatial theories to projects of greater architectural complexity. Design problems and projects incorporate advanced concepts of site planning, urban design, integration of structural and mechanical systems, programming and circulation are included. CSU, UC

ARCHI-226 Computer Aided Drafting Design, Advanced Concepts - AutoCAD

- 3 units SC
 • 36 hours lecture/72 hours laboratory per term
 • Advisory: ARCHI-126 or ENGTC-126 or equivalent
 • Note: Same as ENGTC-226. Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This course covers the concepts and applications of constructing digital three-dimensional (3D) models and photo-realistic renderings for presentation using AutoCAD. Advanced techniques for surface, wireframe and solid modeling will be presented. Students will explore lighting, materials mapping and rendering as they apply to architecture, engineering and industrial design. Other software may be presented. CSU, UC (credit limits may apply to UC - see counselor)

ARCHI-244 Architectural Practice and Working Drawings I

- 3 units SC
 • 36 hours lecture/72 hours laboratory per term
 • Prerequisite: ARCHI-130 or equivalent
 • Advisory: CONST-144 or equivalents

This course will cover methods and processes for the interpretation and creation of architectural working drawings, connections, details and specifications. The technical concepts related to the construction of small-scale structures and their representation in construction documents will be discussed. Students will be introduced to the design review process, along with Construction Specifications Institute (CSI) format, standards of practice and graphic representation, and the role of the architect, client and local governing agencies. CSU

ARCHI-296 Internship in Occupational Work Experience Education in ARCHI

- 2-4 units SC
 • May be repeated eight times
 • Variable hours
 • Note: In order to enroll in the ARCHI-296 course, students must be interning or volunteering, register for the course, complete an online Employment Form, and participate in an orientation. Incomplete grades are not awarded for this course.

ARCHI-296 is a supervised internship in a skilled or professional level assignment in the student's major field of study or area of career interest. Under the supervision of a college instructor, students will engage in on-the-job and other learning experiences that contribute to their employability skills and occupational or educational goals. Internships may be paid, non-paid, or some partial compensation provided. Each unit represents five hours of paid work or four hours of unpaid work per week or 75 hours of paid work or 60 hours of unpaid work per term. Students may earn up to a total of 16 units in any combination of WRKX courses. Repetition allowed per Title 5, Section 55253. CSU

ARCHI-298 Independent Study

.5-3 units SC

- Variable hours
- Note: Submission of acceptable educational contract to department and Instruction Office is required.

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. CSU

ARCHI-299 Student Instructional Assistant

.5-3 units SC

- 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

LANDSCAPE ARCHITECTURE - ARCLA

ARCLA-120 Introduction to Landscape Architecture and Environmental Design

3 units SC

- 36 hours lecture/54 hours laboratory per term
- Formerly HORT-180

This course presents the basic principles and concepts in the field of landscape architecture and environmental landscape design. The history of human impact on natural environments and methods to mitigate those impacts will be explored. Design standards and practices governing landscape architecture and design skills such as site analysis, planning, and construction design will be covered as part of the core of the profession. CSU, UC

ARCLA-121 Landscape Design

3 units SC

- 36 hours lecture/54 hours laboratory per term
- Prerequisite: ARCLA-120 or equivalent
- Formerly HORT-182

This course explores advanced landscape design concepts including design principles, development of design concepts, and creative problem-solving techniques. Emphasis is placed on environmental context and other factors of design and form. CSU, UC

ARCLA-130 Landscape Drafting and Graphics

3 units SC

- 36 hours lecture/54 hours laboratory per term
- Formerly HORT-181

This course in landscape graphics covers the graphic representation of vegetation, topography, and landscape elements. The course will explore the techniques and methods utilized to represent landscape elements, including lettering, line weights, and scale in relation to landscape graphics. CSU, UC

ART – ART

Janette Funaro, Dean

Arts and Communication Division

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.

Associate in arts**Photography****Students completing this program will be able to...**

- A. execute technical proficiency using photographic equipment and software.
- B. demonstrate an understanding of the principles and concepts of analog and digital photography in selected areas of emphasis.
- C. articulate, analyze, and evaluate the meaning in photographs, including social contexts and ethical choices.
- D. employ critical thinking skills regarding their artwork and the artwork of others.
- E. work collaboratively within a creative team.
- F. develop a portfolio of work.

The associate in arts degree in photography offers students a curricular program for studying a variety of fine art and commercially-driven courses within the field of professional photography. The student with an associate in arts degree in photography is prepared for upper division work in the major at four-year institutions. The major is available at UC and CSU systems, the San Francisco Art Institute, the California College of Art, and at other colleges of art and schools of design. The photography curriculum develops a student's critical thinking skills, hones problem-solving skills, and establishes a well-rounded photographic skill set. The photography associate in arts program prepares students for entry-level employment in the photography industry.

Art

Career opportunities in photography include: freelance photographer, commercial photographer, artist, product photographer, architectural photographer, editorial photographer, wedding photographer, portrait photographer, food photographer, event photographer, photojournalist, assistant photographer, production assistant, photography studio assistant, lighting technician, digital technician, photo editor, photographic retouching specialist, art director, stylist, curator, gallery director, digital restoration technician, educator, photography instructor, photography lab technician, fine art printer, print production technician, and camera operator.

To earn an associate in art in photography degree, students must complete each course used to meet a major requirement with a "C" grade or higher. Certain courses may satisfy both major and general education requirements; however, the units are only counted once.

<i>major requirements:</i>	<i>units</i>
ART-160 Photography I.....	3
ARTDM-136 Introduction to Digital Photography.....	3
ARTHS-199 Contemporary Art History.....	3

<i>plus at least 3 units from:</i>	
ART-161 Photography II.....	3
ARTDM-137 Intermediate Digital Photography.....	3

<i>plus at least 3 units from any course above not already used, or:</i>	
ART-163 Documentary Photography.....	3
ART-166 Experimental Photography.....	3

<i>plus at least 3 units from:</i>	
ART-164 Photographic Portfolio Development.....	3
ART-165 Advanced Photographic Portfolio Development.....	3

<i>plus at least 6 units from any course above not already used, or:</i>	
ART-135 Professional Practices for Artists.....	3
ART-164* Photographic Portfolio Development.....	3
ART-165* Advanced Photographic Portfolio Development.....	3
WRKX-180 Internship in Occupational Work Experience Education.....	2-4
total minimum units for the major	24

Associate in arts degree

Studio arts

Students completing the program will be able to...

- demonstrate proficiency in basic skills and techniques related to two-dimensional media and apply the elements and principles of design in the creation of art and projects in selected media.
- demonstrate proficiency in basic skills and techniques related to three-dimensional media and apply the elements and principles of design in the creation of art and projects in selected media.
- apply critical thinking skills to the critique and evaluation of their artwork and the artwork of others.
- analyze works of art in terms of their historical circumstances and cultural values.

The associate in arts degree in studio arts offers students a curricular program for studying a variety of beginning courses within the field of art practice. The student with an associate in arts degree in studio arts is prepared for upper division work in the major at four-year institutions. The major is available at UC and CSU systems, the San Francisco Art Institute, the California College of Art, and at other colleges of art and schools of design. The studio arts curriculum develops a student's critical thinking skills, hones problem-solving skills, and establishes visual literacy. Career opportunities in studio arts include: exhibiting artist, art critic, art dealer, educator, art historian, graphic designer, photographer, sculptor, ceramist, jeweler, printmaker, painter, art illustrator, art technician, museum curator, art journalist, arts administrator, product designer, advertising specialist and other professions in creative endeavor.

The studio arts major is a two-year degree program of transferable courses open to all students. The program requirements are designed for those interested in art as professional practice and as preparation for transfer. The major has three components. The first component is a core of two required foundations studio arts courses. The second component is two required art history courses. The third component offers students choices in ten emphasis areas.

Students may select an emphasis in drawing, painting, sculpture, photography, printmaking, ceramics, art digital media, graphic design, art history, or metalsmithing, but are encouraged to choose within a wide range of these beginning courses for transfer. Studio arts faculty and staff are dedicated to assisting students in exploring job opportunities, internships, and transferring to four-year institutions of higher learning.

The DVC studio arts 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 (CSUGE). Option 1 (DVC General Education) is not generally advised.

To earn an associate in arts degree with a major in studio arts, 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 general education requirements as listed in the catalog. Degree requirements may be completed by attending classes in the day, evening, or weekends. Some courses may satisfy both major and other general education requirements; however, the units are only counted once.

<i>major requirements:</i>	<i>units</i>
ART-101 Introduction to Two-Dimensional Design.....	3
ART-102 Introduction to Three-Dimensional Design and Sculpture.....	3

plus at least 6 units from:

ARTHS-193	History of Asian Art	3
ARTHS-195	History of Prehistoric and Ancient Art	3
ARTHS-196	History of Medieval and Renaissance Art	3
ARTHS-197	History of Baroque to 20th Century Art.....	3
ARTHS-199	Contemporary Art History.....	3

plus at least 12 units from a minimum of three areas of specialization*:

art history

ARTHS-193	History of Asian Art	3
ARTHS-195	History of Prehistoric and Ancient Art	3
ARTHS-196	History of Medieval and Renaissance Art	3
ARTHS-197	History of Baroque to 20th Century Art.....	3
ARTHS-199	Contemporary Art History.....	3

ceramics

ART-151	Visual Theory and Practice - Ceramic Art	3
ART-152	Wheel-Thrown Pottery I	3
ART-153	Wheel-Thrown Pottery II	3
ART-154	Hand-Built Ceramics.....	3
ART-155	Ceramic Sculpture I	3
ART-156	Figurative Ceramics I	3
ART-252	Wheel-Thrown Pottery III	3
ART-253	Wheel-Thrown Pottery IV	3
ART-254	Hand-Built Ceramics II.....	3
ART-255	Ceramic Sculpture II.....	3
ART-256	Figurative Ceramics II	3

color

ART-103	Visual Theory and Practice - Color Theory	3
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digital media

ARTDM-105	Introduction to Digital Imaging	3
ARTDM-112	Digital Imaging for the Artist	3
ARTDM-117	Digital Illustration.....	3
ARTDM-136	Introduction to Digital Photography.....	3
ARTDM-140	Motion Graphics.....	3
ARTDM-160	3D Modeling and Animation I.....	3
ARTDM-161	3D Modeling and Animation II.....	3
ARTDM-171	Web Design I	3
ARTDM-214	Introduction to Graphic Design	3

drawing

ART-105	Introduction to Drawing	3
ART-106	Drawing in Color.....	3
ART-107	Figure Drawing I	3
ART-108	Figure Drawing II	3

other

ART-135	Professional Practices for Artists	3
ARTDM-224	Typography.....	3

metalsmithing

ART-146	Metalsmithing and Jewelry I	3
ART-147	Metalsmithing and Jewelry II	3

painting

ART-120	Watercolor I	3
ART-121	Watercolor II	3
ART-126	Painting I: Introduction to Painting	3
ART-127	Painting II: Intermediate Painting	3
ART-128	Painting Concepts and Portfolio Development...3	
ART-129	Advanced Painting	3
ART-130	Figure Painting	3
ART-131	Painting and Abstraction.....	3

photography

ART-160	Photography I	3
ART-161	Photography II	3
ARTDM-136	Introduction to Digital Photography.....	3

printmaking

ART-109	Monotype and Mixed Media	3
ART-110	Introduction to Printmaking	3
ART-111	Printmaking: Etching I	3
ART-112	Printmaking: Etching II	3
ART-114	Printmaking: Woodblock I.....	3
ART-116	Printmaking: Screen Print	3

sculpture

ART-138	Sculpture I	3
ART-139	Sculpture II	3
ART-141	From Clay to Bronze.....	3
ART-144	Metal Casting Techniques I.....	3

total minimum units for the major 24

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

Associate in arts in studio arts for transfer

Students completing the program will be able to...

- A. demonstrate proficiency in basic skills and techniques related to two-dimensional media, and apply the elements and principles of design in visual problem solving, the creation of art, and projects in selected areas of emphasis.
- B. demonstrate proficiency in basic skills and techniques related to three-dimensional media, and apply the elements and principles of design in the creation of forms in selected areas of emphasis.
- C. apply critical thinking skills to the critique and evaluation of their artwork and the artwork of others.
- D. analyze works of art in terms of their historical circumstances and cultural values.

The associate in arts in studio arts for transfer offers students a curricular program for studying a variety of beginning courses within the field of art practice. The student with associate in arts in studio arts for transfer is prepared for upper division work in the major at four-year institutions. The curriculum develops a student's critical thinking skills, hones problem-solving skills, and establishes visual literacy.

Art

The associate in arts in studio arts for transfer is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major.

In order to earn the degree, students must:

- Complete 60 CSU-transferable units.
- Complete the California State University-General Education pattern (CSU GE); or the Intersegmental General Education Transfer Curriculum (IGETC) pattern, including the Area 1C requirement for Oral Communication.
- Complete a minimum of 18 units in the major.
- Attain a minimum grade point average (GPA) of 2.0.
- Earn a grade of "C" or higher in all courses required for the major.

Students transferring to a CSU campus that accepts the degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system, or those students who do not intend to transfer.

Some courses in the major satisfy both major and CSU GE/IGETC general education requirements; however, the units are only counted once toward the 60 unit requirement for an associate degree. 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.

<i>major requirements:</i>	<i>units</i>
ART-101 Introduction to Two-Dimensional Design	3
ART-102 Introduction to Three-Dimensional Design and Sculpture	3
ART-105 Introduction to Drawing	3
ARTHS-196 History of Medieval and Renaissance Art	3
ARTHS-197 History of Baroque to 20th Century Art	3

<i>plus at least 3 units from:</i>	
ARTHS-193 History of Asian Art	3
ARTHS-195 History of Prehistoric and Ancient Art	3
ARTHS-199 Contemporary Art History	3

plus at least 9 units from:

applied design	
ART-146 Metalsmithing and Jewelry I	3
ART-147 Metalsmithing and Jewelry II	3
ceramics	
ART-152 Wheel-Thrown Pottery I	3
ART-154 Hand-Built Ceramics I	3
ART-153 Wheel-Thrown Pottery II	3
ART-155 Ceramic Sculpture I	3
ART-156 Figurative Ceramics I	3

color	
ART-103 Visual Theory and Practice - Color Theory	3

digital art	
ARTDM-112 Digital Imaging for the Artist	3
ARTDM-171 Web Design I	3
ARTDM-214 Introduction to Graphic Design	3

drawing	
ART-106 Drawing in Color	3
ART-107 Figure Drawing I	3
ART-108 Figure Drawing II	3

other media	
ARTDM-224 Typography	3

painting	
ART-120 Watercolor I	3
ART-126 Painting I: Introduction to Painting	3
ART-127 Painting II: Intermediate Painting	3

photography	
ART-160 Photography I	3
ART-161 Photography II	3

printmaking	
ART-109 Monotype and Mixed Media	3
ART-110 Introduction to Printmaking	3
ART-111 Printmaking: Etching I	3

sculpture	
ART-138 Sculpture I	3

total minimum units for the major 27

Certificate of achievement

Ceramics

Students completing the program will be able to...

- identify and apply the formal design elements of art.
- create original works of ceramic art.
- create a portfolio demonstrating ideas in a broad range of ceramic techniques.
- formally compare the attributes of ceramics and other art forms.
- employ critical thinking to analyze ceramic art works in terms of historical context and cultural values.

A certificate of achievement in ceramics offers a variety of beginning courses within the field of three-dimensional art. The program will introduce both techniques and concepts of ceramics in an academic context. The program requirements are designed for those interested in ceramics as professional practice and provide exposure to the discipline that may help students decide to continue their studies at a four year institution. The ceramics major is available at UC and CSU systems, the San Francisco Art Institute, the California College of Arts, and at other colleges of art and schools of design.

Students seeking to complete an associate in arts degree in fine arts may choose to supplement that award with a certificate of achievement in ceramics. The fine art curriculum develops students' critical thinking skills, hones problem-solving skills, and establishes visual literacy in the ceramic medium. The ceramics certificate offers technical training related to the commercial ceramic industry and can lead to career opportunities that include: art educator, exhibiting artist, hand-made production potter, ceramic art studio assistant, art therapy intern, creative tile designer, tile producer, mosaic muralist, portrait sculptor, industrial ceramics product designer, industrial ceramics shop manager, ceramic engineering intern, museum or gallery assistant, art dealer, art critic and other professions in creative, hands-on endeavors.

The certificate of achievement has three components. The first component is a core of two required foundations: one introductory drawing/design class and an art history class. The second component is five classes of ceramics (three required, two elective). The third component is one studio art course outside ceramics.

To earn a certificate, 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.

<i>required courses:</i>	<i>units</i>
ART-105 Introduction to Drawing	3
ART-152 Wheel-Thrown Pottery I	3
ART-155 Ceramic Sculpture I	3
ART-299 Student Instructional Assistant.....	0.5-3*
ARTHS-199 Contemporary Art History.....	3

*minimum 2 units required

<i>plus at least 9 units from:</i>	
ART-153 Wheel-Thrown Pottery II	3
ART-154 Hand-Built Ceramics I.....	3
ART-156 Figurative Ceramics I	3
ART-252 Wheel-Thrown Pottery III	3
ART-253 Wheel-Thrown Pottery IV	3
ART-254 Hand-Built Ceramics II.....	3
ART-255 Ceramic Sculpture II.....	3
ART-256 Figurative Ceramics II	3
ART-298 Independent Study.....	0.5-3

total minimum required units 23

Certificate of achievement Painting and drawing

Students completing the program will be able to...

- A. create a portfolio demonstrating ideas in a broad range of painting and drawing techniques.
- B. identify the elements that define two-dimensional art.
- C. employ critical thinking to analyze two-dimensional art works in terms of historical context and cultural values.
- D. demonstrate basic drawing skills, color manipulation, and application of design principles.
- E. apply the processes necessary to create drawings in various media and/or paintings in oil, acrylic, and alternative media.

The certificate of achievement in painting and drawing offers a variety of fundamental courses within the field of two-dimensional art. The program will introduce both techniques and concepts of painting and drawing in an academic context. The program requirements are designed for those interested in painting and drawing as a professional practice and may provide preparation for transfer. The requirements for the certificate of achievement in painting and drawing also apply to the associate in arts degree in fine arts. The fine art major in painting and drawing is available at the UC and CSU systems, the San Francisco Art Institute, the California College of the Arts and at other colleges of art and schools of design. Students who wish to transfer must consult with program faculty and college counselors to ensure that the requirements for transfer to appropriate institutions are met.

The fine art curriculum develops a student's critical thinking abilities, hones problem solving skills and establishes visual literacy in the visual arts. Career opportunities that may be enhanced by the certificate of achievement in painting and drawing include: exhibiting artist, muralist, illustrator, graphic designer, art dealer, art critic and other professions in creative endeavors.

To earn the certificate, students must complete each course with "C" grade or higher and maintain an overall GPA of 2.5 or higher in the coursework required for the certificate.

<i>required courses:</i>	<i>units</i>
ART-105 Introduction to Drawing	3
ART-126 Painting I: Introduction to Painting	3
ARTHS-197 History of Baroque to 20th Century Art.....	3

<i>plus at least 6 units from:</i>	
ART-103 Visual Theory and Practice - Color Theory	3
ART-106 Drawing in Color.....	3
ART-107 Figure Drawing I	3
ART-120 Watercolor I	3
ART-135 Professional Practices for Artists	3
ARTDM-112 Digital Imaging for the Artist	3

total minimum required units 15

**Certificate of achievement
Photography**

Students completing the program will be able to:

- A. execute technical proficiency using photographic equipment and software appropriate to creative and commercial photographic industries.
- B. demonstrate an understanding of the principles and concepts of analog and digital photography in selected areas of emphasis.
- C. articulate, analyze, and evaluate the meaning in photographs, including social contexts and ethical choices.
- D. employ critical thinking skills regarding their artwork and the artwork of others.
- E. work collaboratively within a creative team.
- F. develop a professional portfolio of work.

The certificate of achievement in photography is designed to acquaint students with a variety of skills as practiced by photography professionals. The photography curriculum develops a student’s critical thinking skills, hones problem-solving skills, and establishes a well-rounded photographic skillset.

The program primarily aims to provide an individual with the knowledge to maximize his or her own proficiency in the photographic arts. While not designed to provide preparation for a career in photography, individuals may apply the skills in a variety of jobs and career fields. Certain required courses provide prerequisite preparation for advanced professional programs should students decide to pursue an associate or bachelor’s degree.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a “C” grade or higher.

<i>required courses:</i>	<i>units</i>
ART-160 Photography I	3
ARTDM-136 Introduction to Digital Photography.....	3
ARTHS-199 Contemporary Art History.....	3

<i>plus at least 3 units from:</i>	<i>units</i>
ART-161 Photography II	3
ART-163 Documentary Photography.....	3
ART-166 Experimental Photography	3
ARTDM-137 Intermediate Digital Photography	3

<i>plus at least 3 units from:</i>	<i>units</i>
ART-164 Photographic Portfolio Development	3
ART-165 Advanced Photographic Portfolio Development	3
total minimum required units	15

**Certificate of achievement
Printmaking**

Students completing the program will be able to...

- A. create a portfolio demonstrating ideas in a broad range of printmaking techniques.
- B. create and produce edition art prints from various print media.
- C. employ critical thinking to analyze art prints in terms of historical content and cultural values.
- D. demonstrate ability to create prints independently and to present professionally.
- E. create images suitable for printing.
- F. critique their own artwork and the artwork of others.

The certificate of achievement in printmaking includes fundamental courses within the field of printmaking. The program will introduce both techniques and concepts of printmaking in an academic context. The program requirements are designed for those interested in printmaking as professional practice and may provide preparation for transfer. The printmaking major is available at UC and CSU systems, the San Francisco Art Institute, the California College of Arts, and at other colleges of art and schools of design. Students who wish to transfer must consult with program faculty and college counselors to ensure that the requirements for transfer to appropriate institutions are met.

Students whose educational goal is the associate in arts in fine arts may choose to supplement the degree with a certificate of achievement in printmaking. The fine arts curriculum develops a student’s critical thinking skills, hones problem-solving skills, and establishes visual literacy in print media. Career opportunities that may be enhanced by the printmaking certificate include: printmaking exhibiting artist, print dealer, printmaking educator, graphic designer, illustrator, internships and paid apprenticeships in print publishers, and work in print shops including those specializing in etching, woodblock, letterpress, monotype, and silkscreen processes.

To earn the certificate, students must complete each course with “C” grade or higher and maintain an overall GPA of 2.5 or higher in the coursework required for the certificate.

<i>required courses:</i>	<i>units</i>
ART-105 Introduction to Drawing	3
ARTDM-112 Digital Imaging for the Artist	3

<i>plus at least 9 units from:</i>	
ART-109 Monotype and Mixed Media	3
ART-110 Introduction to Printmaking	3
ART-111 Printmaking: Etching I	3
ART-112 Printmaking: Etching II	3
ART-114 Printmaking: Woodblock.....	3
ART-116 Printmaking: Screen Print	3

total minimum required units: 15

Limitations on enrollment

Effective fall term 2013, changes to the regulations that govern community college enrollments placed limitations on the number of courses that students may take in certain disciplines within the Contra Costa Community College District. The charts below indicate which Diablo Valley College (DVC) courses are assigned to groups of courses ("families") for which limitations have been imposed. Certain courses within certain "families" may be repeated (see catalog description), however, students are limited to four enrollments within the family. Certain DVC courses are equivalent to courses at Los Medanos College and Contra Costa College. An enrollment in an equivalent course at one of those colleges will count toward the allowable four enrollments within the family.

Note: Diablo Valley College may offer experimental or topics courses. When appropriate, based on content, such courses will be assigned to a "family" and that enrollment will be counted as an experience within the "family".

ART

Family: Design

ART-101	Introduction to Two-Dimensional Design
ART-102	Introduction to Three-Dimensional Design and Sculpture
ART-103	Visual Theory and Practice - Color Theory

Family: Drawing

ART-105	Introduction to Drawing
ART-106	Drawing in Color
ART-107	Figure Drawing I
ART-108	Figure Drawing II
ART-250F	Advanced Drawing

Family: Printmaking

ART-110	Introduction to Printmaking
ART-111	Printmaking: Etching I
ART-112	Printmaking: Etching II
ART-114	Printmaking: Woodblock I
ART-116	Printmaking: Screen Print
ART-150WB	Printmaking: Woodblock II

Family: Painting

ART-126	Painting I: Introduction to Painting
ART-126A	Introduction to Oil/Acrylic Painting A
ART-126B	Introduction to Oil/Acrylic Painting B
ART-127	Painting II: Intermediate Painting
ART-128	Painting Concepts and Portfolio Development
ART-129	Advanced Painting
ART-130	Figure Painting
ART-131	Painting and Abstraction

Family: Sculpture

ART-138	Sculpture I
ART-139	Sculpture II
ART-141	From Clay to Bronze
ART-142	Metal Art I
ART-143	Metal Art II
ART-144	Metal Casting Techniques I
ART-145	Metal Casting Techniques II
ART-150CB	From Clay to Bronze
ART-150WK	Woodworking for Sculpture

Family: Applied Art Design

ART-146	Metalsmithing and Jewelry I
ART-147	Metalsmithing and Jewelry II
ART-150DC	Digital Ceramics Workshop
ART-150HC	Hand-Built Ceramics II
ART-150JC	Introduction to Jewelry Casting
ART-150LE	Metalsmithing and Jewelry III
ART-150PJ	Production Pottery
ART-150PX	Wheel-Thrown Pottery III
ART-150PY	Wheel-Thrown Pottery IV
ART-150SM	Small Metal Casting for Jewelry
ART-152	Wheel-Thrown Pottery I
ART-153	Wheel-Thrown Pottery II
ART-154	Hand-Built Ceramics I
ART-252	Wheel-Thrown Pottery III
ART-253	Wheel-Thrown Pottery IV
ART-254	Hand-Built Ceramics II

Family: Ceramic Art

ART-150AT	Anatomy for Artists
ART-150CR	Ceramic Sculptures II - Surface
ART-151	Visual Theory and Practice- Ceramic Art
ART-155	Ceramic Sculpture I
ART-156	Figurative Ceramics I
ART-255	Ceramic Sculpture II
ART-256	Figurative Ceramics II

Family: Photography

ART-150PA	Advanced Alternative Photographic Process
ART-160	Photography I
ART-161	Photography II
ART-163	Documentary Photography
ART-164	Photographic Portfolio Development
ART-165	Advanced Photographic Portfolio Development
ART-166	Experimental Photography

Family: Watercolor

ART-120	Watercolor I
ART-120A	Introduction to Watercolor
ART-120B	Watercolor Workshop
ART-121	Watercolor II

Family: Mixed Media

ART-109	Monotype and Mixed Media
ART-150FM	Figurative Monotype and Mixed Media

ART-101 Introduction to Two-Dimensional Design

- 3 units SC
- 36 hours lecture/72 hours laboratory per term
 - *Advisory: College-level reading and writing are expected.*

This course presents the theories and applications of two-dimensional design and color in visual art and design. The formal, theoretical, cultural, contemporary, as well as historical elements of two-dimensional design will be explored. C-ID ARTS 100, CSU, UC

ART-102 Introduction to Three-Dimensional Design And Sculpture

- 3 units SC
- 36 hours lecture/72 hours laboratory per term
 - *Advisory: College-level reading and writing are expected.*

This introductory-level studio art course emphasizes the concepts, applications, and historical references related to three-dimensional design in art. Students study and create art projects based on the elements of three-dimensional design: line, plane, volume, mass, texture, surface, treatment, negative and positive space, composition, and scale. Students develop a visual vocabulary for this creative expression through lecture presentations, demonstrations, and use of appropriate materials for three-dimensional studio art projects. Materials may include wire, cardboard, plaster, papier-mâché, wood and mixed media. C-ID ARTS 101, CSU, UC

ART-103 Visual Theory and Practice - Color Theory

- 3 units SC
- 36 hours lecture/72 hours laboratory per term
 - *Advisory: College-level reading and writing are expected. ART 101 or equivalent*

This introductory course exposes students to the history of color usage and theory and their application across the globe. The art of diverse cultures including Western/European Art, Asian/Middle Eastern Art, Meso-American Art and African Art with a focus on visual theory, aesthetics, criticism and historical context will be examined. The historical impact of pigments on art and culture will be explored. The development of critical thinking skills through analysis of cultural and technological constructs that influence the creation of specific genres will be emphasized. Students will produce original art works demonstrating diverse applications of color theory by reinterpreting the cultural traditions they study into a contemporary context with an emphasis on creative problem solving skills. CSU, UC

ART-105 Introduction to Drawing

- 3 units SC
- 36 hours lecture/72 hours laboratory per term
 - *Advisory: College-level reading and writing are expected. ART-101 or equivalent*

This course introduces observational drawing concepts and form-rendering techniques. Basic visual problem solving skills including perceptual drawing and application of compositional, spatial, and perspectival principles will be presented. C-ID ARTS 110, CSU, UC

ART-106 Drawing in Color

- 3 units SC
- 36 hours lecture/72 hours laboratory per term
 - *Advisory: College-level reading and writing are expected.*

The course is an exploration of artistic concepts, styles, and creative expression related to drawing and color. Students will learn to apply a variety of black and white and color drawing mediums and methodologies to complex subject matter. Students in this course will build on fundamental drawing skills and the application of color theory to develop personalized approaches to content and materials in exercises covering multiple historical and contemporary approaches to drawing. C-ID ARTS 205, CSU, UC

ART-107 Figure Drawing I

- 3 units SC
- 36 hours lecture/72 hours laboratory per term
 - *Advisory: ART-105 or equivalent; College-level reading and writing are expected.*

This course introduces drawing the human figure from live models. Basic human anatomy and its application to figure drawing will be discussed. Pencil, charcoal, and ink techniques will be practiced in the creation of figure drawings. C-ID ARTS 200, CSU, UC

ART-108 Figure Drawing II

- 3 units SC
- 36 hours lecture/72 hours laboratory per term
 - *Prerequisite: ART-107 or equivalent*
 - *Advisory: College-level reading and writing are expected.*
 - *Note: Students may meet equivalency in a variety of ways. Students should seek assistance at Admissions and Records.*

This course presents a continuation of the concepts and techniques introduced in ART-107. Ink wash, gouache, and pastel techniques will be applied to human figure drawing. CSU, UC

ART-109 Monotype and Mixed Media

3 units SC

- 36 hours lecture/72 hours laboratory per term
- *Advisory: College-level reading and writing are expected.*
- *Note: Mandatory materials fee required*

This course is an exploration of mixed media using monotype printmaking. Monotype is a single print with painterly approach. Various drawing/painting techniques such as gouache, watercolor, pastel, oil, or acrylic are explored. The emphasis is on the development of individual stylistic and expressive interpretations subjects by combining various contemporary and traditional media. CSU, UC

ART-110 Introduction to Printmaking

3 units SC

- 36 hours lecture/72 hours laboratory per term
- *Advisory: College-level reading and writing are expected. ART-105 or equivalent*
- *Note: Mandatory materials fee required*

This course provides an introduction to various printmaking techniques: relief (linocut/woodcut), intaglio (drypoint, etching and collagraph), planography (lithograph and monotype), and stencil (screenprint). CSU, UC

ART-111 Printmaking: Etching I

3 units SC

- 36 hours lecture/72 hours laboratory per term
- *Advisory: College-level reading and writing are expected. ART-110 or equivalent*
- *Note: Mandatory materials fee required*

This course is the study of intaglio printmaking including line etching, aquatint, deepbite, and multiple color plates. Projects and discussions develop students' understanding of how images can communicate our experience and imagination. Projects may include publishing multiple impressions in book arts form. CSU, UC

ART-112 Printmaking: Etching II

3 units SC

- 36 hours lecture/72 hours laboratory per term
- *Prerequisite: ART-111 or equivalent*
- *Advisory: College-level reading and writing are expected.*
- *Note: Students may meet prerequisite equivalency in a variety of ways. Students should seek assistance at Admissions and Records. Mandatory materials fee required.*

This course presents a continuation of ART-111, the study of intaglio printmaking. Topics include line etching, aquatint, deep-bite, multiple color plates, and photo etching. Projects and discussion will emphasize understanding of traditional print media and application of contemporary methods. CSU, UC

ART-114 Printmaking: Woodblock I

3 units SC

- 36 hours lecture/72 hours laboratory per term
- *Advisory: College-level reading and writing are expected. ART-110 or equivalent*
- *Note: Mandatory materials fee required*

This course focuses on relief printmaking history and methods. Students will build on basic printmaking techniques such as linocut and woodcut and further explore the possibilities of the media through advanced color woodblock techniques. Various media will be introduced, including multi-plate relief printing and reduction relief printing. Various printing methods will be introduced including hand printing, etching press, and letter press. CSU, UC

ART-116 Printmaking: Screen Print

3 units SC

- 36 hours lecture/72 hours laboratory per term
- *Advisory: College-level reading and writing are expected. ART-110 or equivalent*
- *Note: Mandatory materials fee required*

The study of stencil methods of printmaking, which are utilized in various fine art media and commercial industries in the contemporary world. Students will learn practice the principles of stenciling through cutting stencil and explore various stencil usage in screen printing, including usage of photo positives and digital imagery. CSU,UC

ART-120 Watercolor I

3 units SC

- 36 hours lecture/72 hours laboratory per term
- *Advisory: College-level reading and writing are expected. ART-105 or Equiv.*

This course is an introduction to the materials and processes of watercolor painting with emphasis on techniques, problem solving, concept development, and skill demonstration. CSU, UC

ART-121 Watercolor II

3 units SC

- 36 hours lecture/72 hours laboratory per term
- *Prerequisite: ART-120 or equivalent*
- *Advisory: College-level reading and writing are expected.*
- *Note: Students may meet equivalency in a variety of ways. Students should seek assistance at Admissions and Records.*

This course is a continuation of the study of watercolor materials and techniques with emphasis on the development of intermediate level skills and concepts required to produce a portfolio of work. CSU, UC

ART-126 Painting I: Introduction to Painting

3 units SC

- 36 hours lecture/72 hours laboratory per term
- *Advisory: ART-105 and College-level reading and writing are expected.*
- *Note: ART-126A and ART-126B combined are equivalent to ART-126*

This beginning level course provides students with an introduction to the materials and techniques of oil and acrylic painting. C-ID ARTS 210, CSU, UC

ART-127 Painting II: Intermediate Painting

3 units SC

- 36 hours lecture/72 hours laboratory per term
- *Prerequisite: ART-126 or equivalent*
- *Advisory: College-level reading and writing are expected. ART-103 or equivalent*
- *Note: Students may meet equivalency in a variety of ways. Students should seek assistance at Admissions and Records.*

This is an intermediate level painting course that provides students with painting projects designed to further develop painting techniques and problem solving abilities. Principles of critiquing art will also be covered. CSU, UC

ART-128 Painting Concepts and Portfolio Development

3 units SC

- 36 hours lecture/72 hours laboratory per term
- *Advisory: College-level reading and writing are expected. ART-127 or equivalent*

This course is designed to help students transition to initiating a series of paintings with a unifying theme while developing out their painting portfolios. Emphasis will be on the development of the artist's content exploration and imagination. Ideas and themes addressing issues of historic, contemporary, and cultural significance in painting will be presented. CSU, UC

ART-129 Advanced Painting

3 units SC

- 36 hours lecture/72 hours laboratory per term
- *Advisory: College-level reading and writing are expected. ART-127 or equivalent*

This course is an advanced-level painting class. Approaches to painting issues concerning contemporary painting subject matter, composition, and expression will be studied. Students will develop and complete a series of cohesive and thematic paintings. This course is designed for students who want to develop their painting practice more deeply with a body of work that will possibly assist them in transferring to a 4-year college or a MFA graduate program. CSU, UC

ART-130 Figure Painting

3 units SC

- 36 hours lecture/72 hours laboratory per term
- *Advisory: ART-107, ART-127 and College-level reading and writing are expected.*

This course is designed to provide students the experience with concepts and media in painting using the human figure as subject matter. The objective of this course is to offer development in the skills and techniques necessary to depict the human figure. CSU, UC

ART-131 Painting and Abstraction

3 units SC

- 36 hours lecture/72 hours laboratory per term
- *Advisory: College-level reading and writing are expected. ART-127 or Equiv.*

This course is designed to enable advanced students to develop their painting and drawing techniques while focusing on contemporary abstraction and its influence on today's art movements and studio practice. Students will paint using a variety of subjects while focusing on abstraction as the form and style. A survey of historical art movements in abstraction will be presented and their relevance to current painting issues will be discussed. CSU, UC

ART-135 Professional Practices for Artists

3 units SC

- 36 hours lecture/72 hours laboratory per term
- *Advisory: College-level reading and writing are expected.*

This course is a study of the skills, theories, and practices necessary to prepare works of art for public display. Preparation of artwork, exhibition design, installation, registration, conservation, advertising, and legal issues will be addressed. Students will develop professional skills needed to interact within art and related business environments. Students will apply practical skills in the DVC Art Gallery and with the DVC art collection throughout campus. CSU

ART-138 Sculpture I

3 units SC

- 36 hours lecture/72 hours laboratory per term
- *Advisory: College-level reading and writing are expected. ART-102 or equivalent*

This introductory course focuses on the materials and processes of sculpture. No previous experience in sculpture is required. The course combines an analysis of the history of sculpture (including contemporary object making, installation, art, and self expression) through lectures, demonstrations, and studio projects. A variety of techniques and materials are presented including: wood working, welding, mold-making, modeling, metal casting, plaster, and cement working. CSU, UC

ART-139 Sculpture II

3 units SC

- 36 hours lecture/72 hours laboratory per term
- Advisory: ART-102 and ART-138 or equivalents

This studio course is an intermediate level study in both traditional and contemporary approaches to sculpture. Students should have experience and knowledge of basic sculpture techniques. Processes for this course may include, but are not limited to, woodworking, metal casting, rubber mold-making, installation, new technologies, and welding. Contemporary approaches to sculpture are emphasized through thematic project guidelines. Students further develop their personal aesthetics in a body of related work and a portfolio. CSU, UC

ART-141 From Clay to Bronze

3 units SC

- 36 hours lecture/72 hours laboratory per term
- Advisory: College-level reading and writing are expected. ART-102 or equivalent
- Note: Mandatory materials fee required

This class explores the sculpture process from clay to bronze in a variety of traditional and contemporary techniques. Clay modeling and hand building are utilized as a means to create finished cast bronze works. Traditional skills of lost-wax casting and mold-making are combined with contemporary approaches to sculpture making. No former experience or knowledge of these processes are required to take the course. CSU, UC

ART-144 Metal Casting Techniques I

3 units SC

- 36 hours lecture/72 hours laboratory per term
- Advisory: ART-102 or equivalent
- Note: Mandatory materials fee required

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

- 36 hours lecture/72 hours laboratory per term
- Advisory: ART 102 or equivalent and ART 144 or equivalent
- Note: Mandatory materials fee required

This course expands on metal casting skills with emphasis on more complex casting projects. The casting process for aluminum, bronze, and/or iron will be thoroughly explored. Advanced mold-making techniques in rubber, Resin-Bonded Sand Molds, Green Sand, Standard Investment molds, and Ceramic Shell molds are covered. Emphasis is added to sustainable studio practice, as well as advanced 3-D design. CSU

ART-146 Metalsmithing and Jewelry I

3 units SC

- 36 hours lecture/72 hours laboratory per term
- Advisory: ART-102 or equivalent
- Note: Mandatory materials fee required

This is a beginning course providing skills in basic jewelry and metalsmithing design and hands-on processes. The studio coursework 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

- 36 hours lecture/72 hours laboratory per term
- Advisory: ART 102 or equivalent and ART 146 or equivalent
- Note: Mandatory materials fee required

This is an advanced metalsmithing/jewelry course with an emphasis on hands-on processes incorporating individual design, aesthetics, and conceptualization. Further exploration of traditional and contemporary metalsmithing design and aesthetics will be presented. Techniques such as advanced chainmaking, advanced stone setting, forming and raising, chasing, moldmaking, and casting are introduced. CSU

ART-150 Topics in Studio Art

.3-4 units SC

- Variable hours
- Advisory: College-level reading and writing are expected.

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-151 Visual Theory and Practice - Ceramic Art

3 units SC

- IGETC: 3A; CSU GE: C1; DVC GE: III
- 36 hours lecture/72 hours laboratory per term
- Advisory: ENGL-097 or equivalent
- Note: Mandatory materials fee required

This introductory course will expose students to a broad spectrum of ceramic art from diverse cultures including Western/European Art, Asian/Middle Eastern Art, Meso-American Art and African Art with a focus on visual theory, aesthetics, criticism and historical context. Students will develop critical thinking skills through the analysis of cultural and technological constructs that influence the creation of specific genres. In addition, with an emphasis on creative problem solving skills, students will produce original works of ceramic art by reinterpreting the traditions they study in a contemporary context. CSU, UC

ART-152 Wheel-Thrown Pottery I

3 units SC

- 36 hours lecture/72 hours laboratory per term
- Advisory: ENGL-097 or equivalent
- Note: Mandatory materials fee required

This course is an introduction to the creation of ceramic vessels using the potter's wheel, as well as the development of critical thinking skills through the examination of ceramic art. Through the study of the art of various cultures, the fundamentals of three-dimensional design, and the development of a vocabulary of aesthetic terms and theories, students will engage in both critical discussion and creative application utilizing the potter's wheel. CSU, UC

ART-153 Wheel-Thrown Pottery II

3 units SC

- 36 hours lecture/72 hours laboratory per term
- Advisory: ART-152 or equivalent; ENGL-097 or equivalent
- Note: Mandatory materials fee required

This intermediate-level, wheel-thrown pottery course focuses on the development of surface treatments. Students will study both form and surface treatments from various western and non-western cultures. Experimentation with a variety of different materials and processes as well as the fundamentals of glaze formulation and mixing will be emphasized. CSU, UC

ART-154 Hand-Built Ceramics I

3 units SC

- 36 hours lecture/72 hours laboratory per term
- Advisory: College-level reading and writing are expected.
- Note: Mandatory materials fee required

Using functional objects as a starting point, students learn traditional and contemporary hand-building techniques. This involves the study of hand-built ceramics from various western and non-western cultures. Students explore the creative potential of these methods during the construction of original hand-built ceramics. CSU, UC

ART-155 Ceramic Sculpture I

3 units SC

- 36 hours lecture/72 hours laboratory per term
- Advisory: College-level reading and writing are expected.
- Note: Mandatory materials fee required

This course is an introduction to ceramic sculpture. Its focus is on fundamental techniques and creative strategies to produce ceramic sculpture. This involves the study of sculptural form from various western and non-western cultures and the creation of original works. CSU, UC

ART-156 Figurative Ceramics I

3 units SC

- 36 hours lecture/72 hours laboratory per term
- Advisory: College-level reading and writing are expected.
- Note: Mandatory materials fee required

This course is an introduction to the fundamental techniques and creative strategies to produce ceramic sculpture based on the human figure. This involves the study of sculptural form from various western and non-western cultures and the creation of original figurative ceramic sculpture based on observations of live models and other sources. CSU, UC

ART-160 Photography I

3 units SC

- 36 hours lecture/72 hours laboratory per term
- Advisory: College-level reading and writing are expected.
- Note: Students will need to have a working SLR film camera with manual capability. Note: Mandatory materials fee required.

This course introduces black and white film photography and offers students a working knowledge of the basics of traditional darkroom photography, including history, theory and practice. The technical aspects of photography along with the historical and contemporary role of photography in visual expression, including contributions from diverse cultures and backgrounds will be explored. Class critiques will be used to analyze and discuss photographic images as a form of personal expression and communication. Students will produce a portfolio of photographs. CSU, UC

ART-161 Photography II

3 units SC

- 36 hours lecture/72 hours laboratory per term
- Advisory: ART-160 and College-level reading and writing are expected.
- Note: Students supply a working SLR film camera with manual capability and a light meter (either hand held or built into the camera). Note: Mandatory materials fee required

This intermediate photography class enhances students' knowledge of materials and techniques used in traditional black and white film photography. The course concentrates on the specific controls of image processing and the multiple characteristics of a variety of photographic materials. Beyond technique, emphasis is placed on developing concept, editing, and aesthetic considerations relating to image presentation. CSU, UC

ART-163 Documentary Photography

3 units SC

- 36 hours lecture/72 hours laboratory per term
- Advisory: ART-161 and College-level reading and writing are expected.
- Note: Students supply cameras (film or DSLR), laptop, and external drive. Note: Mandatory materials fee required.

This is an intermediate level course in which students participate in field trips, in-class lectures, demonstrations, critiques, and studio time 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. The students should have a working knowledge of camera operation. CSU

ART-164 Photographic Portfolio Development

3 units SC

- 36 hours lecture/72 hours laboratory per term
- Advisory: ART-161 and College-level reading and writing are expected.
- Note: Students supply a working SLR film or DSLR camera with manual capability. Note: Mandatory materials fee required
- Formerly ART-162

This course offers students an opportunity to develop advanced skills using the materials and techniques of traditional and digital photography. 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-165 Advanced Photographic Portfolio Development

3 units SC

- 36 hours lecture/72 hours laboratory per term
- Advisory: College-level reading and writing are expected. ART-161 or equivalent
- Note: Mandatory materials fee required
- Formerly ART-265

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 identify individual aesthetic concerns, define themes and genres as the basis of their creative project, and relate their construction of a personal vision to contemporary and historical creative photography. CSU

ART-166 Experimental Photography

3 units SC

- 36 hours lecture/72 hours laboratory per term
- Advisory: ART-160 or equivalent and ARTDM-136 or equivalent
- Note: Students supply a working SLR or DSLR camera with manual capability. Mandatory materials fee required

This experimental photography course examines how photographic images are made using both film and digital techniques. The course will offer darkroom techniques combined with digital technologies. Image scanning, digital negatives, image transfers and handmade cameras are some of the tools used in this course. Students will produce pieces made from computers and enlargers. Historical and contemporary processes will be explored along with artistic contributions for diverse cultures. Class critiques will be used to analyze and discuss photographic images and techniques as a form of personal expression and communication. Students will produce a portfolio of photographs using experimental techniques. CSU

ART-250 Projects in Art

.3-4 units SC

- Variable hours

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

ART-252 Wheel-Thrown Pottery III

3 units SC

- 36 hours lecture/72 hours laboratory per term
- Advisory: ART-152 or equivalent; ENGL-097 or equivalent
- Note: Mandatory materials fee required

This intermediate-level, wheel-thrown pottery course focuses on the development of wheel-thrown and altered vessel forms. Emphasis is placed on using wheel-thrown forms as a starting point for more complex structures. The study of vessels from various cultures and the creation of complex forms will be discussed. CSU, UC

ART-253 Wheel-Thrown Pottery IV

3 units SC

- 36 hours lecture/72 hours laboratory per term
- Advisory: ART-152 or equivalent; ENGL-097 or equivalent
- Note: Mandatory materials fee required

This intermediate-level, wheel-thrown pottery course focuses on the development of functional pottery forms for the production potter. The study of the art of various cultures, the fundamentals of three-dimensional design, and the development of a vocabulary of aesthetic terms and theories will be addressed. Students will engage in both critical discussion and creative application utilizing the potter's wheel to develop a line of functional pottery forms. CSU, UC

ART-254 Hand-Built Ceramics II

3 units SC

- 36 hours lecture/72 hours laboratory per term
- Advisory: ART-154 or equivalent; College-level reading and writing are expected.
- Note: Mandatory materials fee required

This intermediate-level, hand-built ceramics course focuses on the progressive refinement of hand-built techniques with an emphasis on surface treatment. This involves the study of hand-built forms and surface from various western and non-western cultures and the creation of original hand-built ceramics with an emphasis on developing unique surfaces. CSU, UC

ART-255 Ceramic Sculpture II

3 units SC

- 36 hours lecture/72 hours laboratory per term
- Advisory: ART-155 or equivalent; College-level reading and writing are expected.
- Note: Mandatory materials fee required

This intermediate-level, ceramic sculpture course focuses on the progressive refinement of sculpture form with an emphasis on surface treatment. This involves the study of sculptural form and surface from various western and non-western cultures and the creation of original ceramic sculpture with an emphasis on developing unique surfaces. CSU, UC

ART-256 Figurative Ceramics II

3 units SC

- 36 hours lecture/72 hours laboratory per term
- Advisory: ART-156 or equivalent; College-level reading and writing are expected.
- Note: Mandatory materials fee required

This intermediate-level, figurative ceramics course focuses on the progressive refinement of figurative sculptural form with an emphasis on surface treatment. This involves the study of figurative sculptural form and surface from various western and non-western cultures. The creation of original figurative ceramic sculpture is based on observations of live models and other sources, with an emphasis on developing unique surfaces. CSU, UC

ART-298 Independent Study

.5-3 units SC

- Variable hours
- Note: Submission of acceptable educational contract to department and Instruction Office is required.

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. CSU

ART-299 Student Instructional Assistant

.5-3 units SC

- 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

Janette Funaro, Dean

Arts and Communication Division

Possible career opportunities

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

Associate in arts degree

Animation

Students completing the program will be able to...

- visually and verbally conceptualize in a clear and concise way the artistic/technical direction for an animation project.
- develop technical proficiency using computer hardware and software appropriate to the animation industry.
- articulate, analyze, and evaluate the meaning in creative projects, including social contexts and ethical choices.
- work collaboratively within a creative team.
- develop a professional portfolio of work.

The animation associate in arts degree provides students with a strong foundation in the fundamental aspects of animation. Students will learn the skills to develop animations including techniques such as modeling, animation, and texturing. Courses present material that will take the student through the production process and workflow of animation projects. Curriculum includes traditional animation techniques, drawing, and the technical fundamentals of animation. The program goal is to provide the skills necessary to enter this growing, professional field.

The types of industries that employ individuals with animation skills include animation for film or television and animation for the web. Advanced students have the opportunity to create portfolios to prepare for animation careers.

To earn an associate in arts degree with a major in animation, students must complete each course used to meet a major requirement with a “C” grade or higher. Degree requirements can be completed by attending classes in the day, evening, online, or a combination of those. Some courses may satisfy both major and other general education requirements; however, the units are only counted once.

<i>major requirements:</i>	<i>units</i>
ARTDM-105 Introduction to Digital Imaging	3
ARTDM-167 Digital Animation	3
DRAMA-122 Basic Principles of Acting	3
FTVE-160 Introduction to Film Production	3

<i>plus at least 3 units from:</i>	
ARTDM-117 Digital Illustration	3
ARTDM-140 Motion Graphics.....	3

<i>plus at least 6 units from:</i>	
ARTDM-160 3D Modeling and Animation I	3
ARTDM-161 3D Modeling and Animation II	3
ARTDM-165 Drawing for Digital Animation	3
ARTDM-166 Intermediate Drawing for Digital Animation.....	3

total minimum units for the major 21

Associate in arts degree

Art digital media

Students completing the program will be able to...

- A. demonstrate an understanding of basic drawing techniques.
- B. produce a digital image from scanned or digital photographs.
- C. utilize digital images for exports to websites, multimedia presentations, and print.
- D. utilize production tools for digital audio for multimedia projects.
- E. demonstrate basic techniques for video capture and editing.
- F. design a multimedia project.
- G. critically evaluate multimedia design techniques and their use in the development of a professional portfolio.
- H. qualify for entry-level employment in the art digital media field.

The art digital media associate in arts program prepares students for entry level employment in the digital media industry. 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 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. Certain courses may satisfy both major and general education requirements; however, the units are only counted once.

<i>major requirements:</i>	<i>units</i>
ART-105 Introduction to Drawing	3
ARTDM-105 Introduction to Digital Imaging	3
ARTDM-115 Digital Interface Design.....	3
ARTDM-117 Digital Illustration	3
ARTDM-140 Motion Graphics.....	3
ARTDM-160 3D Modeling and Animation I	3
ARTDM-171 Web Design I	3
ARTDM-190 Digital Media Projects.....	3
ARTDM-214 Introduction to Graphic Design	3
CARER-140 Job Search Strategies	1
CIS-108 Introduction to WordPress.....	2

<i>plus at least 6 units from:</i>	
ART-103 Visual Theory and Practice – Color Theory.....	3
ART-106 Drawing in Color.....	3
ART-107 Figure Drawing I	3
ARTDM-100 Introduction to the History and Development of Digital Media	3
ARTDM-101 Introduction to the Production of Digital Media	3
ARTDM-112 Digital Imaging for the Artist.....	3
ARTDM-130 Introduction to Digital Audio.....	3
ARTDM-136 Introduction to Digital Photography	3
ARTDM-161 3D Modeling and Animation II	3
ARTDM-165 Drawing for Digital Animation	3
ARTDM-166 Intermediate Drawing for Digital Animation.....	3
ARTDM-167 Digital Animation.....	3
ARTDM-170 Animation for Interaction Design	3
ARTDM-172 User Experience Design for Web and Mobile Devices.....	3
ARTDM-173 Web Design II.....	3
ARTDM-174 Web and Mobile Design with JavaScript.....	3
ARTDM-180 Game Design I.....	3
ARTDM-224 Typography.....	3
BUS-109 Introduction to Business.....	3
BUSMG-191 Small Business Management	3
COMSC-110 Introduction to Programming.....	4
FTVE-165 Digital Editing	3
FTVE-166 Intermediate Digital Editing.....	3
MUSX-172 Introduction to Electronic Music and MIDI.....	3
MUSX-173 Advanced Electronic Music	3
MUSX-174 Introduction to Music Technology and Pro Tools	3
WRKX-170 Occupational Work Experience Education ...	2-4
WRKX-180 Internship in Occupational Work Experience Education.....	2-4

total minimum units for the major 36

Associate in arts degree

Game design

Students completing this program will be able to...

- A. develop technical proficiency using computer hardware and software appropriate to the game design or 3D design industry.
- B. visually and verbally conceptualize in a clear and concise way the artistic/technical direction for a game design project.
- C. articulate, analyze, and evaluate the meaning in creative projects, including social contexts and ethical choices.
- D. work collaboratively within a creative team.
- E. develop a professional portfolio of work.

The game design associate in arts degree provides students with a strong foundation in the fundamental aspects of game design. Students will learn the skills to develop games including game engine integration. Courses present material that will take the student through the production process and workflow game design. The program goal is to provide the skills necessary to enter this growing, professional field.

The types of industries that employ individuals with game design skills include game design, game development for the web, and assets for game production. Advanced students have the opportunity to create portfolios to prepare for game design careers.

To earn an associate in arts degree with a major in game design, students must complete each course used to meet a major requirement with a "C" grade or higher. Degree requirements can be completed by attending classes in the day, evening, online, or a combination of those. Some courses may satisfy both major and other general education requirements; however, the units are only counted once.

<i>major requirements:</i>		<i>units</i>
ARTDM-105	Introduction to Digital Imaging	3
ARTDM-160	3D Modeling and Animation I	3
ARTDM-161	3D Modeling and Animation II	3
ARTDM-167	Digital Animation	3
ARTDM-180	Game Design I.....	3
ARTDM-181	Game Design II.....	3
plus at least 3 units from:		
ARTDM-115	Digital Interface Design	3
COMSC-110	Introduction to Programming.....	4
DRAMA-122	Basic Principles of Acting	3
total minimum units for the major		21

Associate in arts degree

Graphic design

Students completing the program will be able to...

- A. combine appropriate aesthetic form and content to create evocative and engaging work.
- B. create appropriate typographic solutions for a variety of design situations.
- C. demonstrate proficiency with computers, software and production processes.
- D. select appropriate tools, materials and processes for a range of media products.
- E. work collaboratively within a creative team.
- F. critically evaluate and discuss the merits of various creative ideas.
- G. develop a professional portfolio of work.

This degree program provides students with a strong foundation in the fundamental aspects of graphic design and digital art. Students develop creativity and ideation skills, learn the theories of communication design and apply this to a wide range of design situations. The program is hands-on, integrating conceptual design studies with traditional and digital tools and production methods. The program goal is to provide the skills necessary to enter this growing, professional field.

Some examples where students might find employment using their design and illustration skills might include website design and development, design and illustration of electronic magazines and books, design of interactive marketing presentations, interactive learning products, scientific visualizations, etc. Advanced students have the opportunity to complete professional career preparation courses that deal with specific business issues relevant for designers, illustrators, and digital artists.

DVC graphic design students who intend to transfer must consult with a program advisor to select appropriate courses and are advised to select either General Education Option 2 (IGETC) or Option 3 (CSU GE). 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 graphic design, students must complete each course used to meet a major requirement with a "C" grade or higher. Degree requirements can be completed by attending classes in the day, evening, online or a combination of those. Some courses may satisfy both major and general education requirements; however, the units are only counted once.

<i>major requirements:</i>		<i>units</i>
ART-105	Introduction to Drawing	3
ARTDM-105	Introduction to Digital Imaging	3
ARTDM-117	Digital Illustration	3
ARTDM-171	Web Design I	3
ARTDM-172	User Experience Design for Web and Mobile Devices.....	3
ARTDM-190	Digital Media Projects.....	3
ARTDM-214	Introduction to Graphic Design	3
ARTDM-224	Typography.....	3
total minimum units for the major		24

Associate in arts degree Interaction design for web and mobile platforms

Students completing the program will be able to...

- A. design, develop and publish responsive websites using industry best practices.
- B. create research and planning deliverables for interactive media projects.
- C. implement visual design, user-centered design, and interaction design concepts.
- D. apply foundation knowledge in rich-media production.
- E. qualify for entry-level employment in the interactive design field.
- F. demonstrate skill in a range of professional interactive media design tools.

The associate degree in interaction design for web and mobile platforms prepares students for entry level employment in the interaction design industries with emphasis in user-centered design. This program of study will expose students to the design and technical skills needed for creating interactive digital media. This includes working with industry best practices and applying them using current professional tools. Students will participate in a collaborative team-oriented learning experience that reflects the design industry production processes.

Additionally, students will explore web and mobile career opportunities and develop a professional portfolio for entry into the workforce. A few of the areas that students might find employment include: web design and development, user experience design (UX), user interface design (UI), digital product design, and mobile design and development.

To earn an associate degree, students must complete each course used to meet a major requirement with a "C" grade or higher. Some courses are available in online and traditional formats. Some courses may satisfy both major and general education requirements; however, the units are only counted once.

<i>major requirements:</i>	<i>units</i>
ARTDM-105 Introduction to Digital Imaging	3
ARTDM-115 Digital Interface Design.....	3
ARTDM-171 Web Design I	3
ARTDM-172 User Experience Design for Web and Mobile Devices.....	3
ARTDM-173 Web Design II	3
ARTDM-174 Web and Mobile Design with JavaScript.....	3

<i>plus at least 3 units from:</i>	
ARTDM-117 Digital Illustration	3
ARTDM-136 Introduction to Digital Photography	3
ARTDM-140 Motion Graphics.....	3
ARTDM-170 Animation for Interaction Design	3
ARTDM-180 Introduction to Game Design	3
ARTDM-224 Typography.....	3
ARTDM-295 Occupational Work Experience Education in ARTDM.....	2-4
ARTDM-296 Internship in Occupational Work Experience Education in ARTDM	2-4

<i>plus at least 3 units from:</i>	
BUS-250 Business Communication.....	3
BUSMK-259 Digital Marketing Fundamentals	3
BUSMK-260 Social Media Marketing.....	3

total minimum units for the major 24

Certificate of achievement Animation

Students completing the program will be able to...

- A. visually and verbally conceptualize in a clear and concise way the artistic/technical direction for an animation project.
- B. develop technical proficiency using computer hardware and software appropriate to the animation industry.
- C. articulate, analyze, and evaluate the meaning in creating projects, including social contexts and ethical choices
- D. work collaboratively within a creative team
- E. develop a professional portfolio of work

The art digital media program prepares students for entry level employment in the digital media industry with a specialization in animation. 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 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.

<i>required courses:</i>	<i>units</i>
ARTDM-105 Introduction to Digital Imaging	3
ARTDM-167 Digital Animation	3
DRAMA-122 Basic Principles of Acting.....	3
FTVE-160 Introduction to Film Production	3

<i>plus at least 3 units from:</i>	
ARTDM-117 Digital Illustration	3
ARTDM-140 Motion Graphics.....	3

<i>plus at least 6 units from:</i>	
ARTDM-160 3D Modeling and Animation I	3
ARTDM-161 3D Modeling and Animation II	3
ARTDM-165 Drawing for Digital Animation	3
ARTDM-166 Intermediate Drawing for Digital Animation.....	3

total minimum required units 21

Certificate of achievement Digital media

Students completing the program will be able to...

- A. create digital images suitable for printing or multimedia applications.
- B. evaluate digital images for effective design.
- C. create graphic design projects.
- D. build foundation knowledge in digital media production.
- E. qualify for entry-level employment in the art digital media field.
- F. gain skills in specific digital media applications.

Art digital media

The art digital media program prepares students for entry level employment in the digital media industry with a specialization in digital imaging. 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 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*
 ARTDM-105 Introduction to Digital Imaging 3

plus at least 12 units from:

ARTDM-100	Introduction to the History and Development of Digital Media	3
ARTDM-101	Introduction to the Production of Digital Media	3
ARTDM-112	Digital Imaging for the Artist	3
ARTDM-115	Digital Interface Design.....	3
ARTDM-117	Digital Illustration	3
ARTDM-130	Introduction to Digital Audio	3
ARTDM-136	Introduction to Digital Photography	3
ARTDM-140	Motion Graphics.....	3
ARTDM-149	Fundamentals of Digital Video.....	3
ARTDM-150	Topics in Digital Media.....	0.5-4
ARTDM-160	3D Modeling and Animation I	3
ARTDM-161	3D Modeling and Animation II	3
ARTDM-165	Drawing for Digital Animation	3
ARTDM-166	Intermediate Drawing for Animation.....	3
ARTDM-167	Digital Animation.....	3
ARTDM-170	Animation for Interaction Design	3
ARTDM-171	Web Design I	3
ARTDM-172	User Experience Design for Web and Mobile Devices.....	3
ARTDM-173	Web Design II	3
ARTDM-174	Web and Mobile Design with JavaScript.....	3
ARTDM-180	Game Design I.....	3
ARTDM-181	Game Design II.....	3
ARTDM-190	Digital Media Projects	3
ARTDM-214	Introduction to Graphic Design	3
ARTDM-224	Typography.....	3
ARTDM-295	Occupational Work Experience Education in ARTDM.....	2-4
ARTDM-296	Internship in Occupational Work Experience Education in ARTDM	2-4
ARTDM-298	Independent Study.....	0.5-3
ARTDM-299	Student Instructional Assistant	0.5-3
total minimum required units		15

Certificate of achievement Game design

Students completing the program will be able to...

- A. develop technical proficiency using computer hardware and software appropriate to the game design or 3D design industry.
- B. visually and verbally conceptualize in a clear and concise way the artistic/technical direction for a game design project.
- C. articulate, analyze, and evaluate the meaning in creative projects, including social contexts and ethical choices.
- D. work collaboratively within a creative team.
- E. develop a professional portfolio of work.

The game design certificate of achievement program provides students with a strong foundation in the fundamental aspects of game design. Students will learn the skills to develop game designs including techniques such as game engine integration. Courses present material that will take the student through the production process and workflow of game design. The program goal is to provide the skills necessary to enter this growing, professional field.

The types of industries that employ individuals with game design skills include game design companies, game development for the web, or assets for game production. Advanced students have the opportunity to create portfolios to prepare for game design careers.

To earn a certificate of achievement in game design, students must complete each course used to meet a major requirement with a "C" grade or higher. Certificate requirements can be completed by attending classes in the day, evening, online, or a combination of those.

<i>required courses:</i>	<i>units</i>
ARTDM-105 Introduction to Digital Imaging	3
ARTDM-160 3D Modeling and Animation I	3
ARTDM-161 3D Modeling and Animation II	3
ARTDM-167 Digital Animation	3
ARTDM-180 Game Design I.....	3
ARTDM-181 Game Design II.....	3

plus at least 3 units from:

ARTDM-115 Digital Interface Design.....	3
COMSC-110 Introduction to Programming.....	4
DRAMA-122 Basic Principles of Acting	3

total minimum required units 21

Certificate of achievement

Graphic design

Students completing the program will be able to...

- A. combine appropriate aesthetic form and content to create evocative and engaging work.
- B. create appropriate typographic solutions for a variety of design situations.
- C. demonstrate proficiency with computers, software and production processes.
- D. select appropriate tools, materials and processes for a range of media products.
- E. work collaboratively within a creative team.
- F. critically evaluate and discuss the merits of various creative ideas.
- G. develop a professional portfolio of work.

This certificate program provides students with a strong foundation in the fundamental aspects of graphic design and digital art. Students develop creativity and ideation skills, learn the theories of communication design and apply this to a wide range of design situations. The program is hands-on, integrating conceptual design studies with traditional and digital tools and production methods. The program goal is to provide the skills necessary to enter this growing, professional field.

Some examples where students might find employment using their design and illustration skills might include website design and development, design and illustration of electronic magazines and books, design of interactive marketing presentations, interactive learning products, scientific visualizations, etc. Advanced students have the opportunity to complete professional career preparation courses that deal with specific business issues relevant for designers, illustrators, and digital artists.

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.

<i>required courses:</i>	<i>units</i>
ART-105 Introduction to Drawing	3
ARTDM-105 Introduction to Digital Imaging	3
ARTDM-117 Digital Illustration	3
ARTDM-171 Web Design I	3
ARTDM-172 User Experience Design for Web and Mobile Devices.....	3
ARTDM-190 Digital Media Projects.....	3
ARTDM-214 Introduction to Graphic Design	3
ARTDM-224 Typography.....	3
total minimum required units	24

Certificate of achievement

Interaction design for web and mobile platforms

Students completing the program will be able to...

- A. design, develop, and publish responsive websites using industry best practices.
- B. create research and planning deliverables for interactive media projects.
- C. implement visual design, user-centered design, and interaction design concepts.
- D. apply foundation knowledge in rich-media production.
- E. qualify for entry-level employment in the interactive design field.
- F. demonstrate skill in a range of professional interactive media design tools.

The certificate of achievement in interaction design for web and mobile platforms prepares students for entry-level employment in the interaction design industries with emphasis in user-centered design. This program of study will expose students to the design and technical skills needed for creating interactive digital media. This includes working with industry best practices and applying them using current professional tools. Students will participate in a collaborative team-oriented learning experience that reflects the design industry production processes. Additionally, students will explore web and mobile career opportunities and develop a professional portfolio for entry into the workforce. A few of the areas that students might find employment include: web design and development, user experience design (UX), user interface design (UI), digital product design, and mobile design and development.

To earn a certificate, students must complete each course used to meet a certificate requirement with a "C" grade or higher. Some courses are available in online and traditional formats.

<i>required courses:</i>	<i>units</i>
ARTDM-105 Introduction to Digital Imaging	3
ARTDM-115 Digital Interface Design.....	3
ARTDM-117 Digital Illustration	3
ARTDM-171 Web Design I	3
ARTDM-172 User Experience Design for Web and Mobile Devices.....	3
ARTDM-190 Digital Media Projects.....	3

<i>plus at least 3 units from:</i>	<i>units</i>
ARTDM-173 Web Design II	3
ARTDM-174 Web and Mobile Design with JavaScript.....	3

total minimum required units 21

**Certificate of achievement
Motion graphics**

Students completing the program will be able to...

- A. create motion graphic projects.
- B. utilize digital production tools for web delivery.
- C. demonstrate competency in various aspects of digitizing, importing, and exporting images.
- D. build foundation knowledge in digital media production.
- E. qualify for entry-level employment in the art digital media field.

The art digital media program prepares students for entry level employment in the digital media industry with a specialization in motion graphics. 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 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.

<i>required courses:</i>		<i>units</i>
ART-105	Introduction to Drawing	3
ARTDM-105	Introduction to Digital Imaging	3
ARTDM-115	Digital Interface Design.....	3
ARTDM-117	Digital Illustration	3
ARTDM-140	Motion Graphics.....	3
ARTDM-160	3D Modeling and Animation I	3
ARTDM-170	Animation for Interaction Design	3
ARTDM-171	Web Design I	3
ARTDM-190	Digital Media Projects.....	3
ARTDM-214	Introduction to Graphic Design	3
CARER-140	Job Search Strategies	1
CIS-108	Introduction to WordPress.....	2
FTVE-165	Digital Editing	3
total minimum required units		36

**Certificate of achievement
Web design**

Students completing the program will be able to...

- A. design, develop, and publish responsive website designs using industry best practices.
- B. create, research, and plan deliverables for web and mobile projects.
- C. implement visual design, user-centered design, and interaction design concepts.
- D. incorporate rich-media into website productions.
- E. prepare a web portfolio for applying to entry-level jobs in the digital media field.
- F. demonstrate proficiency in a range of professional web design tools.

The certificate of achievement in web design prepares students for entry-level employment in the web and mobile industries. This program of study introduces students to the design and technical skills needed to create easy to use websites that function well regardless of screen size. Students use current professional tools and apply industry best practice of web design. Students participate in a collaborative team-oriented learning experience that reflects human-centered design processes.

Potential areas of employment include: web design, user experience design (UX), and user interface design (UI). This certificate is an entry point for building toward the certificate of achievement or associate in arts degree in interaction design.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a "C" grade or higher.

<i>required courses:</i>		<i>units</i>
ARTDM-105	Introduction to Digital Imaging	3
ARTDM-115	Digital Interface Design.....	3
ARTDM-171	Web Design I	3
ARTDM-172	User Experience Design for Web and Mobile Devices.....	3
ARTDM-173	Web Design II	3
total minimum required units		15

**Certificate of accomplishment
Art digital media -
Foundation**

Students completing any program will be able to...

- A. discuss the career opportunities available in the field of digital media.
- B. describe the different applications of digital media such as website, mobile application, and augmented reality.
- C. produce and utilize digital images for exports to websites, multimedia presentations, and print.
- D. design and create a multimedia project.
- E. critically evaluate multimedia design concepts and techniques.

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.

<i>required courses:</i>	<i>units</i>
ARTDM-101 Introduction to the Production of Digital Media	3
ARTDM-105 Introduction to Digital Imaging	3
ARTDM-214 Introduction to Graphic Design	3
total minimum required units	9

ARTDM-100 Introduction to the History and Development of Digital Media

- 3 units SC
- 36 hours lecture/54 hours laboratory per term
- *Advisory: College-level reading and writing are expected.*

This course introduces students to digital media through theory and hands-on activities. The history, aesthetics, technology, and social impacts of digital media will be explored. CSU, UC

ARTDM-101 Introduction to the Production of Digital Media

- 3 units SC
- 36 hours lecture/54 hours laboratory per term
- *Advisory: College-level reading and writing are expected.*

This course introduces key concepts and industry concerns, technologies, and the creation of digital media. Time-based art, network culture, image resolution, computational techniques, and interactivity will be examined. Students will also explore ways of constructing different types of digital media and investigate the history of digital technology. CSU, UC

ARTDM-105 Introduction to Digital Imaging

- 3 units SC
- 36 hours lecture/54 hours laboratory per term
- *Note: This course is equivalent to ARTDM-110 and ARTDM-111 combined. Credit by examination option available.*

This course presents design and composition concepts, processes, and aesthetic interpretation of making digital imagery. Students will create computer graphics and edit digital images from scanned photographs and digital photography. CSU, UC

ARTDM-112 Digital Imaging for the Artist

- 3 units SC
- 36 hours lecture/72 hours laboratory per term
- *Advisory: College-level reading and writing are expected. ART-105 or equivalent*

This course is designed to develop a fine arts approach to computer-generated imaging using graphic arts software. An emphasis will be placed on the application and integration of color theory as well as design principles with digital imaging. C-ID ARTS 250, CSU, UC

ARTDM-115 Digital Interface Design

- 3 units SC
- 36 hours lecture/54 hours laboratory per term
- *Advisory: ARTDM-105 or equivalent*
- *Note: Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply toward the 60 units required for the degree.*

This introductory course explores current trends and techniques of interface design and design skills. Emphasis is placed on the development of visual solutions for various interactive communication problems, platforms, and devices. CSU, UC

ARTDM-117 Digital Illustration

3 units SC

- 36 hours lecture/54 hours laboratory per term

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, UC

ARTDM-130 Introduction to Digital Audio

3 units SC

- 36 hours lecture/54 hours laboratory per term
- Note: Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply toward the 60 units required for the degree.

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 a variety of digital media formats including DVD's, video and the Internet. The course will involve hands-on work with a variety of digital workstations and multimedia software applications. CSU

ARTDM-136 Introduction to Digital Photography

3 units SC

- 36 hours lecture/72 hours laboratory per term
- Advisory: ART-160 or equivalent
- Note: Students must have digital camera with manual functions. Note: Mandatory materials fee required

This introductory course focuses on the skills required to create effective digital photographs using digital cameras. Students will be introduced to the fundamental principles of image making, composition, color theory, color management, lighting, image processing, and printing with a specific focus on digital photographic practice in fine art. CSU, UC

ARTDM-137 Intermediate Digital Photography

3 units SC

- 36 hours lecture/72 hours laboratory per term
- Advisory: ARTDM-136 or equivalent
- Note: Mandatory materials fee required

This digital photography class advances students' knowledge of materials and techniques used in ARTDM-136 Introduction to Digital Photography. The course will concentrate on the specific controls of image processing and the characteristics of a digital photographic practice. In addition to advanced imaging techniques, emphasis will be placed on developing concept, nondestructive editing, and aesthetic considerations relating to image presentation, printing, and professional development for both commercial and fine art photography. CSU

ARTDM-140 Motion Graphics

3 units SC

- 36 hours lecture/54 hours laboratory per term
- Advisory: ARTDM-105 or equivalent
- Note: Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply toward the 60 units required for the degree.

This introductory course focuses on the creative design skills required to create effective motion graphics. Students will create motion graphics utilizing digital video and various graphic file formats. The theory and production of animated two-dimensional (2D) graphics for time-based media environments will be introduced, focusing on animating typography, graphic objects, and still images. Various software applications will be used including Adobe After Effects. CSU, UC

ARTDM-149 Fundamentals of Digital Video

3 units SC

- 36 hours lecture/54 hours laboratory per term

This introductory course covers the application of video to various forms of digital media including how to capture, edit and create digital video for DVD's and the internet. The course will involve hands-on work with a variety of digital workstations and multimedia software applications. CSU, UC

ARTDM-150 Topics in Digital Media

.5-4 units SC

- Variable hours

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

ARTDM-160 3D Modeling and Animation I

3 units SC

- 36 hours lecture/54 hours laboratory per term
- Advisory: ARTDM-105 or equivalent
- Note: Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply toward the 60 units required for the degree.

This course presents the basic concepts of three-dimensional (3D) modeling and animation. Students explore the production of 3D computer animation including modeling, animation, rigging, and texture mapping. Students will also plan, design and produce 3D animation projects. CSU, UC

ARTDM-161 3D Modeling and Animation II

3 units SC

- 36 hours lecture/54 hours laboratory per term
- Advisory: ARTDM-160 or equivalent
- Note: Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply toward the 60 units required for the degree.

This course builds on skills presented in ARTDM-160 and focuses on the creation of short, 3D animated movies. Students explore the principles that govern animation and practice techniques to implement them in 3D. CSU, UC

ARTDM-165 Drawing for Digital Animation

3 units SC

- 36 hours lecture/54 hours laboratory per term
- Advisory: ART-105 or equivalent

This course introduces students to the skills necessary to create animation that utilizes the 12 principles of animation, character pages, and storyboard animatics. The course is designed to prepare students to develop a particular style of animation using hand drawing techniques and introduces digital applications. In addition, a survey of the history of animation will be presented. CSU

ARTDM-166 Intermediate Drawing for Digital Animation

3 units SC

- 36 hours lecture/54 hours laboratory per term
- Advisory: ART-165 or equivalent

This course builds on skills in ARTDM-165 and emphasizes fluidity of movement, multiple visual perspectives, and creating a unified cast of characters for digital animation. Through a series of projects and experiments, students will explore these subjects and discover how to create an animator's "story bible". CSU

ARTDM-167 Digital Animation

3 units SC

- 36 hours lecture/54 hours laboratory per term
- Advisory: ARTDM-160 or equivalent, ARTDM-165 or equivalent
- Formerly ARTDM-175

This course explores how to combine multiple techniques and processes related to animation to create complete viewing experiences. The course follows basic industry production structure to immerse students in the animation process. Students will compare 2D, 3D, and compositing techniques and how to apply them in the creation of animated projects. In addition, students will apply audio recording and post production techniques to animated projects. CSU, UC

ARTDM-170 Animation for Interaction Design

3 units SC

- 36 hours lecture/54 hours laboratory per term
- Advisory: ARTDM-115 or equivalent, ARTDM-171 or equivalent

This course explores animation for the purpose of improving interaction design and user experience design. Concepts and techniques for improving usability and user engagement for the web, mobile, and other interactive contexts will be addressed. CSU, UC

ARTDM-171 Web Design I

3 units SC

- 36 hours lecture/54 hours laboratory per term
- Advisory: ARTDM-105 or equivalent

This introductory course focuses on the essential principles and processes of web design. Students will design and publish effective websites using HTML, cascading style sheets (CSS) and a variety of software tools. CSU

ARTDM-172 User Experience Design for Web and Mobile Devices

3 units SC

- 36 hours lecture/54 hours laboratory per term

This course explores user-centered design concepts, practices, and standard deliverables employed in planning interactive experiences. Students will also be exposed to the detailed processes of researching, planning, and designing user experiences for digital contexts. CSU

ARTDM-173 Web Design II

3 units SC

- 36 hours lecture/54 hours laboratory per term
- Prerequisite: ARTDM-171 or equivalent

This course presents advanced production concepts such as design and development frameworks, pre-and postprocessors, and content management systems. Students will build upon previous web design experiences to learn professional tools and practices. CSU

ARTDM-174 Web and Mobile Design with JavaScript

3 units SC

- 36 hours lecture/54 hours laboratory per term
- Prerequisite: ARTDM-171 or equivalent
- Note: Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply toward the 60 units required for the degree.

This course presents JavaScript/ECMAScript skills and best practices for web standards. Utilization of code libraries for the development of user interfaces will also be covered. Concepts include interactive design skills with emphasis on scripting the functionality of web interfaces. CSU

ARTDM-180 Game Design I

3 units SC

- 36 hours lecture/54 hours laboratory per term
- Advisory: ARTDM-160 or equivalent
- Note: Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply toward the 60 units required for the degree.

This course will present techniques for the development of interactive game environments. Students will create multiple levels, integrate game mechanics, and apply visual design concepts in the development process. The course follows basic industry production structure to immerse students in the game design process and will introduce node based programming tool sets to be applied to level designs. CSU, UC

ARTDM-181 Game Design II

3 units SC

- 36 hours lecture/54 hours laboratory per term
- Advisory: ARTDM-180 or equivalent
- Note: Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply toward the 60 units required for the degree.

This course will build upon techniques and methods covered in ARTDM-180 Game Design I. Students will create multiple levels, integrate game mechanics, and apply visual design concepts in the development process with an emphasis on continuity and level transitions. The course follows standard industry production structure to immerse students in the game design process. Students will be introduced to intermediate programming and artificial intelligence (AI) behavior systems to be applied to level designs. CSU, UC

ARTDM-190 Digital Media Projects

3 units SC

- 36 hours lecture/54 hours laboratory per term
- Advisory: ART-105, ARTDM-130 and ARTDM-149 or equivalents

This advanced course is designed for students who are preparing for employment in the digital media industry. Working independently and in teams, students will use a variety of software and design tools to create projects for real-world clients. Students will also create presentations combining a variety of digital media. CSU

ARTDM-214 Introduction to Graphic Design

3 units SC

- IGETC: 3A; CSU GE: C1; DVC GE: III
- 36 hours lecture/54 hours laboratory per term
- Advisory: College-level reading and writing are expected.

This course presents the 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, and the integration of text and image. Students will survey the history of graphic design as a basis for exploring and understanding graphic design fundamentals. CSU, UC

ARTDM-224 Typography

3 units SC

- 36 hours lecture/54 hours laboratory per term
- Advisory: College-level reading and writing are expected.

This course presents fundamentals of typography including history, theory and contemporary practices of typography in the practice design. Topics cover typographic terminology, conventions, typesetting fundamentals, grid systems, type as visual/verbal expressive communication, and development of unique alphabet letterforms. CSU, UC

ARTDM-295 Occupational Work Experience in ARTDM

2-4 units SC

- May be repeated eight times
- Variable Hours
- Note: In order to enroll in ARTDM-295, students must be employed, register for the course, complete an online Employment Form, and participate in an orientation. Incomplete grades are not awarded for this course.

ARTDM-295 is supervised employment that extends classroom learning to the job site and relates to the student's chosen field of study or area of career interest. Under the supervision of a college instructor, students will engage in on-the-job and other learning experiences that contribute to their employability skills and occupational or educational goals. Each unit represents five hours of work per week or 75 hours work per term. Students may earn up to a total of 16 units in any combination of WRKX courses. Repetition allowed per Title 5, Section 55253. CSU

ARTDM-296 Internship in Occupational Work Experience Education in ARTDM

2-4 units SC

- *May be repeated eight times*
- *Variable hours*
- *Note: In order to enroll in the ARTDM-296 course, students must be interning or volunteering, register for the course, complete an online Employment Form, and participate in an orientation. Incomplete grades are not awarded for this course.*

ARTDM-296 is a supervised internship in a skilled or professional level assignment in the student's major field of study or area of career interest. Under the supervision of a college instructor, students will engage in on-the-job and other learning experiences that contribute to their employability skills and occupational or educational goals. Internships may be paid, non-paid, or some partial compensation provided. Each unit represents five hours of paid work or four hours of unpaid work per week or 75 hours of paid work or 60 hours of unpaid work per term. Students may earn up to a total of 16 units in any combination of WRKX courses. Repetition allowed per Title 5, Section 55253. CSU

ARTDM-298 Independent Study

.5-3 units SC

- *Variable hours*
- *Note: Submission of acceptable educational contract to department and Instruction Office is required.*

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. CSU

ARTDM-299 Student Instructional Assistant

.5-3 units SC

- *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 HISTORY – ARTHS

Janette Funaro, Dean

Arts and Communication Division

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.

Associate in arts in art history for transfer**Students completing any program will be able to...**

- identify, describe, and analyze important artworks and issues from respective historical periods using appropriate art historical vocabulary.
- employ critical thinking skills in the study of art.
- describe the intersection of culture, politics, religion, and the arts in specific cultures and time periods.
- apply the elements and principles of design and aesthetics to create works of art.
- relate visual art to cultural traditions in language, literature, music, and philosophy.

The associate in arts in art history for transfer offers students a curricular program for studying a variety of beginning courses within the field of art history. The art history major is a two-year degree program of transferable courses open to all students. The program requirements are designed for those interested in art history as preparation for transfer. The program is broadly constructed both to prepare students for advanced study in the history of art and to provide a basis for many other fields that require the ability to do independent research, evaluate evidence (visual and textual), and create a coherent argument.

The major has required components of Western art history, non-Western art, and fundamentals of drawing and design. The studio practice courses are common components of art history degrees, and are necessary to an understanding of the fundamentals of art making, which informs theory and critique. Students also select related electives. Foreign language preparation is recommended as many baccalaureate degrees and most post-baccalaureate programs require proficiency in at least one foreign language.

Art history

Fine arts faculty and staff are dedicated to assisting students in exploring job opportunities, internships, and transferring to four-year institutions of higher learning. Students interested in the major must contact DVC counselors and art faculty about program requirements and transferability to specific institutions. The student with an associate in arts in art history for transfer is prepared for upper division work in the major or related fields (humanities, interdisciplinary studies, visual studies) at four-year institutions. The major is available at UC and CSU systems, the San Francisco Art Institute, the California College of Art, and at other colleges of art and schools of design. Career opportunities include: art or art history teacher, art conservator, museum curator, art journalist, and other related professions. Career opportunities are also available in galleries, museums, and art organizations. Some career fields will require post-baccalaureate preparation. Students also receive a broad-based liberal arts education that is strong in critical thinking skills, which prepares them for a range of professions.

The associate in arts in art history for transfer is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major.

In order to earn the degree, students must:

- Complete 60 CSU-transferable units.
- Complete the California State University-General Education pattern (CSU GE); or the Intersegmental General Education Transfer Curriculum (IGETC) pattern, including the Area 1C requirement for Oral Communication.
- Complete a minimum of 18 units in the major.
- Attain a minimum grade point average (GPA) of 2.0.
- Earn a grade of "C" or higher in all courses required for the major.

Students transferring to a CSU campus that accepts the degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system, or those students who do not intend to transfer.

Some courses in the major satisfy both major and CSU GE/IGETC general education requirements; however, the units are only counted once toward the 60 unit requirement for an associate degree. 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:	units
ART-105 Introduction to Drawing	3
ARTHS-193 History of Asian Art	3
ARTHS-195 History of Prehistoric and Ancient Art	3
ARTHS-196 History of Medieval and Renaissance Art	3
ARTHS-197 History of Baroque to 20th Century Art	3

plus at least 3 units from:

ART-101 Introduction to Two-Dimensional Design	3
ART-102 Introduction to Three-Dimensional Design and Sculpture	3
ART-107 Figure Drawing I	3
ART-138 Sculpture I	3
ART-152 Wheel-Thrown Pottery I	3
ART-160 Photography I	3
ARTDM-112 Digital Imaging for the Artist	3

plus at least 3 units from:

ARTHS-199 Contemporary Art History	3
ENGL-176 The Graphic Novel as Literature	3
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
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
HUMAN-110 Humanities: Ancient Civilizations	3
HUMAN-111 Humanities: The Middle Ages and Renaissance	3
HUMAN-112 Humanities: The Modern World	3
HUMAN-115 Humanities: The Multicultural American Experience	3
HUMAN-116 Humanities: The Arts and Culture of Asia	3
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

total minimum units for the major 21

ARTHS-100 Art Appreciation

3 units SC

- IGETC: 3A; CSU C1; DVC GE: III
- 54 hours lecture per term
- Advisory: ENGL-122 or equivalent

This introductory course offers a look at works of art through the study of theory, terminology, themes, design principles, media, and techniques. Visual arts across time and diverse cultures will be examined. CSU, UC

ARTHS-190 Topics in Art History

.3-4 units SC

- Variable hours
- Advisory: College-level reading and writing are expected.

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-191 Critical Thinking in Visual Studies

3 units SC

- *IGETC: 1B; CSU GE: A3; DVC GE: IB*
- *54 hours lecture per term*
- *Prerequisite: ENGL-122 or equivalent*

This course explores the power of visual culture including analysis of how visual culture creates and mediates meaning. Emphasis is placed on understanding and using principles of inductive and deductive reasoning as well as on evaluation and creation of argument, persuasion, and criticism of visual culture topics from both visual and textual sources. Students will investigate our rich visual world which includes art, advertisements, illustrations, and many other forms of visual communication that inform and mediate every aspect of our lives. CSU, UC

ARTHS-193 History of Asian Art

3 units SC

- *IGETC: 3A; CSU GE: C1; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course examines major artistic traditions in Asia from prehistory to the present. It tracks the interdependence of artists, patrons, cultures, and religions. Artistic changes are contextualized in relation to political developments and cross-cultural exchanges. C-ID ARTH 130, CSU, UC

ARTHS-195 History of Prehistoric and Ancient Art

3 units SC

- *IGETC: 3A; CSU GE: C1; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course presents the history of Western art from the Paleolithic through the end of the Roman period and the beginning of early Christian art. Archeological and anthropological concepts are discussed in relation to the study of art styles. The social and cultural background of ancient civilizations and the role of the artist will be considered. ARTHS-195 + ARTHS-196 = C-ID: ARTH 110, CSU, UC

ARTHS-196 History of Medieval and Renaissance Art

3 units SC

- *IGETC: 3A; CSU GE: C1; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

The course presents the 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. ARTHS-195 + ARTHS-196 = C-ID ARTH 110, ARTHS 196 + ARTHS 197 = C-ID ARTH 120, CSU, UC

ARTHS-197 History of Baroque to 20th Century Art

3 units SC

- *IGETC: 3A; CSU GE: C1; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course presents a history of Western art from the 17th century through major movements of the 20th century. Stylistic changes are related to significant social and cultural changes. Consideration is given to the changing role of the artist. ARTHS 196 + ARTHS 197 = C-ID ARTH 120, CSU, UC

ARTHS-199 Contemporary Art History

3 units SC

- *IGETC: 3A; CSU GE: C1; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course presents a survey of contemporary art in the United States and globally from 1945 to the present. Emphasis is placed on identifying and understanding important contemporary art movements and images, as well as social and political issues that shape the character of art. CSU, UC

ARTHS-299 Student Instructional Assistant

.5-3 units SC

- *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

Charles Ramos, Dean

Sciences Division

Physical Sciences Building, Room 263

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

- *IGETC: 5A; CSU GE: B1; DVC GE: II*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected. MATH-085 or equivalent*
- *Note: Students who have successfully completed ASTRO-112 should not enroll in ASTRO-110. Students who have successfully completed ASTRO-112 will not receive credit for ASTRO-110. The planetarium sky provides students with the opportunity to observe concepts presented in class for in-person and hybrid classes on the Pleasant Hill campus only.*

This introductory course focuses on observational astronomy. Students will visit the planetarium to identify constellations, discover how the rotation and orbit of the Earth affects our view of the night sky, distinguish the causes of the Moon phases and how to predict eclipses. Students will be introduced to light and energy output from the cosmos and use planetary orbits to find planets outside of our Solar System. CSU, UC (credit limits may apply to UC - see counselor)

ASTRO-112 The Visible Universe With Laboratory

4 units LR

- *IGETC: 5A, 5C; CSU GE: B1, B3; DVC GE: B3*
- *54 hours lecture/54 hours laboratory per term*
- *Advisory: College-level reading and writing are expected. MATH-085 or equivalent*

This introductory course focuses on observational astronomy. Students will visit the planetarium to identify constellations, discover how the rotation and orbit of the Earth affects our view of the night sky, distinguish the causes of Moon phases, and predict eclipses. Students will be introduced to light and energy output from the cosmos and use planetary orbits to find planets outside of our Solar System. The laboratory component 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 (credit limits may apply to UC - see counselor)

ASTRO-120 Elementary Astronomy

3 units LR

- *IGETC: 5A; CSU GE: B1; DVC GE: II*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected. MATH-085 or MATH-085SP or beginning algebra or MATH-114 equivalents.*

This course presents an introduction to an elementary mathematical approach to the solving of problems relating to solar and stellar systems. Properties and evolution of stars and galaxies as well as their role in the evolution of the universe will be the major emphasis. Instrumentation used for and the analysis of electromagnetic radiation will also be discussed. CSU, UC (credit limits may apply to UC - see counselor)

ASTRO-130 Astronomy Laboratory

1 unit LR

- *IGETC: 5C; CSU GE: B3*
- *54 hours laboratory per term*
- *Prerequisite: ASTRO-110 or 120 or equivalent (may be taken concurrently)*

The laboratory course 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 are 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

- *Variable hours*
- *Note: Submission of acceptable educational contract to department and Instruction Office is required.*

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. CSU

ASTRO-299 Student Instructional Assistant

.5-3 units SC

- *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 that can be used are BIOSC-119, 120, 139, 140 and 146.

Charles Ramos, Dean
Sciences Division
Physical Sciences Building, Room 263

Possible career opportunities

Completion of the biology program prepares students for advanced study leading to careers in government, industry, or secondary-school teaching. The program also partially satisfies the entrance requirements for medical and dental schools. Career options include: researcher, educator, laboratory technician, botanist, ecologist, and field technician.

Associate in science degree

Allied health

Students completing any program will be able to...

- illustrate and analyze chemical bonds and reactions.
- demonstrate an understanding of the structure and growth of microbes.
- demonstrate knowledge of the structure and function of the human body.
- demonstrate knowledge of the structure of the human body including both normal and pathological conditions.
- demonstrate knowledge of cell structure and function.

The associate in science degree with a major in allied health is a transfer degree for students who wish to transfer to a four-year institution with a major in an allied health field. These fields include, but are not limited to, nursing, radiological sciences, physical therapy, occupational health, and dental hygiene. The degree offers students a broad general education, and provides basic knowledge in microbiology, human anatomy and physiology. These are common prerequisites for above mention four-year majors, while also preparing students for more advanced allied health courses. Degree 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 specific course requirements for that particular program.

The DVC allied health major is intended for transfer. Students wishing to transfer must consult with a counselor regarding other courses in math, chemistry and physics that may be required by the four-year institution to which they intend to transfer. Students who intend to transfer are advised to select General Education Option 2 (IGETC) or Option 3 (CSU GE). Option 1 (DVC General Education) is not generally advised.

To earn an associate in science degree with a major in allied health, students must complete each course used to meet a major requirement with a "C" grade or higher and complete all general education requirements as listed in the catalog. Major requirements may be taken only on a "for grade" basis. Certain courses may satisfy both major and general education requirements; however, the units are only counted once.

<i>major requirements:</i>		<i>units</i>
BIOSC-139	Human Anatomy.....	5
BIOSC-140	Human Physiology	5

<i>plus at least 4 units from:</i>		
BIOSC-119	Fundamentals of Microbiology	4
BIOSC-146	Principles of Microbiology	5

<i>plus at least 4 units from:</i>		
CHEM-107	Integrated Inorganic, Organic, and Biological Chemistry	5
CHEM-108	Introductory Chemistry	4
CHEM-109	Introduction to Organic and Biochemistry	4
CHEM-120	General College Chemistry I.....	5
total minimum units for the major		18

Associate in science degree Biology

Students completing any program will be able to...

- apply the scientific method of inquiry.
- illustrate and analyze chemical bonds and reactions.
- compare and contrast organismal life structures and functions.
- demonstrate an understanding of the mechanisms and evidence for the theory of evolution.

The associate in science degree with a major in biology is designed as a two-year program that offers a broad general education background and an introduction to the basic principles of biology as well as the supporting knowledge of chemistry needed to fully understand and appreciate biology as specified by the learning objectives of the courses. The courses included in the major are also applicable to further study in the life sciences.

The DVC biology major is intended for transfer. Students wishing to transfer must consult with a counselor regarding other courses in math, chemistry and physics that may be required by the four year institution to which they intend to transfer. Students who intend to transfer are advised to select General Education Option 2 (IGETC) or Option 3 (CSU GE). Option 1 (DVC General Education) is not generally advised.

To earn an associate in science degree with a major in biology, students must complete each course used to meet a major requirement with a "C" grade or higher and complete all general education requirements as listed in the catalog. Certain courses may satisfy both major and general education requirements; however, the units are only counted once.

Biological science

<i>major requirements:</i>		<i>units</i>
BIOSC-130	Principles of Cellular and Molecular Biology.....	5
BIOSC-131	Principles of Organismal Biology, Evolution and Ecology.....	5
CHEM-120	General College Chemistry I.....	5
CHEM-121	General College Chemistry II.....	5
total minimum units for the major		20

Associate in science degree

Life science

Students completing any program will be able to...

- understand and apply the scientific method of inquiry.
- explain, illustrate and analyze chemical bonds and reactions.
- discuss the mechanisms and evidence for the theory of evolution.
- understand the molecular aspects of cell biology/genetics. (Cellular Biology emphasis)
- discuss interactions of organisms in communities. (Field Studies emphasis)
- demonstrate knowledge of the structure and function of the human body. (Health emphasis)
- demonstrate the proper use and care for common laboratory equipment, lab skills, and techniques.

The associate in science degree with a major in life science is designed as a two-year program that offers a broad general education background and an introduction to the basic principles of biology and the supporting knowledge of chemistry needed to fully understand and appreciate biology. Furthermore, courses in three categories of life science are offered from which students select a minimum of twelve units. These categories emphasize I: health science, II: field sciences and III: cellular and molecular biology.

The associate degree in life science is not designed to transfer as major preparation for a baccalaureate degree. DVC life science students who intend to transfer must consult with a program advisor or counselor to ensure that other major preparation courses in math, chemistry, physics and other transfer requirements at the 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 GE). 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 life science, students must complete each course used to meet a major requirement with a "C" grade or higher and complete all general education requirements as listed in the catalog. Certain courses may satisfy both major and general education requirements; however, the units are only counted once.

<i>major requirements:</i>		<i>units</i>
<i>complete at least 4 units from:</i>		
BIOSC-102	Fundamentals of Biological Science with Laboratory.....	4
BIOSC-117	Human Biology with Laboratory.....	4
or both		
BIOSC-130	Principles of Cellular and Molecular Biology.....	5
and		
BIOSC-131	Principles of Organismal Biology, Evolution and Ecology.....	5
<i>plus at least 4 units from:</i>		
CHEM-107	Integrated Inorganic, Organic, and Biological Chemistry.....	5
CHEM-109	Introduction to Organic and Biochemistry.....	4
CHEM-120	General College Chemistry I.....	5
<i>plus at least 12 units from the following areas of specialization; with at least 3 units from each area:</i>		
cellular biology		
BIOSC-107	Genetics and Evolution.....	4
BIOSC-119	Fundamentals of Microbiology.....	4
BIOSC-130	Principles of Cellular and Molecular Biology.....	5
BIOSC-146	Principles of Microbiology.....	5
field studies		
BIOSC-126	Ecology and Field Biology.....	4
BIOSC-131	Principles of Organismal Biology, Evolution and Ecology.....	5
BIOSC-161	Fundamentals of Marine Biology.....	3
BIOSC-162	Fundamentals of Marine Biology with Laboratory.....	4
BIOSC-170	Environmental Science.....	3
BIOSC-171	Environmental Science with Laboratory.....	4
HORT-148L	California Native Plants Laboratory.....	1
OCEAN-101	Fundamentals of Oceanography.....	3
OCEAN-102	Fundamentals of Oceanography with Laboratory.....	4
health		
BIOSC-120	Introduction to Human Anatomy and Physiology.....	5
BIOSC-139	Human Anatomy.....	5
BIOSC-140	Human Physiology.....	5
NUTRI-160	Nutrition: Science and Applications.....	3
total minimum units for the major		20

Associate in science degree

Natural science

Students completing any program will be able to...

- A. understand and apply scientific terminology appropriate for this specific field of life or physical science.
- B. understand and apply the method of scientific inquiry appropriate for this specific field of life or physical science.
- C. collect and/or analyze laboratory and/or field data appropriate for the specific field of life or physical science.
- D. critically evaluate scientific information in various formats.
- E. understand the relationship between humans and the physical and/or life sciences.

The associate in science degree in natural science is designed as a two-year program that offers a broad general education background and an introduction to the diverse field of the natural sciences. This degree is an appropriate choice for students who seek breadth in their knowledge of the sciences or for those starting their preparation for a career in elementary education (multi subject), secondary education (single subject), journalism, liberal arts, environmental sciences, etc. Students may transfer to a science-related major or career/technical program or may work in a science-related field.

This degree, however, is not designed to present the complete lower division preparation for a major in a traditional scientific field. DVC natural sciences students who intend to transfer must consult with a program advisor or counselor to ensure that other major preparation courses such as mathematics and other transfer requirements at the 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 GE). General Education Option 1 (DVC General Education) is appropriate for students who do not intend to transfer.

To earn an associate in science degree in natural sciences, students must complete each course used to meet a major requirement with a "C" grade or higher and complete all general education requirements as listed in the catalog. Certain courses may satisfy both major and general education requirements; however the units are only counted once.

Major requirements – Students will select a minimum of 18 units total from courses in the biological sciences and physical sciences:

biological science

required biological science core: at least 4 units from the following biological science courses with a laboratory:

	<i>units</i>
BIOSC-102 Fundamentals of Biological Science with Laboratory	4
BIOSC-107 Genetics and Evolution	4
BIOSC-117 Human Biology with Laboratory	4
BIOSC-119 Fundamentals of Microbiology	4
BIOSC-120 Introduction to Human Anatomy and Physiology	5
BIOSC-126 Ecology and Field Biology	4
BIOSC-130 Principles of Cellular and Molecular Biology.....	5
BIOSC-131 Principles of Organismal Biology, Evolution and Ecology.....	5
BIOSC-139 Human Anatomy.....	5
BIOSC-146 Principles of Microbiology	5
BIOSC-162 Fundamentals of Marine Biology with Laboratory	4
BIOSC-171 Environmental Science with Laboratory.....	4

physical science

required physical science core: at least 4 units from the following physical science courses with a laboratory:

	<i>units</i>
ASTRO-110 The Visible Universe.....	3
<i>and</i>	
ASTRO-130 Astronomy Laboratory	1
ASTRO-120 Elementary Astronomy.....	3
<i>and</i>	
ASTRO-130 Astronomy Laboratory	1
CHEM-106 Chemistry for Non-Science Majors	4
CHEM-107 Integrated Inorganic, Organic, and Biological Chemistry	5
CHEM-108 Introductory Chemistry	4
CHEM-109 Introduction to Organic and Biochemistry	4
CHEM-120 General College Chemistry I.....	5
GEOG-120 Physical Geography	3
<i>and</i>	
GEOG-121 Physical Geography Laboratory	1
GEOG-140 Introduction to Weather	3
<i>and</i>	
GEOG-141 Introduction to Weather Laboratory	1
GEOL-120 Physical Geology.....	3
<i>and</i>	
GEOL-122 Physical Geology Laboratory.....	1
GEOL-121 Earth and Life Through Time	3
<i>and</i>	
GEOL-124 Earth and Life Through Time Laboratory	1
GEOL-130 Earth Science	4
OCEAN-102 Fundamentals of Oceanography with Laboratory	4
PHYS-110 Elementary Physics.....	3
<i>and</i>	
PHYS-111 Physics Laboratory	1

Biological science

PHYS-120	General College Physics I.....	4
PHYS-129	Introductory Physics for Engineers	4
PHYS-130	Physics for Engineers and Scientists A: Mechanics and Wave Motion.....	4
<i>plus 8-10 units from the following if not used above: units</i>		
ASTRO-110	The Visible Universe.....	3
ASTRO-120	Elementary Astronomy.....	3
ASTRO-130	Astronomy Laboratory	1
BIOOSC-101	Fundamentals of Biological Science	3
BIOOSC-102	Fundamentals of Biological Science with Laboratory	4
BIOOSC-107	Genetics and Evolution	4
BIOOSC-116	Human Biology	3
BIOOSC-117	Human Biology with Laboratory	4
BIOOSC-119	Fundamentals of Microbiology	4
BIOOSC-120	Introduction to Human Anatomy and Physiology	5
BIOOSC-126	Ecology and Field Biology	4
BIOOSC-130	Principles of Cellular and Molecular Biology.....	5
BIOOSC-131	Principles of Organismal Biology, Evolution and Ecology.....	5
BIOOSC-139	Human Anatomy.....	5
BIOOSC-140	Human Physiology	5
BIOOSC-146	Principles of Microbiology	5
BIOOSC-161	Fundamentals of Marine Biology	3
BIOOSC-162	Fundamentals of Marine Biology with Laboratory	4
BIOOSC-170	Environmental Science	3
BIOOSC-171	Environmental Science with Laboratory.....	4
CHEM-106	Chemistry for Non-Science Majors	4
CHEM-107	Integrated Inorganic, Organic, and Biological Chemistry	5
CHEM-108	Introductory Chemistry	4
CHEM-109	Introduction to Organic and Biochemistry	4
CHEM-120	General College Chemistry I.....	5
CHEM-121	General College Chemistry II.....	5
CHEM-226	Organic Chemistry I	5
CHEM-227	Organic Chemistry II	5
GEOG-120	Physical Geography	3
GEOG-121	Physical Geography Laboratory	1
GEOG-125	Introduction to Geographic Information Systems (GIS).....	3
GEOG-126	Advanced Geographic Information Systems	3
GEOG-140	Introduction to Weather	3
GEOG-141	Introduction to Weather Laboratory	1
GEOG-160	Introduction to Remote Sensing.....	4
GEOG-162	Map Design and Visualization.....	3
GEOL-120	Physical Geology.....	3
GEOL-121	Earth and Life Through Time	3
GEOL-122	Physical Geology Laboratory.....	1
GEOL-124	Earth and Life Through Time Laboratory	1
GEOL-125	Geology of California	3
GEOL-130	Earth Science	4
HORT-110	Introduction to Horticulture and Plant Science	4
HORT-148L	California Native Plants Laboratory.....	1
NUTRI-160	Nutrition: Science and Applications	3
OCEAN-101	Fundamentals of Oceanography	3
OCEAN-102	Fundamentals of Oceanography with Laboratory	4
PHYS-110	Elementary Physics.....	3
PHYS-111	Physics Laboratory	1

PHYS-113	Elementary Modern Physics: From Atoms to the Big Bang.....	3
PHYS-120	General College Physics I.....	4
PHYS-121	General College Physics II.....	4
PHYS-124	Calculus Supplement for Physics 120	0.5
PHYS-125	Calculus Supplement for Physics 121	0.5
PHYS-129	Introductory Physics for Engineers	4
PHYS-130	Physics for Engineers and Scientists A: Mechanics and Wave Motion.....	4
PHYS-230	Physics for Engineers and Scientists B: Heat and Electro-Magnetism.....	4
PHYS-231	Physics for Engineers and Scientists C: Optics and Modern Physics.....	4
PHYS-112	Fundamentals of Physical Science.....	3
total minimum units for the major		18

Associate in science in biology for transfer Students completing any program will be able to...

- apply the scientific method of inquiry using appropriate and effective tools in obtaining, analyzing (including use of statistical procedures and standard techniques in data gathering), and interpreting information including peer-reviewed articles.
- illustrate and analyze chemical bonds and reactions starting on the level of subatomic particles to the level of large organic molecules.
- compare and contrast organismal life structures and functions including microorganisms.
- demonstrate an understanding of the mechanisms and evidence for the theory of evolution.
- demonstrate the concept of limits and apply limits to real-world problems.
- solve problems involving rates of change and derivatives, including real-world problems.
- explain the core concepts in mechanics; forces, motion, momentum and energy.
- solve simple circuit problems involving electric potential, capacitance and resistance.

The associate in science in biology for transfer degree is designed as a two-year program that offers an introduction to the basic principles of biology as well as the supporting knowledge of chemistry, physics, and mathematics. The associate in science in biology for transfer is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major.

In order to earn the degree, students must:

- Complete 60 CSU-transferable units.
- Complete the California State University-General Education pattern (CSU GE); or the Intersegmental General Education Transfer Curriculum (IGETC) pattern, including the Area 1C requirement for Oral Communication.
- Complete a minimum of 18 units in the major.
- Attain a minimum grade point average (GPA) of 2.0.
- Earn a grade of “C” or higher in all courses required for the major.

Students transferring to a CSU campus that accepts the degree will be required to complete no more than 60 units after transfer to earn a bachelor’s degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system, or those students who do not intend to transfer.

Students must complete each course used to meet a major requirement with a “C” grade or higher. Some courses in the major satisfy both major and CSUGE/IGETC general education requirements; however, the units are only counted once toward the 60 unit requirement for an associate degree. Students are advised that for this major, they may use the IGETC for STEM (Science, Technology, Engineering and Mathematics) pattern. This pattern allows students to complete one course in Area 3A; one course in Area 3B; and two courses in Area 4 from two different disciplines. Some variations in major 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.

<i>required courses:</i>	<i>units</i>
BIOSC-130 Principles of Cellular and Molecular Biology.....	5
BIOSC -131 Principles of Organismal Biology, Evolution and Ecology.....	5
CHEM-120 General College Chemistry I.....	5
CHEM-121 General College Chemistry II.....	5
<i>plus at least 4 units from:</i>	
MATH-182 Calculus for Management, Life Science and Social Science I.....	4
MATH-192 Analytic Geometry and Calculus I.....	5
<i>plus at least 8 units from:</i>	
PHYS-120 General College Physics I.....	4
PHYS-121 General College Physics II.....	4
or	
PHYS-130 Physics for Engineers and Scientists A: Mechanics and Wave Motion.....	4
PHYS-230 Physics for Engineers and Scientists B: Heat and Electro-Magnetism.....	4
<i>plus at least 3 units from:</i>	
BIOSC-119 Fundamentals of Microbiology.....	4
BIOSC-146 Principles of Microbiology.....	5
CHEM-226 Organic Chemistry I.....	5
MATH-142 Elementary Statistics with Probability.....	4
PSYCH-101 Introduction to Psychology.....	3
total minimum units for the major	35

Certificate of achievement Allied health

Students completing any program will be able to...

- illustrate and analyze chemical bonds and reactions.
- demonstrate an understanding of the structure and growth of microbes.
- demonstrate knowledge of the structure and function of the human body.
- demonstrate knowledge of the structure of the human body including both normal and pathological conditions.
- demonstrate knowledge of cell structure and function.

This program prepares the student for entry into some health professional programs or jobs in the medical field that do not require degrees. These courses provide some of the prerequisites for advanced training in the medical field for such occupations as nursing, dental hygiene, physical therapy, occupational therapy, medical laboratory technician, and radiological sciences.

To earn a certificate of achievement, students must complete the required courses with a “C” grade or higher. Course requirements are typically available in the day and evening. Students may also earn an associate in science degree in allied health.

Students who intend to transfer to a four-year program should consult with a counselor regarding course and program requirements.

<i>required courses:</i>	<i>units</i>
BIOSC-139 Human Anatomy.....	5
BIOSC-140 Human Physiology.....	5
<i>plus at least 4 units from:</i>	
BIOSC-119 Fundamentals of Microbiology.....	4
BIOSC-146 Principles of Microbiology.....	5
<i>plus at least 4 units from:</i>	
CHEM-107 Intergrated Inorganic, Organic, and Biological Chemistry.....	5
CHEM-108 Introductory Chemistry.....	4
CHEM-109 Introduction to Organic and Biochemistry.....	4
CHEM-120 General College Chemistry I.....	5
total minimum required units	18

**Certificate of achievement
Allied health fundamentals**

Students completing any program will be able to...

- A. demonstrate an understanding of the structure and growth of microbes.
- B. demonstrate knowledge of the structure and function of the human body.
- C. demonstrate knowledge of changes in bodily functions as a result of disease and determine the reason for functional changes.
- D. analyze chemical reactions.
- E. demonstrate knowledge of cell structure and function.

This program prepares the student for entry into some health professional programs or jobs in the medical field that do not require degrees. These courses provide some of the prerequisites for advanced training in the medical field for such occupations as nursing, dental hygiene, physical therapy, occupational therapy, medical laboratory technician, and radiological sciences.

To earn a certificate of achievement, students must complete the required courses with a "C" grade or higher. Course requirements are typically available in the day and evening. Students may also earn a certificate of achievement in allied health or an associate in science degree in allied health.

Students who intend to transfer to a four-year program should consult with a counselor regarding course and program requirements.

<i>required course:</i>	<i>units</i>
BIOSC-120 Introduction to Human Anatomy and Physiology	5

<i>plus at least 4 units from:</i>	
BIOSC-119 Fundamentals of Microbiology	4
BIOSC-146 Principles of Microbiology	5

<i>plus at least 4 units from:</i>	
CHEM-107 Intergrated Inorganic, Organic, and Biological Chemistry	5
CHEM-108 Introductory Chemistry	4
CHEM-109 Introduction to Organic and Biochemistry	4
CHEM-120 General College Chemistry I.....	5
total minimum required units	13

BIOSC-101 Fundamentals of Biological Science

3 units SC

- IGETC: 5B; CSU GE: B2; DVC GE: II
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.
- Note: Students who have successfully completed BIOSC-102 should not enroll in BIOSC-101. Students who have successfully completed BIOSC-102 will not receive credit for BIOSC-101.

In this course students will explore fundamental biological principles including 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

- IGETC: 5B, 5C; CSU GE: B2, B3; DVC GE: II
- 54 hours lecture/54 hours laboratory per term
- Advisory: College-level reading and writing are expected.
- Note: Students who have successfully completed BIOSC-101 should not enroll in BIOSC-102. Students who have successfully completed BIOSC-101 will not receive credit for BIOSC-102.

In this course students will explore fundamental biological principles including 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. 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-107 Genetics and Evolution

4 units SC

- IGETC: 5B, 5C; CSU GE: B2, B3; DVC GE: II
- 54 hours lecture/54 hours laboratory per term
- Advisory: College-level reading and writing are expected.

This course presents the study of various aspects of genetics and evolution. Topics include cellular reproduction, Mendelian Genetics, DNA structure and function, protein synthesis, gene regulation, biotechnology, genetically-modified organisms and gene therapy as well as an introduction to the process of evolution by means of natural selection and the social implications of these topics. The laboratory component includes an introduction to the scientific method and experimentation including data gathering and analysis with a variety of scientific equipment. Laboratory activities will include manipulating DNA, conducting genetic crosses and constructing cladograms. CSU, UC

BIOSC-116 Human Biology

3 units SC

- *IGETC: 5B; CSU GE: B2; DVC GE: II*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*
- *Note: Students who have successfully completed BIOSC-117 should not enroll in BIOSC-116. Students who have successfully completed BIOSC-117 will not receive credit for BIOSC-116.*

This course will explore fundamental biological principles as applied to humans. Topics will include evolution; ecology and human impact on the environment; human heredity including genetics and DNA structure and function; cell structure and function; major organ systems including structure, function, and pathology; human reproduction and development; and scientific method, including evaluation of scientific and medical information in the media and application of this knowledge to real life decision-making. CSU, UC (credit limits may apply to UC - see counselor)

BIOSC-117 Human Biology with Laboratory

4 units SC

- *IGETC: 5B, 5C; CSU GE: B2, B3; DVC GE: II*
- *54 hours lecture/54 hours laboratory per term*
- *Advisory: College-level reading and writing are expected.*
- *Note: Students who have successfully completed BIOSC-116 should not enroll in BIOSC-117. Students who have successfully completed BIOSC-116 will not receive credit for BIOSC-117.*

This course will explore fundamental biological principles as applied to humans. Topics will include evolution: ecology and human impact on the environment; human heredity including genetics and DNA structure and function; major organ systems including structure, function and pathology; human reproduction and development; and the scientific method, including evaluation of scientific, medical and health information in the media and the application of this knowledge to real life decision-making. The laboratory component introduces the scientific method and experimentation, including histology, dissection, data gathering and analysis with instruction in the use of a variety of scientific equipment. CSU, UC (credit limits may apply to UC - see counselor)

BIOSC-119 Fundamentals of Microbiology

4 units SC

- *IGETC: 5B, 5C; CSU GE: B2, B3; DVC GE: II*
- *54 hours lecture/54 hours laboratory per term*
- *Prerequisite: CHEM 107 or CHEM-108 or CHEM-109 or CHEM-120 or equivalent*
- *Advisory: College-level reading and writing are expected. High school or college biology or equivalents. MATH-119 or MATH-119SP or intermediate algebra or equivalent.*
- *Note: Students who have successfully completed BIOSC-146 should not enroll in BIOSC-119. Students who have successfully completed BIOSC-146 will not receive credit for BIOSC-119.*

This course will explore the fundamentals of microbiology and emphasize its application to allied health professions. Topics include microscopy and staining, cell structure and function, biological molecules and metabolism, growth and control of microbes (with an emphasis on sterile technique), microbial genetics and biotechnology, classification and identification of microbes, immunology and applications, epidemiology, medical microbiology, and public health microbiology. CSU, UC (credit limits may apply to UC - see counselor)

BIOSC-120 Introduction to Human Anatomy and Physiology

5 units SC

- *IGETC: 5B, 5C; CSU GE: B2, B3; DVC GE: II*
- *54 hours lecture/108 hours laboratory per term*
- *Advisory: College-level reading and writing are expected. High school or college biology or chemistry or equivalents.*

The course covers the structure and function of the human body, stressing the levels of organization within the body, the relationship between structure and function, the 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) supports the lecture material. CSU, UC (credit limits may apply to UC - see counselor)

BIOSC-126 Ecology and Field Biology

4 units SC

- *IGETC: 5B, 5C; CSU GE: B2, B3; DVC GE: II*
- *54 hours lecture/54 hours laboratory per term*
- *Advisory: College-level reading and writing are expected.*

This course is designed for non-majors and presents the principles of ecology, natural selection, speciation and biodiversity. During field laboratories, students will survey the natural history of ecological communities in northern California to identify dominant plant and animal species in each community, and explore the influences of the physical environment on the evolutionary adaptations and ecology of the species. Human impacts on ecological systems and conservation issues are explored. CSU, UC

BIOSC-130 Principles of Cellular and Molecular Biology

5 units SC

- *IGETC: 5B, 5C; CSU GE: B2, B3; DVC GE: II*
- *54 hours lecture/108 hours laboratory per term*
- *Prerequisite: CHEM-120 or equivalent*
- *Advisory: College-level reading and writing are expected. BIOSC-101 or BIOSC-102 or equivalents*

This course is formed around the universal biological processes of all organismal life with an emphasis on the cellular level of organization and is intended for biology majors or other students with an in-depth interest in the biological sciences. Topics include principles of biomolecules, prokaryotic and eukaryotic cellular morphology and ultrastructure, biochemical pathways (photosynthesis and cellular respiration), enzymes, cellular communication and reproduction, classical and molecular genetics, gene control, embryology, immunology, and selected topics of animal physiology emphasizing homeostatic control mechanisms. The laboratory component focuses on methodologies necessary for analyzing molecular, cellular and genetic problems like microscopy, spectrophotometry, graphing and statistical analysis, as well as recombinant DNA technologies. C-ID BIOL 190, BIOSC 130 + BIOSC 131= C-ID BIOL 135S, CSU, UC

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

5 units SC

- *IGETC: 5B, 5C; CSU GE: B2, B3; DVC GE: II*
- *54 hours lecture/108 hours laboratory per term*
- *Prerequisite: CHEM-120 (may be taken concurrently) or equivalent*
- *Advisory: College-level reading and writing are expected. BIOSC-101 or 102 or BIOSC-130 or equivalents*

This course is formed around three main biological principles: evolution, unity/diversity of life, and ecology and is intended for biology majors or other students with an in-depth interest in the biological sciences. The focus is on universal biological processes with emphasis on the whole organism and higher levels of organization. Evidence and mechanisms of evolution and speciation; evolutionary history and diversity of life; structure, function and evolutionary adaptations of organisms (including plants, fungi, animals, and unicellular organisms); general, population and community ecology; ecosystems and environmental concerns are covered. In laboratory, students will explore these themes with hands-on observations, dissections, laboratory activities and field exercises. BIOSC-130+BIOSC-131=C-ID BIOL 135S, CSU, UC

BIOSC-139 Human Anatomy

5 units SC

- *IGETC: 5B, 5C; CSU GE: B2, B3; DVC GE: II*
- *54 hours lecture/108 hours laboratory per term*
- *Advisory: College-level reading and writing are expected. BIOSC-102 or equivalents*
- *Note: The course content is appropriate for majors in Physical and Health Education; Public Health; Nursing; Physical, Occupational and Respiratory Therapy; Paramedical; Nurse Practitioner, and Physician Assistant programs.*

This course examines the physical structure of the human body as an integrated unit, stressing normal structure and the changes that occur with aging and disease. 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. C-ID BIOL 110B, CSU, UC (credit limits may apply to UC - see counselor)

BIOSC-140 Human Physiology

5 units SC

- *IGETC: 5B, 5C; CSU GE: B2, B3; DVC GE: II*
- *54 hours lecture/108 hours laboratory per term*
- *Prerequisite: BIOSC-120 or BIOSC-139 or Equivalent. CHEM-107, 108, 109 or 120 or one year of high school chemistry or equivalents*
- *Advisory: College-level reading and writing are expected. BIOSC-102, MATH-119, MATH-119SP or intermediate algebra or equivalents*
- *Note: This course is primarily intended for allied health and medical professions including nursing, dental hygiene, kinesiology, physical therapy, occupational therapy, respiratory therapy, physician assistant, pharmacy and other health related majors.*

This course presents the essential concepts of physiological mechanisms for the functioning of the human body. Emphasis will be given to regulatory mechanisms ranging from the cellular level to organ-system level employing chemical, mathematical and physical principles. Topics of study will include physiological function, communication, integration and homeostasis of the human body ranging from the cellular to organismal level. Laboratory activities focus on the knowledge of scientific methodologies necessary for the application, analysis and evaluation of major physiological principles using standard measuring equipment, bioelectronics, computer analysis, simulations and/or live organisms. C-ID BIOL 120B, CSU, UC (credit limits may apply to UC - see counselor)

BIOSC-146 Principles of Microbiology

5 units SC

- *IGETC: 5B, 5C; CSU GE: B2, B3; DVC GE: II*
- *54 hours lecture/108 hours laboratory per term*
- *Prerequisite: CHEM-107 or CHEM 108 or CHEM 109 or CHEM 120 or equivalents*
- *Advisory: College-level reading and writing are expected. High school or College biology or equivalents. MATH-119 or MATH-119SP or intermediate algebra or equivalent.*

This course will explore the principles of microbiology with a molecular emphasis, as well as extensive laboratory experience. It is appropriate for allied health and biology majors. Topics include microscopy and staining, cell structure and function, cell biochemistry and metabolism, growth and control of microbes (with an emphasis on sterile technique), microbial genetics, biotechnology concepts and applications, classification and identification of microbes, immunology and applications, epidemiology, medical microbiology and public health microbiology. CSU, UC (credit limits may apply to UC - see counselor)

BIOSC-150 Topics in Biology

.3-4 units SC

- *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 in the schedule of classes. CSU

BIOSC-161 Fundamentals of Marine Biology

3 units SC

- *IGETC: 5B; CSU GE: B2; DVC GE: II*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*
- *Note: This course does not include a laboratory. Students requiring or wanting a laboratory to accompany this course should enroll in BIOSC-162. Students who have successfully completed BIOSC-162 should not enroll in BIOSC-161. Students who have successfully completed BIOSC-162 will not receive credit for BIOSC-161.*

This course is an introduction to the diversity of marine organisms, the environments in which they live, and the relationships between species and organisms with their environments. Topics will include: the scientific method and its utilization in the marine sciences; properties of the marine environment; marine organisms (including their diversity and evolutionary adaptations; marine ecosystems with a focus on local estuarine and coastal environs; marine ecology;) and the sustainable use of marine biological resources. CSU, UC (credit limits may apply to UC - see counselor)

BIOSC-162 Fundamentals of Marine Biology with Laboratory

4 units SC

- *IGETC: 5B, 5C; CSU GE: B2, B3; DVC GE: II*
- *54 hours lecture/54 hours laboratory per term*
- *Advisory: College-level reading and writing are expected.*
- *Note: Students who have successfully completed BIOSC-161 should not enroll in BIOSC-162. Students who have successfully completed BIOSC-161 will not receive credit for BIOSC-162. This course will include field trips outside of regularly scheduled class time. Formerly BIOSC-160.*

This course is an introduction to marine organisms, marine environments, and the ecological relationships that exist between them. Lecture topics will include: the scientific method and its utilization in the marine sciences; physical, chemical and geological properties of the marine environment; marine organisms (including their taxonomic classification, diversity and evolutionary adaptations); marine ecosystems; marine ecology. Laboratory topics will include: observation and dissection of representative marine organisms; and inquiry based comparison of organisms in different phyla and from different habitats. CSU, UC (credit limits may apply to UC - see counselor)

BIOSC-170 Environmental Science

3 units SC

- *IGETC: 5B; CSU GE: B2; DVC GE: II*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected. BIOSC-101 or 102 or equivalents*
- *Note: Students who have successfully completed BIOSC-171 should not enroll in BIOSC-170. Students who have successfully completed BIOSC-171 will not receive credit for BIOSC-170.*

This is an introductory course designed to expose students to environmental science. Human interactions with the environment and their consequences for living and nonliving systems will be examined. Topics will include 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

- *IGETC: 5B, 5C; CSU GE: B2, B3; DVC GE: II*
- *54 hours lecture/54 hours laboratory per term*
- *Advisory: College-level reading and writing are expected. BIOSC-101 or BIOSC-102 or equivalents*
- *Note: Students who have successfully completed BIOSC-170 should not enroll in BIOSC-171. Students who have successfully completed BIOSC-170 will not receive credit for BIOSC-171. Class field trips will be organized to local sites related to course topics.*

This is an introductory course designed to expose students to environmental science. Human interactions with the environment and their consequences for living and nonliving systems will be examined. Topics will include 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 introduce the scientific method, including experimental design, sampling methods, 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-299 Student Instructional Assistant

.5-3 units SC

- *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

Charlie Shi, Dean

Business, Computer Science, and Culinary Arts Division

Possible career opportunities - Business

Studies in business prepare students to participate and support the operations of organizations. Careers include supervising and coordinating activities, such as purchasing, budgeting, and record keeping. Functional area of management or administration, such as human resources, purchasing, or administrative services are likely focal points of a business professional.

Possible career opportunities - Business management and leadership

Careers in business management/leadership assist administrative functions through teamwork to conduct organizational studies, design systems and procedures, conduct measurement analyses, and prepare operations and procedures reports. Some careers also involve assessing staff requirements in hiring, training new employees, or participating in human resources processes.

Possible career opportunities - Business marketing

Study in business marketing prepares students for careers in several areas, including brand and product management, professional selling, public relations, advertising and promotions, marketing research, marketing logistics, and nonprofit services. Regardless of whether students plan to become a marketing professional or do something else in business, a basic understanding of marketing is important in preparation for any career.

Possible career opportunities - Office professional

The office professional curriculum enriches the chosen career of all who work in professional office settings, especially those who are employed as an administrative assistant, administrative technician, administrative associate, office manager, office clerk, receptionist, secretary, customer service representative, office coordinator, or typist.

Possible career opportunities - Real estate

Professionals in real estate arrange, support, or coordinate the selling, buying, and leasing of commercial, industrial, or residential property. Careers may include working with homeowner associations, rented or leased housing units, buildings, or land (including rights-of-way). Employees work in real estate offices or for commercial real estate firms to arrange loans for the purchase of property.

Possible career opportunities - Small business management/ Entrepreneurship

Small business managers/entrepreneurs have diverse career duties including finding financial resources, collecting sales tax, creating computer networks, setting up filing systems, and creating marketing plans. Further, those who select careers in this discipline identify trends and potential markets for products, direct salespersons, provide guidance and training for new employees, and mitigate compliant and compliance issues.

Associate in science degree

Business

Students completing the program will be able to...

- A. demonstrate knowledge of business operations, the business organization, and business procedures.
- B. analyze and evaluate business situations in the major concentration area (i.e., real estate, wealth management, business marketing, advanced general business, management and leadership studies, and small business management/entrepreneurship), identify business problems, and develop solutions/plans of action.
- C. apply ethical standards and best practices of social responsibility to business situations.
- D. develop communication that presents business information in an organized and clear form.
- E. implement technologies to identify business problems and to develop solutions and action plans.

This curriculum is designed to provide an opportunity for business students to achieve an associate in science degree after completing a series of foundational and more advanced courses in the area of business. Completion of this curriculum will demonstrate commitment to the field and provide comprehensive preparation for employment in business-related occupations. This degree is not primarily intended for transfer students and does not include all courses required for transfer. Students who intend to transfer should consider the associate in science degree in business administration for transfer. 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 GE). General Education Option 1 (DVC General Education) is appropriate for students who do not intend to transfer.

To earn this associate degree with a major in business, students must satisfactorily complete sixty (60) units of degree-applicable coursework with a grade point average of 2.0 (C) or higher. At least 12 units of degree applicable coursework must be earned at DVC. Certain courses may satisfy both major and general education requirements; however, the units are only counted once. Because currency of information is relevant for this employment-related degree, all coursework required for the degree major must be completed within ten years of the degree date.

<i>major requirements:</i>		<i>units</i>
BUS-109	Introduction to Business	3
BUS-250	Business Communications	3
BUS-294	Business Law	3
BUSMG-120	Introduction to Management Studies	3

plus at least 3 units from:

BUSAC-181	Applied Accounting.....	3
BUSAC-186	Financial Accounting.....	4

plus at least 9 units from:

BUS-161	Personal Financial Management	3
BUS-209	International Business.....	3
BUS-210	Introduction to e-Business	3
BUS-240	Business Statistics.....	3
BUS-261	Investments	3
BUSAC-185	QuickBooks Accounting for Business I.....	1.5
BUSAC-187	Managerial Accounting	4
BUSAC-188	QuickBooks Accounting for Business II	1.5
BUSAC-285	Federal Income Taxes – Individuals.....	3
BUSMG-121	Practices and Concepts of Supervision	3
BUSMG-131	Managing Diversity in the Workplace	3
BUSMG-132	Human Resource Management.....	3
BUSMG-191	Small Business Management	3
BUSMG-192	Entrepreneurship and Venture Management	3
BUSMG-226	Group Behavior and Leadership.....	3
BUSMK-158	Professional Selling.....	3
BUSMK-255	Advertising	3
BUSMK-256	Marketing.....	3
BUSMK-258	Advertising and Gender	3
CIS-116	Microsoft Excel – Comprehensive.....	2
RE-160	Real Estate Principles	3
RE-161	Real Estate Law.....	3
RE-162	Real Estate Appraisal.....	3
RE-163	Real Estate Practice.....	3
RE-164	Real Estate Finance	3
RE-165	Real Estate Economics	3
RE-166	Real Estate Escrow Procedures	3
RE-167	Real Estate Property Management.....	3
total minimum units for the major		24

Associate in science in business administration for transfer 2.0

Students completing the program will be able to...

- A. communicate in a professional, concise, clear, and correct manner.
- B. explain the functions of business financial operations and apply them to business case problems.
- C. compare and contrast ethical approaches and social responsibility options in business situations.
- D. evaluate an existing business and identify the business organization and key business procedures relevant to a specific problem using appropriate technology.

This curriculum is designed to provide an opportunity for the business major to achieve an associate in science degree in business administration while completing the requirements for transfer to a California State University (CSU) or other four-year college or university to earn a bachelor's degree in business administration. 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.

The associate in science in business administration 2.0 for transfer is intended for students who plan to complete a bachelor’s degree in a similar major at a CSU campus. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major.

In order to earn the degree, students must:

- Complete 60 CSU-transferable units.
- Complete the California State University-General Education-Breadth pattern (CSUGE-Breadth); or the Intersegmental General Education Transfer Curriculum (IGETC) pattern, including the Area 1C requirement for Oral Communication.
- Complete a minimum of 18 units in the major.
- Attain a minimum grade point average (GPA) of 2.0.
- Earn a grade of “C” or higher in all courses required for the major.

Students transferring to a CSU campus that accepts the degree will be required to complete no more than 60 units after transfer to earn a bachelor’s degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to university or college that is not part of the CSU system, or those students who do not intend to transfer.

Some courses in the major satisfy both major and CSUGE/IGETC general education requirements; however, the units are only counted once toward the 60-unit requirement for an associate degree. 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.

<i>major requirements:</i>	<i>units</i>
BUS-109 Introduction to Business.....	3
BUS-294 Business Law	3
BUSAC-186 Financial Accounting.....	4
BUSAC-187* Managerial Accounting	4
ECON-220* Principles of Macroeconomics	3
ECON-221* Principles of Microeconomics	3

<i>plus at least 3 units from:</i>	
MATH-181* Finite Mathematics.....	3
MATH-182* Calculus for Management, Life Science and Social Science I.....	4
MATH-192* Analytic Geometry and Calculus I.....	5

<i>plus at least 3 units from:</i>	
BUS-240* Business Statistics.....	3
MATH-142* Elementary Statistics with Probability.....	4

total minimum units for the major 26

**These courses have specific prerequisites. See course description for details.*

Associate in science Professional and technical workplace skills

Program learning outcomes for the professional workplace skills:

Students completing this program will be able to...

- A. communicate clearly in writing.
- B. communicate clearly in meetings and oral presentations.
- C. perform essential functions in Microsoft Excel.
- D. navigate Microsoft Office suite applications proficiently (Outlook, PowerPoint, Word).
- E. demonstrate professionalism in daily interactions.
- F. deliver and receive feedback in a professional manner.
- G. work collaboratively with colleagues and clients.

Program learning outcomes for the technical workplace skills: Helpdesk and desktop support

Students completing this program will be able to...

- A. identify, assemble, and disassemble the major components of a personal computer.
- B. describe the basics of networking and security forensics.
- C. diagnose and troubleshoot common hardware, software, and networking issues.
- D. identify the basics of virtualization, desktop imaging, and deployment.
- E. create basic business documents including letters, memos, and email messages.

Program learning outcomes for the technical workplace skills: Project management support

Students completing this program will be able to...

- A. utilize project management concepts, terminology, and processes.
- B. use project management software to manage multi-faceted projects.
- C. define a project plan and develop diagrams and charts to illustrate enterprise structure, workflow, and scheduling.
- D. demonstrate basic graphical user interface operations in a computer environment.
- E. produce spreadsheets, documents, and presentations by using basic to advanced software operations.

The professional and technical workplace skills associate in science degree program is designed in consultation with industry wide professionals to address changing workforce needs. Students complete a set of interdisciplinary core courses that deliver communication and fundamental workplace competencies and select a specialization in one of the following areas: Help desk and Desktop Support or Project Management Support. In addition, students have the option to participate in work experience opportunities that reinforce classroom learning. This degree major will provide robust preparation for a student interested in a career in technology support in either of these job categories.

Eligible DVC students have the option to complete this program in an accelerated format through the DVC Year Up program. See the college website for details.

The DVC professional and technical workplace skills major is not intended for transfer. General Education Option 1 (DVC GE) is advised for students who do not intend to transfer. Students who intend to transfer to a four-year baccalaureate program should consult with a counselor regarding specific major preparation requirements at the transfer institution of their choice. Students who intend to transfer are advised to select General Education Option 2 (IGETC) or Option 3 (CSU GE).

To earn an associate in science degree with a major in professional and technical workplace skills, students must complete each course used to meet a major requirement with a "C" grade or higher and complete all general education requirements as listed in the catalog.

Certain courses may satisfy both major and general education requirements; however, the units are only counted once.

<i>required courses:</i>	<i>units</i>
BUS-250 Business Communications	3
BUSMG-168 Customer Service.....	0.5
BUSMG-174 Business Ethics	0.5
CIS-116 Microsoft Excel – Comprehensive	2
COMM-120 Public Speaking	3
COMSC-101 Computer Literacy.....	4

Complete all units from one of the following specializations:

helpdesk and desktop support:	
BUS-101 Business English	3
CNT-104 IT Essentials (A+)	4
or	

project management support	
CIS-180 Introduction to Project Management.....	3
CIS-185 Project Management Tools	2

<i>plus at least 0-9 units from:</i>	
BUS-295 Occupational Work Experience Education in BUS	2-4
BUS-296 Internship in Occupational Work Experience Education in BUS	2-4
WRKX-180 Internship in Occupational Work Experience Education	2-4
total minimum units for the major	18

Certificate of achievement Advanced general business

Students completing the program will be able to...

- determine how a business decision maximizes the benefit and minimizes the risk for all entities involved.
- explain the importance of the global environment and the role it plays in the overall success of business organizations.
- explain group dynamics in developing and managing a team and work effectively in teams.
- analyze and evaluate business situations in the major concentration area (i.e., real estate, wealth management, business marketing, advanced general business, management and leadership studies, and small business management/entrepreneurship), identify business problems, and develop solutions/plans of action.
- apply ethical standards and best practices of social responsibility to business situation.

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. All coursework required for the certificate must be completed within seven years of the certificate date.

<i>required courses:</i>	<i>units</i>
BUS-109 Introduction to Business.....	3
BUS-250 Business Communications	3
BUS-294 Business Law	3
BUSMG-120 Introduction to Management Studies.....	3

plus at least 12 units from:

CIS-116 Microsoft Excel – Comprehensive.....	2
Any BUS course not listed in the core requirements.....	3
Any BUSAC course not listed in the core requirements.....	3
Any BUSMG course not listed in the core requirements.....	3
Any BUSMK course not listed in the core requirements	3
Any RE course not listed in the core requirements	3

total minimum required units 24

Certificate of achievement Business-transfer

Students completing the program will be able to...

- communicate in a professional, concise, clear, and correct manner.
- explain the functions of business financial operations and apply them to business case problems.
- compare and contrast ethical approaches and social responsibility options in business situations.
- evaluate an existing business and identify the business organization and key business procedures relevant to a specific problem using appropriate technology.

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 in business transfer, students must complete each course used to meet a certificate requirement with a "C" grade or higher. All coursework required for the certificate must be completed within seven years of the certificate date.

Business

<i>required courses:</i>	<i>units</i>
BUSAC-186 Financial Accounting.....	4
BUSAC-187* Managerial Accounting	4
ECON-220* Principles of Macroeconomics	3
ECON-221* Principles of Microeconomics	3

<i>plus at least 4 units from:</i>	
MATH-182* Calculus for Management, Life Science and Social Science I.....	4
MATH-192* Analytic Geometry and Calculus I	5

<i>plus at least 3 units from:</i>	
BUS-240* Business Statistics.....	3
MATH 142* Elementary Statistics with Probability.....	4

<i>plus at least 3 units from:</i>	
BUS-109 Introduction to Business.....	3
BUS-294 Business Law	3

total minimum required units 24

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

Certificate of achievement Business marketing

Students completing the program will be able to...

- demonstrate knowledge of business operations, the business organization, and business procedures.
- determine the demand for products and services offered by a firm and its competitors and identify potential customers.
- 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.
- participate in product development or monitor trends that indicate the need for new products and services.
- identify and implement cost-effective distribution channels and promotional mixes.

This curriculum is designed to develop many aspects of strategic marketing, advertising, professional selling, retail merchandising, and emerging trends in social and interactive media. Market analysis is incorporated into the program to tap into customer data and consumer insights to develop ways to better connect with target audiences and formulate winning business strategies.

Students in the business marketing program can acquire a solid foundation in principles of marketing, business statistics, selling and sales management, integrated marketing communications, advertising principles, international business, consumer behavior, marketing research, internet marketing, and ethics in marketing. Students become proficient in the marketing planning process, from goal setting to situation analysis and marketing strategy development to marketing implementation and control. Building marketing competencies prepares students for a job in a large organization, small business, or startup.

To earn the certificate of achievement in business marketing, students must complete each course with a "C" grade or higher. All coursework required for the certificate must be completed within five years of the certificate date.

<i>required courses:</i>	<i>units</i>
BUS-109 Introduction to Business	3
BUSMK-256 Marketing.....	3

<i>plus at least 6 units from:</i>	
BUS-240 Business Statistics.....	3
BUS-250 Business Communications	3
BUSMK-158 Professional Selling.....	3
BUSMK-255 Advertising	3
BUSMK-259 Digital Marketing Fundamentals	3

<i>plus at least 4 units from:</i>	
BUS-295 Occupational Work Experience Education in BUS	2-4
BUS-296 Internship in Occupational Work Experience Education in BUS.....	2-4
BUSMK-260 Social Media Marketing	3
BUSMK-261 Digital Marketing Analytics	3
BUSMK-262 Content Marketing.....	3
BUSMK-263 Email Marketing.....	2
BUSMK-264 Search Marketing	2
BUSMK-298 Independent Study.....	0.5-3

total minimum required units 16

Certificate of achievement Digital marketing

Students completing the program will be able to...

- demonstrate knowledge of common digital marketing tactics, tools, and strategies used by business-to-consumer (B2C) and business-to-business (B2B) companies.
- design an e-commerce program to build strong customer relationships and drive sales.
- devise a content marketing strategy that creates a closer bond between the customer and the brand.
- develop an effective search marketing strategy to drive organic traffic and paid searches.
- create an integrated digital marketing campaign designed to achieve organizational goals and objectives.
- measure the effectiveness of a digital marketing campaign using web analytics software.

The curriculum is designed to familiarize students with the essential digital marketing tools and techniques required to identify, cultivate, and manage customer relationships in today's fast-paced digital environment. This career pathway program takes a detailed look at digital marketing, social media, web analytics, content strategy, video marketing, search engine optimization, email marketing, and e-business, among other course topics.

The program provides a solid foundation in all phases of digital marketing to prepare for work as social media managers, advertising and promotions managers, public relations specialists, marketing and media communications professionals, search marketing strategists, sales representatives, advertising sales agents, and marketing research analysts and marketing specialists. Some career options may require more than two years of college study. Students are advised to consult a counselor.

To earn the certificate of achievement in digital marketing, students must complete each course with a "C" grade or higher. All coursework required for the certificate must be completed within seven years of the certificate date.

<i>required courses:</i>	<i>units</i>
BUSMK-259 Digital Marketing Fundamentals	3
BUSMK-260 Social Media Marketing	3
BUSMK-261 Digital Marketing Analytics	3
BUSMK-262 Content Marketing.....	3

plus at least 6 units from:

ARTDM-149 Fundamentals of Digital Video.....	3
BUS-210 Introduction to e-Business	3
BUSMK-263 Email Marketing.....	2
BUSMK-264 Search Marketing	2
CIS-105 Introduction to Web Design	2
CIS-133 Developing Video Content for the Web	2
total minimum required units	18

Certificate of achievement General business

Students completing the program will be able to...

- determine how a business decision maximizes the benefit and minimizes the risk for all entities involved.
- explain the importance of the global environment and the role it plays in the overall success of business organizations.
- explain group dynamics in developing and managing a team and work effectively in teams.

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. All coursework required for the certificate must be completed within seven years of the certificate date.

<i>required courses:</i>	<i>units</i>
BUS-109 Introduction to Business	3
BUS-250 Business Communications	3
BUS -294 Business Law	3
BUSMG-120 Introduction to Management Studies.....	3
total minimum required units	12

Certificate of achievement Management and leadership studies

Students completing the program will be able to...

- integrate basic management theories into supervisory and management functions.
- investigate current management practices and problems related to human behavior in organizations.
- differentiate threshold issues involved in the legal, ethical, and social responsibilities of management.
- summarize measures that can be taken by individuals and organizations to correct organizational problems.

This program benefits students preparing to become managers and supervisors, and it is also valuable for persons already holding these positions.

The management and leadership 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.

To earn a certificate of achievement in management and leadership studies, students must complete each course used to meet a certificate requirement with a "C" grade or higher. All coursework required for the certificate must be completed within seven years of the certificate date.

<i>required courses:</i>	<i>units</i>
BUS-109 Introduction to Business.....	3
BUS-250 Business Communications	3
BUS-294 Business Law	3
BUSMG-120 Introduction to Management Studies.....	3

plus at least 4 units from:

BUS-295 Occupational Work Experience Education in BUS	2-4
BUS-296 Internship in Occupational Work Experience Education in BUS	2-4
BUS-298 Independent Study.....	0.5-3
BUSMG-121 Practices and Concepts of Supervision.....	3
BUSMG-131 Managing Diversity in the Workplace	3
BUSMG-132 Human Resource Management	3
BUSMG-226 Group Behavior and Leadership	3

total minimum required units 16

Course substitutions for program requirements require department chairperson approval. Substitutions are limited to 6 units outside the management department.

Certificate of achievement

Office professional business information worker

Students completing the program will be able to...

- A. apply oral and written communication best practices.
- B. evaluate business situations using mathematics and software.
- C. demonstrate competency in interpersonal and intrapersonal skills.
- D. compile and organize business data using business software.

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.

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.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a "C" grade or higher.

All coursework required for the certificate must be completed within seven years of the certificate date.

<i>required courses:</i>	<i>units</i>
BUS-101 Business English	3
BUS-103 Applied Business Mathematics	3
BUS-109 Introduction to Business	3
BUS-250 Business Communication	3

<i>plus at least 3 units from:</i>	
BUS-295 Occupational Work Experience Education in BUS	2-4
BUS-296 Internship in Occupational Work Experience Education in BUS	2-4
BUSMG-168 Customer Service.....	0.5
BUSMG-174 Business Ethics.....	0.5

<i>plus at least 8 units from:</i>	
CIS-115 Microsoft Word – Comprehensive	2
CIS-116 Microsoft Excel – Comprehensive.....	2
CIS-118 Microsoft PowerPoint – Comprehensive.....	2
CIS-119 Microsoft Outlook – Comprehensive.....	2
COMSC-101 Computer Literacy.....	4
total minimum required units	23

Certificate of achievement

Professional and technical workplace skills

Program learning outcomes for the professional workplace skills:

- A. communicate clearly in writing.
- B. communicate clearly in meetings and oral presentations.
- C. perform essential functions in Microsoft Excel.
- D. navigate Microsoft Office suite applications proficiently . (Outlook, PowerPoint, Word)
- E. demonstrate professionalism in daily interactions.
- F. deliver and receive feedback in a professional manner.
- G. work collaboratively with colleagues and clients.

Program learning outcomes for the technical workplace skills:

Helpdesk and desktop support

- A. identify, assemble, and disassemble the major components of a personal computer.
- B. describe the basics of networking and security forensics.
- C. diagnose and troubleshoot common hardware, software, and networking issues.
- D. identify the basics of virtualization, desktop imaging, and deployment.
- E. create basic business documents including letters, memos, and email messages.

Program learning outcomes for the technical workplace skills:

Project management support

- A. utilize project management concepts, terminology, and processes.
- B. use project management software to manage multifaceted projects.
- C. define a project plan and develop diagrams and charts to illustrate enterprise structure, workflow, and scheduling.
- D. demonstrate basic graphical user interface operations in a computer environment.
- E. produce spreadsheets, documents, and presentations by using basic to advanced software operations.

The professional and technical workplace skills certificate of achievement program is designed in consultation with industry wide professionals to address changing workforce needs. Students complete a set of interdisciplinary core courses that deliver communication and fundamental workplace competencies and select a specialization in one of the following areas: help desk and desktop support or project management support. In addition, students have the option to participate in work experience opportunities that reinforce classroom learning. This certificate will provide robust preparation for a student interested in a career in technology in either of these job categories.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a "C" grade or higher.

Eligible DVC students have the option to complete this program in an accelerated format through the DVC Year Up program. See the college website for details.

<i>required courses:</i>	<i>units</i>
BUS-250 Business Communications	3
BUSMG-168 Customer Service.....	0.5
BUSMG-174 Business Ethics	0.5
CIS-116 Microsoft Excel – Comprehensive.....	2
COMM-120 Public Speaking	3
COMSC-101 Computer Literacy.....	4

complete all units from one of the following specializations:

helpdesk and desktop support:

BUS-101 Business English	3
CNT-104 IT Essentials (A+).....	4

or

project management support:

CIS-180 Introduction to Project Management.....	3
CIS-185 Project Management Tools	2

plus at least 0-9 units from:

BUS-295 Occupational Work Experience Education in BUS	2-4
BUS-296 Internship in Occupational Work Experience Education in BUS	2-4
WRKX-180 Internship in Occupational Work Experience Education	2-4
total minimum required units	18

Certificate of achievement

Real estate

Students completing the program will be able to...

- explain the functions of real estate markets, real estate practices, and real estate institutions, and recommend choices for common real estate situations.
- demonstrate how to calculate the time value of money and evaluate various financing alternatives for real estate investment strategies.
- evaluate real estate development opportunities in the commercial real estate markets for residential, warehouse, retail, and industrial properties.
- research and analyze specific case problems related to real estate investment and present solutions.

To earn a certificate of achievement in real estate, 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. All coursework required for the certificate must be completed within seven years of the certificate date.

<i>required courses:</i>	<i>units</i>
RE-160 Real Estate Principles	3
RE-161 Real Estate Law.....	3
RE-162 Real Estate Appraisal.....	3
RE-163 Real Estate Practice.....	3
RE-164 Real Estate Finance	3
RE-165 Real Estate Economics	3

plus at least 6 units from:

BUS-294 Business Law	3
BUSAC-186 Financial Accounting.....	4
RE-166 Real Estate Escrow Procedures	3
RE-167 Real Estate Property Management.....	3

total minimum required units 24

Certificate of achievement

Small business management/ entrepreneurship

Students completing the program will be able to...

- describe the nature and characteristics of successful small business persons.
- summarize the responsibilities of small business owners in selecting, motivating, training, and supervising employees.
- define and give concrete examples of the "Competitive Advantage" concept that a small business must achieve in order to succeed.
- construct a business plan and essential financial documents for a small business.

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.

The small business management/entrepreneurship certificate provides a foundation of business competencies and management strategies that will enable students to succeed as an entrepreneur, small business owner, partner, manager, or inventor.

To earn a certificate of achievement in small business management/entrepreneurship, students must complete each course with a "C" grade or higher. All coursework required for the certificate must be completed within seven years of the certificate date.

<i>required course:</i>	<i>units</i>
BUSMG-120 Introduction to Management Studies	3

plus at least 3 units from:

BUSMG-191 Small Business Management	3
BUSMG-192 Entrepreneurship and Venture Management	3

plus at least 3 units from:

BUSAC-181 Applied Accounting.....	3
BUSAC-185 QuickBooks Accounting for Business I.....	1.5
BUSAC-186 Financial Accounting.....	4
BUSAC-188 QuickBooks Accounting for Business II	1.5

plus at least 3 units from:

BUSMK-256 Marketing.....	3
BUSMK-259 Digital Marketing Fundamentals	3
BUSMK-260 Social Media Marketing	3

Business

plus at least 4 units from:

BUS-104	Exploring Careers in Business Administration	1.5
BUS-109	Introduction to Business	3
BUS-209	International Business	3
BUS-210	Introduction to e-Business	3
BUS-250	Business Communications	3
BUS-294	Business Law	3
BUS-295	Occupational Work Experience	
	Education in BUS	2-4
BUS-296	Internship in Occupational Work Experience	
	Education in BUS	2-4
BUS-298	Independent Study	0.5-3
BUSAC-187	Managerial Accounting	4
total minimum required units		16

Certificate of accomplishment Cannabis entrepreneurship

Students completing the program will be able to...

- identify and evaluate different sectors of the cannabis industry for a potential business including grow operations, manufacturing, dispensaries, and delivery operations.
- describe the requirements for starting a business in the cannabis industry including industry specific regulations and laws.
- construct a business plan and essential financial documents for a cannabis related business.
- describe basic accounting and marketing knowledge to support a business.

This certificate will allow students to develop the business skills needed to start and run their own businesses in the legal cannabis industry. To earn the certificate of accomplishment, students must complete each course used to meet a certificate requirement with a "C" grade or higher.

<i>required courses:</i>	<i>units</i>
BUSEN-193 Cannabis Industry Entrepreneurship	3

plus at least 6 units from:

BUSAC-185	QuickBooks Accounting for Business I	1.5
BUSAC-188	QuickBooks Accounting for Business II	1.5
BUSMK-259	Digital Marketing Fundamentals	3
BUSMK-260	Social Media Marketing	3
total minimum required units		9

Certificate of accomplishment Management and leadership studies

Students completing the program will be able to...

- integrate basic management theories into supervisory and management functions.
- investigate current management practices and problems related to human behavior in organizations.
- differentiate threshold issues in the legal, ethical, and social responsibilities of management.
- Summarize measures that can be taken by individuals and organizations to correct organizational problems.

This program benefits students preparing to become managers and supervisors and it is also valuable for persons already holding these positions.

The management and leadership students certificate of accomplishment 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.

To earn a certificate of accomplishment in management and leadership studies, students must complete each course used to meet a certificate requirement with a "C" grade or higher. All coursework required for the certificate must be completed within seven years of the certificate date.

<i>required courses:</i>	<i>units</i>
BUS-109 Introduction to Business	3
BUSMG-120 Introduction to Management Studies	3

plus at least 3 units from:

BUSMG-121	Practices and Concepts of Supervision	3
BUSMG-131	Managing Diversity in the Workplace	3
BUSMG-132	Human Resource Management	3
BUSMG-226	Group Behavior and Leadership	3
total minimum required units		9

Course substitutions for program requirements require department chairperson approval. Substitutions are limited to 3 units outside the management department.

Certificate of accomplishment Real estate salesperson

Students completing the program will be able to...

- define and explain concepts and terminology relevant to real estate and real estate transactions.
- compare and contrast the broker-agent and agent-client relationships; legal and fiduciary obligations.
- structure real estate transactions that result in optimum property rights for buyers and sellers.

The courses listed in the real estate salesperson certificate of accomplishment will qualify and prepare a student to take the written examination for a real estate salesperson license. Upon successfully passing the examination and other California Bureau of Real Estate (CalBRE) requirements, a license will be approved by the CalBRE. This license is required to conduct real estate activities while under the supervision of a licensed broker. For additional information regarding the Real Estate Salesperson license, refer to <http://www.dre.ca.gov>.

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

<i>required courses:</i>	<i>units</i>
RE-160 Real Estate Principles	3
RE-163 Real Estate Practice	3

plus at least 3 units from:

RE-161	Real Estate Law	3
RE-162	Real Estate Appraisal	3
RE-164	Real Estate Finance.....	3
RE-165	Real Estate Economics.....	3
RE-166	Real Estate Escrow Procedures.....	3
RE-167	Real Estate Property Management	3
total minimum required units		9

**Certificate of accomplishment
Small business management/
entrepreneurship**

Students completing the program will be able to...

- A. describe the nature and characteristics of successful entrepreneurs.
- B. summarize the responsibilities of entrepreneurs/small business owners in selecting, motivating, training, and supervising employees.
- C. construct a business plan and essential financial documents for a small business or entrepreneurial venture.

This program is designed to prepare students for planning, organizing, and operating a small business or entrepreneurship venture. Courses involve those that will provide students with basic knowledge and skills in various business functional areas such as business management, marketing, accounting, and finance, as well as those needed in business planning.

The small business management/entrepreneurship certificate of accomplishment provides the basic foundation of business competencies and management strategies that will enable students to succeed as an entrepreneur, small business owner, partner, manager, or inventor.

To earn a certificate of accomplishment in small business management/entrepreneurship, students must complete each course with a "C" grade or higher. All coursework required for the certificate must be completed within seven years of the certificate date.

required courses: *units*

at least 3 units from:

BUSMG-191	Small Business Management	3
BUSMG-192	Entrepreneurship and Venture Management	3

plus at least 1.5 units from:

BUSAC-181	Applied Accounting.....	3
BUSAC-185	QuickBooks Accounting for Business I	1.5
BUSAC-186	Financial Accounting	4

plus at least 4.5 unit from:

BUS-104	Exploring Careers in Business Education	1.5
BUS-109	Introduction to Business.....	3
BUS-209	International Business.....	3
BUS-210	Introduction to e-Business	3
BUS-295	Occupational Work Experience Education in BUS	2-4
BUS-296	Internship in Occupational Work Experience Education in BUS	2-4
BUS-298	Independent Study.....	0.5-3
BUSAC-188	QuickBooks Accounting for Business II	1.5
BUSMG-120	Introduction to Management Studies	3
BUSMK-256	Marketing.....	3
BUSMK-259	Digital Marketing Fundamentals	3
BUSMK-260	Social Media Marketing	3
total minimum required units		9

BUS-101 Business English

- 3 units SC
- 54 hours lecture per term
 - Advisory: College-level reading and writing are expected.

This course presents the study of the English language from a business perspective. Grammar, punctuation, spelling, business vocabulary, sentence structure, and the structure and the creation of a variety of business documents will be examined. The processes and ethics of writing clearly and correctly in different business contexts will also be covered. CSU

BUS-103 Applied Business Mathematics

- 3 units SC
- 54 hours lecture/18 hours laboratory per term
 - Advisory: College-level reading and writing are expected.

This course is 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-104 Exploring Careers in Business Administration

- 1.5 units SC
• 18 hours lecture/22 hours laboratory per term

This course provides an overview of specializations within business administration including management, accounting, and marketing. Students explore these specializations through lectures and guest speakers from the business community. Students develop a business plan using current business practices such as teamwork, problem solving, and communication. This course is designed for students preparing to enter college and provides a substantive perspective of business administration as an academic major. CSU

BUS-109 Introduction to Business

- 3 units SC
• 54 hours lecture per term
• Advisory: College-level reading and writing are expected.

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; evaluate the global, financial, social, cultural, and political environment in which businesses exist and operate; and discuss the importance of business ethics in every aspect of the business environment. The course will describe the evolution, formation, and management of businesses, and provide a basic overview of the functional areas of business. Legal, accounting, financial, and regulatory practices of the business enterprise will also be covered. C-ID BUS 110, CSU, UC

BUS-145 Business Spreadsheet Applications

- 2 units SC
• 27 hours lecture/27 hours laboratory per term
• Advisory: College-level reading and writing are expected.
• Note: Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree. The laboratory (lab) hours for this course may be offered as face to face lab or online lab. See schedule of classes for specific requirements.

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

BUS-150 Topics in Business

- .3-4 units SC
• 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 Financial Management

- 3 units SC
• 54 hours lecture per term
• Advisory: BUS-103 and College-level reading and writing are expected.

This course introduces planning and managing individual finances. Topics include budgets and financial statements; managing income, taxes, checking, savings, investments, tax deferred, and retirement accounts; building and maintaining good credit reputation and scores; sources of financing or credit for major purchases, such as autos, homes, and other property; decision factors to consider when buying property, health, or life insurance; investing in real estate and securities; and college, retirement, and estate planning. CSU

BUS-209 International Business

- 3 units SC
• 54 hours lecture per term
• Advisory: BUS-109 and College-level reading and writing are expected.

This course presents an overview of the theories and practices of modern international business. The key functional areas related to global business, 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 will be examined. The course culminates with students developing a market entry strategy for a local business to a foreign market. CSU

BUS-210 Introduction to e-Business

- 3 units SC
• 54 hours lecture per term
• Advisory: College-level reading and writing are expected.

This course provides an introduction to the modern world of e-business and e-commerce. Topics include e-business models and strategy, e-commerce platforms, multi-channel marketing and advertising, electronic payments and digital currency, security risks as well as important ethical and legal issues in e-business and e-commerce. E-business and e-commerce trends will also be discussed, including peer-to-peer commerce and on-demand service models, business-to-business models, e-marketplaces, global e-business infrastructure and supply chain management, as well as the roles of social networks and mobile platforms. CSU

BUS-240 Business Statistics

3 units SC

- IGETC: 2A; CSU GE: B4; DVC GE: IB, IC
- 54 hours lecture/18 hours laboratory per term
- Prerequisite: Placement into BUS-240 or MATH-119 or MATH-119SP or intermediate algebra or equivalent.

This course is an introduction to concepts, tools, methods and models employed in quantitative reasoning using the statistical method. Students are introduced to organizational, analytical and inference-making processes, using sample data to visually and numerically describe samples and make decisions applying inferential thinking deduction and induction. The course details how to estimate confidence intervals, test hypotheses and develop estimates and 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. Performing Analysis of Variance (ANOVA), estimating simple linear regressions, and making inference from such analysis is a major theme of this course. The use of spreadsheet-based statistical software to perform computational statistics using large-data sets is an important part of laboratory work. C-ID MATH 110, CSU, UC (credit limits may apply to UC - see counselor)

BUS-250 Business Communications

3 units SC

- DVC GE: IB
- 54 hours lecture per term
- Advisory: BUS-101 and College-level reading and writing are expected.
- Note: Credit by examination option available.

This course presents the principles of effective and ethical communication in the creation of letters, memos, and emails. Written and oral reports for a variety of business situations are also covered. The course also explores planning, organizing, composing, and revising business documents, as well as the use of presentation software to create and deliver professional-level reports. CSU

BUS-261 Investments

3 units SC

- 54 hours lecture per term
- Advisory: BUS-109 or equivalent

This course provides an overview of financial markets and financial assets such as stocks, bonds and mutual funds. The evaluation of different financial assets and selection of investment opportunities are discussed. The importance of research and analytical skills for better investment decision making is emphasized. CSU

BUS-294 Business Law

3 units SC

- 54 hours lecture per term
- Advisory: BUS-109 and College-level reading and writing are expected.

This course presents a general overview of the specific areas of the legal environment that affect individuals and businesses with an emphasis on contracts, including the Uniform Commercial Code, Article 2. Legal history, civil procedure, constitutional law, torts, intellectual property, cyber law, criminal law, international law, labor and employment law, and agency will also be covered. C-ID BUS 125, CSU, UC

BUS-295 Occupational Work Experience Education in BUS

2-4 units SC

- May be repeated eight times
- Variable hours
- Note: In order to enroll in BUS-295, students must be employed, register for the course, complete an online Employment Form, and participate in an orientation. Incomplete grades are not awarded for this course.

BUS-295 is supervised employment that extends classroom learning to the job site and relates to the student's chosen field of study or area of career interest. Under the supervision of a college instructor, students will engage in on-the-job and other learning experiences that contribute to their employability skills and occupational or educational goals. Each unit represents five hours of work per week or 75 hours work per term. Students may earn up to a total of 16 in any combination of WRKX courses. Repetition allowed per Title 5, Section 55253. CSU

BUS-296 Internship in Occupational Work Experience Education in BUS

2-4 units SC

- May be repeated eight times
- Variable hours
- Note: In order to enroll in the BUS-296 course, students must be interning or volunteering, register for the course, complete an online Employment Form, and participate in an orientation. Incomplete grades are not awarded for this course.

BUS-296 is a supervised internship in a skilled or professional level assignment in the student's major field of study or area of career interest. Under the supervision of a college instructor, students will engage in on-the-job and other learning experiences that contribute to their employability skills and occupational or educational goals. Internships may be paid, non-paid, or some partial compensation provided. Each unit represents five hours of paid work or four hours of unpaid work per week or 75 hours of paid work or 60 hours of unpaid work per term. Students may earn up to a total of 16 units in any combination of WRKX courses. Repetition allowed per Title 5, Section 55253. CSU

BUS-298 Independent Study

- .5-3 units SC
- Variable hours
- Note: Submission of acceptable educational contract to department and Instruction Office is required.

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. CSU

BUS-299 Student Instructional Assistant

- .5-3 units SC
- 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

This technical 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 the courses in this program demonstrates commitment to the field of accounting, provides comprehensive preparation for employment in accounting-related occupations, and meets a portion of the educational requirements for the California CPA exam (For additional requirements please go to www.dca.ca.gov/cba).

This degree is not recommended for transfer students and DVC accounting students in this program who intend to transfer should 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 GE). General Education Option 1 (DVC General Education) does not meet requirements for most transfer institutions.

To earn an associate degree with a major in accounting, students must satisfactorily complete a minimum of sixty (60) units of degree applicable coursework with a grade point average of 2.0 (C) or higher. Certain courses may satisfy both major and general education requirements; however, the units are only counted once. All coursework required for the degree major must be completed within seven years of the degree date.

<i>major requirements:</i>	<i>units</i>
BUSAC-186 Financial Accounting.....	4
BUSAC-187 Managerial Accounting.....	4
CIS-116 Microsoft Excel – Comprehensive.....	2

<i>plus at least 3 units from:</i>	
BUS-240 Business Statistics.....	3
BUS-250 Business Communications.....	3
BUS-295 Occupational Work Experience Education in BUS.....	2-4
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

<i>plus at least 12 units from:</i>	
BUS-294 Business Law.....	3
BUSAC-282 Intermediate Accounting I.....	4
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 Financial Statement Analysis.....	4
BUSAC-292 Intermediate Accounting II.....	4
BUSAC-293 Accounting Ethics and Accountants’ Professional Responsibilities.....	4
BUSAC-294 Advanced Accounting.....	4

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

total minimum units for the major 28

BUSINESS ACCOUNTING – BUSAC

Charlie Shi, Dean
Business, Computer Science, and Culinary Arts Division

Possible career opportunities

Study in accounting prepares students for careers in book-keeping, private and public accounting, auditing, tax preparation and administration, cost and managerial accounting, financial services, payroll, software systems, corporate governance, and financial investigation. Some career options require more than two years of college study.

Associate in science degree Accounting

Students completing the program will be able to...

- A. construct basic accounting documents and solve case problems related to the accounting cycle utilizing appropriate technology.
- B. analyze existing documents by verifying the accuracy of information for a company and performing necessary reconciliation.
- C. evaluate financial data in a business environment and apply ethical business judgment for decision making.

Certificate of achievement Advanced accounting

Students completing the program will be able to...

- produce accurate financial statements for a company and communicate a company's financial position.
- construct basic accounting documents and solve case problems related to the accounting cycle utilizing appropriate technology.
- analyze existing documents by verifying the accuracy of information for a company and performing necessary reconciliation.
- compare and contrast the financial information prepared for different types of business entities.

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 "C" grade or higher in all required courses. At least 25 percent of the units must be completed at DVC. All coursework required for the certificate must be completed within seven years of the certificate date.

<i>required courses:</i>	<i>units</i>
BUSAC-186 Financial Accounting.....	4
BUSAC-187 Managerial Accounting.....	4
CIS-116 Microsoft Excel – Comprehensive.....	2

<i>plus at least 3 units from:</i>	
BUS-240 Business Statistics.....	3
BUS-250 Business Communications.....	3
BUS-295 Occupational Work Experience Education in BUS.....	2-4
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

<i>plus at least 12 units from:</i>	
BUS-294 Business Law.....	3
BUSAC-282 Intermediate Accounting I.....	4
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 Financial Statement Analysis.....	4
BUSAC-292 Intermediate Accounting II.....	4
BUSAC-293 Accounting Ethics and Accountants' Professional Responsibilities.....	4
BUSAC-294 Advanced Accounting.....	4

plus at least 3 units from:

BUS-209 International Business.....	3
BUS-240* Business Statistics.....	3
BUS-250* Business Communications.....	3
BUSMG-191 Small Business Management.....	3
BUSMG-192 Entrepreneurship and Venture Management.....	3

total minimum required units 28

**If not used above*

Certificate of achievement Bookkeeping

Students completing the program will be able to...

- enter basic accounting transactions into an accounting software program.
- consolidate accounts on a monthly basis to track business income and expenses.
- compare and contrast the financial information prepared for different types of business entities.

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 "C" grade or higher in all required courses. At least 25 percent of the units must be completed at DVC. All coursework required for the certificate must be completed within seven years of the certificate date.

<i>required courses:</i>	<i>units</i>
BUSAC-181 Applied Accounting.....	3
BUSAC-186 Financial Accounting.....	4

plus at least 9 units from:

BUS-250 Business Communications.....	3
BUS-295 Occupational Work Experience Education in BUS.....	2-4
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
CIS-116 Microsoft Excel – Comprehensive.....	2

total minimum required units 12

**Certificate of achievement
General accounting**

Students completing the program will be able to...

- A. produce accurate financial statements for a company and communicate a company's financial position.
- B. construct basic accounting documents and solve case problems related to the accounting cycle utilizing appropriate technology.
- C. analyze existing documents by verifying the accuracy of information for a company and performing necessary reconciliation.
- D. compare and contrast the financial information prepared for different types of business entity.

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 "C" grade 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. All coursework required for the certificate must be completed within seven years of the certificate date.

<i>required courses:</i>	<i>units</i>
BUSAC-186 Financial Accounting.....	4
BUSAC-187 Managerial Accounting	4
CIS-116 Microsoft Excel – Comprehensive.....	2

<i>plus at least 3 units from:</i>	
BUS-240 Business Statistics.....	3
BUS-250 Business Communications	3
BUS-295 Occupational Work Experience Education in BUS	2-4
BUSAC-182 Computer Income Tax 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
total minimum required units	13

BUSAC-150 Topics in Business Accounting

- .3-4 units SC
- 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 per term
- Advisory: BUS-103 and College-level reading and writing are expected.
- Note: This course is recommended as preparation for BUSAC-186. Credit by Examination option available.

This beginning accounting course presents a practical approach, emphasizing small business applications. Topics include the accounting cycle for a sole proprietorship; journals and ledgers; financial statements; adjusting, closing, and reversing entries; bank reconciliation; petty cash; payroll; payroll taxes; sales and purchases; and cash receipts and cash payments. An introduction to the use of an accounting software program is also covered. CSU

BUSAC-182 Computer Income Tax Return Preparation - Individuals

- 1.5 units SC
- 18 hours lecture/27 hours laboratory per term
- Advisory: BUSAC-285 and College-level reading and writing are expected.
- Note: May be repeated when software changes. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This course presents tax software used to prepare income tax returns for an individual. Topics 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
- 18 hours lecture/27 hours laboratory per term
- Advisory: BUSAC-181 and College-level reading and writing are expected.
- Note: Students may petition to repeat this course when software changes. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This introductory course presents the application of basic accounting knowledge and theory using QuickBooks software. Topics include 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 Financial Accounting

4 units SC

- 72 hours lecture per term
- *Advisory: College-level reading and writing are expected.*
- *Note: Students seeking an introduction to bookkeeping techniques should register for BUSAC-181 - Applied Accounting.*

This course presents the theory, practices and procedures of accounting. The importance of accounting and the use of financial statements by investors, creditors, and others making financial, investment, or regulatory decisions will be examined. Topics include transactions reporting and the accounting cycle, accounting for cash, receivables, inventory, plant and intangible assets, long-term investments, time value of money, liabilities, stockholders' equity, an introduction to analyzing financial statements, and accounting ethics. The application of generally accepted accounting principles and international financial reporting standards will also be covered. C-ID ACCT 110, CSU, UC

BUSAC-187 Managerial Accounting

4 units SC

- 72 hours lecture per term
- *Prerequisite: BUSAC-186 or equivalent*

This course presents how managers use accounting information in decision-making, planning, directing operations, and controlling. The focus is on cost terms and concepts, cost behavior, cost structure and cost-volume-profit analysis. Issues relating to cost systems, cost control, profit planning, and performance analysis in manufacturing and service environments will also be covered. C-ID ACCT 120, CSU, UC

BUSAC-188 QuickBooks Accounting for Business II

1.5 units SC

- 18 hours lecture/27 hours laboratory per term
- *Advisory: BUSAC-185 and College-level reading and writing are expected.*
- *Note: Students may petition to repeat this course when software changes. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.*

This is an intermediate-level course for business using QuickBooks software. Focus is placed on developing skills to create a set of records for a merchandising business including sales and receivables, payables and purchases, and end-of-period procedures. Topics include payroll, payroll tax reporting and related preparation of employee earnings reports. CSU

BUSAC-190 Payroll Accounting

1.5 units SC

- 27 hours lecture per term
- *Advisory: College-level reading and writing are expected.*

This course presents accounting functions as related to payroll. Topics include wage calculation, employer and employee tax deductions, payroll processing, and required reporting. Employment legislation and tax laws that affect payroll will also be covered. CSU

BUSAC-282 Intermediate Accounting I

4 units SC

- 72 hours lecture per term
- *Prerequisite: BUSAC-186 or equivalent*
- *Advisory: BUSAC-187 or equivalent*

This advanced financial accounting course builds on the material presented in BUSAC-186. Topics include accounting and reporting for assets, liabilities, and their associated financial impact on earnings. Current issues regarding financial statement preparation and interpretation will also be covered. CSU

BUSAC-283 Auditing

3 units SC

- 54 hours lecture/18 hours laboratory per term
- *Prerequisite: BUSAC-186 or equivalent*
- *Advisory: BUSAC-187 or equivalent*
- *Note: The laboratory (lab) hours for this course may be offered as face to face or online. See schedule of classes for specific requirements.*

This intermediate-level course presents the role and responsibility of Certified Public Accountants (CPA) in the audit of publicly traded and private companies. Emphasis is placed on verification of financial statements and internal control of accounting systems and cycles for publicly traded companies in the United States. Coverage focuses on the legal and ethical responsibilities of auditors as mandated by the Securities Acts of 1933 and 1934 and the Sarbanes Oxley Act of 2002. Topics include auditing standards, professional ethics, legal liability, responsibilities regarding fraud, internal control, audit plans, sampling techniques, auditing of the revenue cycle, auditing of cash and marketable securities, auditing of inventory and the acquisition/payment cycle, auditing of long-lived assets, auditing of debt obligations and stockholders' equity, audit reports, and other complex audit judgment issues. CSU

BUSAC-284 Cost Accounting

3 units SC

- 54 hours lecture/18 hours laboratory per term
- Prerequisite: BUSAC-187 or equivalent
- Note: The laboratory (lab) hours for this course may be offered as face to face lab or online lab. See schedule of classes for specific requirements.

This advanced accounting course explores the accountant's role in measuring, analyzing, and reporting financial and non-financial information to help managers make decisions that fulfill the goals of an organization. Emphasis is on determination, collection and analysis of cost information as it relates to planning, control, and decision making. Additional topics include costing systems, as well as cost allocation, inventory management, transfer pricing, capital budgeting, and the balanced scorecard. CSU

BUSAC-285 Federal Income Taxes-Individuals

3 units SC

- 54 hours lecture/18 hours of laboratory per term
- Advisory: BUSAC-186 and College-level reading and writing are expected.

This course concentrates on federal tax law for individuals and includes problem solving, perspectives on tax saving, and tax planning techniques. The Internal Revenue Code, regulations, rulings and court cases will be analyzed and applied. Introduction to tax preparation software is also included. CSU

BUSAC-286 Governmental and Not-For-Profit Accounting

3 units SC

- 54 hours lecture/18 hours laboratory per term
- Prerequisite: BUSAC-186 or equivalent
- Advisory: BUSAC-187 or equivalent

This course presents the accounting practices used in governmental units, private not-for-profit organizations, colleges and universities, hospitals, and tax-exempt organizations. Basic characteristics of fund accounting, reporting objectives and standards, budgetary process, issues of reporting and disclosure will be covered. CSU

BUSAC-290 Financial Statement Analysis

4 units SC

- 72 hours lecture per term
- Prerequisite: BUSAC-282 or equivalent
- Advisory: College-level reading and writing are expected.

This advanced accounting course explores the analysis of financial statements to evaluate past performance and predict the future performance of a company. Emphasis is placed on corporate financial reporting and the implications on businesses decisions through the examination of financial statements and disclosure examples. CSU

BUSAC-292 Intermediate Accounting II

4 units SC

- 72 hours lecture per term
- Prerequisite: BUSAC-186 or equivalent

This course presents advanced financial accounting principles that builds on the material in BUSAC-282. Topics include accounting for long-term liabilities, stockholders' equity, investing assets, income taxes, leases, pensions, earnings per share, changes and error corrections, revenue recognition, and the statement of cash flows. CSU

BUSAC-293 Accounting Ethics and Accountants' Professional Responsibilities

4 units SC

- 72 hours lecture per term
- Prerequisite: BUSAC-186 or equivalent

This course introduces ethical standards for accounting professionals with emphasis on contemporary issues, including social and ethical responsibilities. This course meets the three semester unit requirement in accounting ethics and accountants' professional responsibilities for Certified Public Accountant (CPA) licensure. CSU

BUSAC-294 Advanced Accounting

4 units SC

- 72 hours lecture per term
- Prerequisite: BUSAC-292 or equivalent

This course presents advanced accounting principles that build on the material in BUSAC-292. Topics include sources of long term capital, funds statement, accounting for partnerships, consolidated financial statements, foreign currency risk, and other advanced accounting reporting requirements. CSU

BUSAC-299 Student Instructional Assistant

.5-3 units SC

- 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 ENTREPRENEURSHIP – BUSEN

Charlie Shi, Dean

Business, Computer Science, and Culinary Arts Division
Administration Building, 214

Associate in arts degree

Music industry entrepreneurship - See MUSX

Certificate of achievement

Cannabis entrepreneurship - See BUS

Food truck entrepreneurship - See CULN

Landscape design entrepreneurship- See HORT

Music industry entrepreneurship - See MUSX

Nursery and greenhouse entrepreneurship-

See HORT

BUSEN-193 Cannabis Industry Entrepreneurship

3 units SC

- 54 hours lecture per term

This course is designed for students who want to become entrepreneurs and successfully launch a business venture in the cannabis industry. The process of successfully launching, managing, and growing an entrepreneurial firm, with an emphasis on opportunity recognition and feasibility analysis are addressed. Topics such as developing a relevant and effective business model, regulatory and legal framework, property rights, and venture financing are covered. Students develop a business plan to gain entrepreneurial hands-on experience. CSU

BUSINESS MANAGEMENT – BUSMG

Charlie Shi, Dean

Business, Computer Science, and Culinary Arts Division
Administration Building, 214

Certificates of achievement

Management and leadership studies - See BUS

Small business management/entrepreneurship -
See BUS

Certificates of accomplishment

Management and leadership studies-See BUS

Small business management/entrepreneurship -

See BUS

BUSMG-120 Introduction to Management Studies

3 units SC

- 54 hours lecture per term
- Advisory: BUS-109 and College-level reading and writing are expected.

This course introduces management theories and their application to various work environments. topics include management principles and organizational planning, structuring, staffing, directing, and controlling. The legal, ethical, and social responsibilities of management will also be covered. CSU

BUSMG-121 Practices and Concepts of Supervision

3 units SC

- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This course provides a real world approach to supervisory practices and concepts. Each of the management functions - planning, organizing, influencing, and controlling - will be explained from the standpoint of how each function relates in supervisory roles. Student participation includes a variety of supervisory exercises and case study discussions. CSU

BUSMG-131 Managing Diversity in the Workplace

3 units SC

- 54 hours lecture per term
- Advisory: BUS-109 and College-level reading and writing are expected.

This course explores issues relating to the management of workplace diversity, including individual, group, and cultural differences. How to recognize, understand, and adapt to these differences in order to create cohesive and productive work units will also be covered in this course. CSU

BUSMG-132 Human Resource Management

3 units SC

- 54 hours lecture per term
- Advisory: BUS-109 and College-level reading and writing are expected.

This course presents a comprehensive study of human resource management in organizations. Topics include human resource planning, recruitment and selection, training and development, and retention through compensation and benefits, performance appraisal, and career management. Values, legal and ethical issues, leadership and communication, conflict resolution, and organizational culture will also be covered. CSU

BUSMG-150 Topics in Management Studies

.3-4 units SC

- *Variable hours*

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

BUSMG-168 Customer Service

.5 unit SC

- *9 hours lecture per term*

This course presents the competencies needed for high quality customer service, which include developing a joint purpose, showing compassion, and being generous and trustworthy with customers, co-workers, and external stakeholders. The relationship of customer service skills to career success will also be examined. CSU

BUSMG-174 Business Ethics

.5 unit SC

- *9 hours lecture per term*

The course introduces the theory and practice of ethical decision making in the workplace. Topics include ethical theories, ethical dilemma resolution, social responsibility, ethics of whistle-blowing, and ethics and technology. CSU

BUSMG-191 Small Business Management

3 units SC

- *54 hours lecture per term*
- *Advisory: BUS-103; BUS-109 and College-level reading and writing are expected.*

This course is designed for students who want to start a small business or are involved in the ongoing management of an existing small business. Topics include ideation, profit planning, developing and marketing products, hiring and developing employees, managing a family-owned business, becoming a franchisee, and applying for funding sources such as a Small Business Administration (SBA) loan. Students will get practical experience in creating a small business by developing a comprehensive business plan. CSU

BUSMG-192 Entrepreneurship and Venture Management

3 units SC

- *54 hours lecture per term*
- *Advisory: BUS-103, BUS-109 and College-level reading and writing are expected.*

This course is designed for students who want to become entrepreneurs and successfully launch new business ventures. It covers the process of successfully launching, managing and growing an entrepreneurial firm, emphasizing opportunity recognition and feasibility analysis. Important topics such as developing an effective business model, protecting intellectual property and obtaining venture capital financing are presented. 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 SC

- *54 hours lecture per term*
- *Advisory: BUS-109 and College-level reading and writing are expected.*

This course provides theoretical foundations and practical experiences with group behavior and leadership. Emphasis is placed on self-awareness in a group setting. The course includes the examination of workforce diversity, motivation, decision-making, and organizational politics and their impact on the proper functioning of a business organization. CSU

BUSINESS MARKETING - BUSMK

Charlie Shi, Dean

Business, Computer Science, and Culinary Arts Division
Administration Building, 214

Certificate of achievement

Business marketing - see BUS

Digital marketing - see BUS

BUSMK-150 Topics in Business Marketing

.3-4 units SC

- *Variable hours*

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

BUSMK-158 Professional Selling

3 units SC

- 54 hours lecture per term
- Advisory: BUS-109 and College-level reading and writing are expected.

This course is an in-depth examination of the theory and practice of professional selling with a focus on the relationship selling process in business-to-consumer and business-to-business selling environments. Topics include the buying process, prospecting, acquiring sales knowledge, sales call planning, sales presentation methods, objection handling, and closing techniques. Motivating, compensating, training, and evaluating salespeople are also covered. CSU

BUSMK-255 Advertising

3 units SC

- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This course provides an introduction to the role of advertising and promotion as an integral part of the marketing process. Historical perspectives, ethical considerations, economic effects, and regulatory aspects of advertising are discussed. Topics include consumer behavior patterns, target audience analysis, brand positioning, creative messaging, media strategies, and campaign planning, execution, and evaluation. CSU

BUSMK-256 Marketing

3 units SC

- 54 hours lecture per term
- Advisory: BUS-109 or equivalent

This course is an introduction to marketing with an emphasis on creating and evaluating effective marketing campaigns. Real-world examples and case studies are used to develop contemporary marketing strategies--product, price, promotion, and distribution--with a focus on the customer and ethical practice. CSU

BUSMK-258 Advertising and Gender

3 units SC

- 54 hours lecture per term
- Advisory: BUSMK-255 or equivalent, College-level reading and writing are expected.

This course examines gender stereotypes, sex appeals, and body image in advertising. The use of celebrities as endorsers, spokespersons, or brand symbols are also explored. Students will conduct content analysis of gender-role portrayals in print, television, and digital advertising. A special emphasis is placed on gender and ethics in advertising. CSU, UC

BUSMK-259 Digital Marketing Fundamentals

3 units SC

- 54 hours lecture per term
- Advisory: BUSMK-255 or equivalent, College-level reading and writing are expected.

This course explores the rapidly evolving world of digital marketing and how it is reshaping the way businesses and brands engage their customers. A detailed understanding of digital marketing concepts, tools, tactics, and strategies will be covered. Students will also create an integrated digital marketing campaign. CSU

BUSMK-260 Social Media Marketing

3 units SC

- 54 hours lecture per term
- Advisory: BUSMK-255 or equivalent, College-level reading and writing are expected.

This interactive course provides a thorough grounding in all facets of social media marketing. The development of a social media strategy, building a target audience profile, choosing appropriate social media platforms, crafting engaging social media content, and creating an effective social media marketing plan will be covered. Emphasis is placed on fostering effective collaboration, demonstrating tactical execution, and monitoring social media. CSU

BUSMK-261 Digital Marketing Analytics

3 units SC

- 54 hours lecture per term
- Advisory: BUS-240 or equivalent, College-level reading and writing are expected.

This course applies analytical tools to translate business intelligence into structured content that helps firms improve Internet marketing results. Students will use various web-analytical software tools to compare search engine formats, social media use, geo-location analysis, and mobile digital analytics. Familiarity with strategic operations of web analytics and the technologies used in these business functions will be explored. CSU

BUSMK-262 Content Marketing

3 units SC

- 54 hours lecture per term
- Advisory: BUSMK-255 or equivalent, College-level reading and writing are expected.

This course covers strategic approaches to content creation, management, and distribution for use across multiple platforms to help support an organization's brand. Developing a content marketing strategy and plan, creating compelling content, and monitoring content performance will be emphasized. CSU

BUSMK-263 Email Marketing

2 units SC

- 36 hours lecture per term
- Advisory: BUSMK-255 or equivalent, College-level reading and writing are expected.

This course introduces email marketing principles and practices as well as the development and implementation of an email marketing strategy. Developing an email marketing campaign, building an email marketing list, choosing email marketing distribution software, writing appropriate email messages, and employing email marketing analytics are included. The course also emphasizes executing and monitoring an email campaign to achieve business objectives. CSU

BUSMK-264 Search Marketing

2 units SC

- 36 hours lecture per term
- Advisory: BUSMK-255 or equivalent, College-level reading and writing are expected.

This course introduces search marketing and the critical role that it plays in an organization's digital marketing strategy and online presence. Search engine optimization (SEO), search engine marketing (SEM), and pay-per-click (PPC) advertising are also explored in depth. Topics include keyword research, on-page ranking factors, link building, SEO copywriting, site architecture, content optimization, and search marketing metrics. Students develop a search marketing campaign using performance indicators to evaluate the campaign's results. CSU

BUSMK-298 Independent Study

.5-3 units SC

- Variable hours
- Note: Submission of acceptable educational contract to department and Instruction Office is required.

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. CSU

BUSINESS REAL ESTATE – RE

Charlie Shi, Dean

Business, Computer Science, and Culinary Arts Division
Administration Building, 214

Certificate of achievement

Real estate - See BUS

Certificate of accomplishment

Real estate salesperson - See BUS

RE-150 Topics in Real Estate

.3-4 units SC

- Variable hours

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

RE-160 Real Estate Principles

3 units SC

- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.
- Note: Applies toward the CA Board of Real Estate continuing education and licensing.

This course provides an introduction to the real estate profession. The course covers real and personal property acquisition, ownership, estates in real property, contracts, deeds, financing, taxes, property transfer, agency and other topics relevant to the transaction and transfer of property rights, especially within the context of California law. Persons preparing for the real estate salesperson's license examination through the California Board of Real Estate may find this course valuable, although the course is not specifically or solely designed as a pre-licensing course. CSU

RE-161 Real Estate Law

3 units SC

- 54 hours lecture per term
- Advisory: RE-160 or valid CA RE license and College-level reading and writing are expected.
- Note: Applies toward the CA Board of Real Estate continuing education and licensing.

This course provides an overview of California law as it pertains to the practice of real estate, including rights to property ownership and management, agency, contracts, and application to real estate transfer. The course also covers conveyancing, probate proceedings, trust deeds, foreclosure, and recent federal and California legislation governing real estate transactions. CSU

RE-162 Real Estate Appraisal

3 units SC

- 54 hours lecture per term
- Advisory: RE-160 or valid CA RE license and College-level reading and writing are expected.
- Note: Applies toward the CA Department of Real Estate educational requirements for real estate licenses.

This course covers real estate valuation concepts, methods, and models, with emphasis on residential property. Topics include definitions, concepts, and techniques of valuation, and the appraisal process, including the preparation of appraisal reports. CSU

RE-163 Real Estate Practice

3 units SC

- 54 hours lecture per term
- Advisory: RE-160 or a valid California real estate license and College-level reading and writing are expected.
- Note: Applies toward the CA Board of Real Estate continuing education and licensing.

This course is a comprehensive overview of all legal, ethical, and professional aspects to a successful real estate services practice including techniques of prospecting, listing, selling, financing, drafting offers and purchase agreements, overseeing escrow, executing tax-efficient property exchanges, and managing leasehold estates and other property. CSU

RE-164 Real Estate Finance

3 units SC

- 54 hours lecture per term
- Advisory: RE-160 or a valid California real estate license and College-level reading and writing are expected.
- Note: Applies toward the CA Board of Real Estate continuing education and licensing.

This course provides an overview of real estate finance, including lending policies, procedures and types of loans used to buy, build, refinance, or invest in real property. CSU

RE-165 Real Estate Economics

3 units SC

- 54 hours lecture per term
- Advisory: RE-160 or a valid California real estate license and College-level reading and writing are expected.
- Note: Applies toward the CA Board of Real Estate continuing education and licensing.

This course provides an overview of economic concepts and theories as they apply to the functioning of real estate markets. Special attention is paid to the impact that the financial system and government institutions have on real estate value and return. CSU

RE-166 Real Estate Escrow Procedures

3 units SC

- 54 hours lecture per term
- Advisory: RE-160 or a valid California real estate license and College-level reading and writing are expected.
- Note: Applies toward the CA Board of Real Estate continuing education and licensing.

This course provides an overview of the procedures required to complete a valid escrow in order to close a real estate transaction. Technical skills, legal aspects, ethical restrictions, interfacing with financing and real estate agents will be emphasized. Students are introduced to the procedures and practices from the perspective of both the escrow/title insurance company and the real estate licensee. CSU

RE-167 Real Estate Property Management

3 units SC

- 54 hours lecture per term
- Advisory: RE-160 or a valid California real estate license and College-level reading and writing are expected.
- Note: Applies toward the CA Board of Real Estate continuing education and licensing.

This course presents the fundamental elements of managing residential properties. Topics also include commercial and business property management, acquisition, marketing, financing, financial reporting, contracts, leases, Fair Housing Laws, valuation, maintenance, taxes, risk management, insurance, furnishings, and tenant relations. CSU

CAREER DEVELOPMENT- CARER

See also Counseling - COUNS

Emily Stone, Dean

Counseling Division

Student Services Center, Room 122

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-100 College and Career Readiness I

1.5 units SC

- 27 hours lecture per term
- Note: Credit by examination option available.

This course introduces career exploration and is designed to assist students in making career and post-secondary decisions. Topics will include self-exploration, career and life planning, job search skills, and decision-making strategies. CSU, UC (Credit limitations may apply to UC - see counselor.)

CARER-101 College and Career Readiness II

1.5 units SC

- 27 hours lecture per term
- Note: Credit by examination option available.

This course introduces college readiness and success skills. In addition, students will explore post-secondary education and career options, budget management, and job search basics. CSU, UC (Credit limitations may apply to UC - see counselor.)

CARER-110 Career and Life Planning

3 units SC

- CSU GE: E
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This course presents research strategies for effective career and major choice selection. Students will use a variety of techniques to find, retrieve, and evaluate career planning information as well as career assessments to identify their preferred work values, interests, skills and personality traits. Focus is placed 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. Employability and interpersonal skills such as communication, critical thinking, creative problem solving, time management, self-esteem and professional confidence, emotional intelligence, conflict resolution, and effective collaboration are also addressed. CSU, UC (credit limits may apply to UC - see counselor)

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 introduces student self-assessment inventories with the goal of identifying individual interests, values, skills, and personality types. Topics include self-exploration, researching college majors, and making the connections between values, interests, personality, and the career world. CSU

CARER-130 Career and Major Exploration

1 unit P/NP

- 18 hours lecture per term
- Advisory: CARER-120 or equivalent

This course introduces basic career planning and electronic resources that aid in the research of career and college major options. This course is intended for students who are undecided about their career and/or educational goals. CSU

CARER-140 Job Search Strategies

1 unit P/NP

- 18 hours lecture per term

This course is designed to prepare students for the employment search process. 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 will be covered. Students will also identify and discuss the employability skills most commonly sought by employers. CSU

CARER-150 Topics in Careers

.3-4 units SC

- 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

CHEMISTRY – CHEM

Charles Ramos, Dean

Sciences Division

Physical Sciences Building, Room 263

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.

**Certificate of achievement
Chemistry**

Students completing the program will be able to...

- apply the basic concepts of chemistry to predict chemical structure and trends in reactivity.
- analyze and solve quantitative and qualitative problems in chemistry and explain results verbally or in writing.
- integrate chemical principles into reaction mechanisms.
- apply basic laboratory skills and techniques in general and organic chemistry to collect data and synthesize compounds.
- analyze data and evaluate laboratory experimental results.
- maintain a laboratory notebook.

Completion of the chemistry program prepares students for advanced study leading to careers in government, industry, or secondary-school teaching. The program also partially satisfies the entrance requirements for medical and dental schools. Careers include researcher, educator, laboratory technician, or chemical engineer.

This certificate includes the coursework that will prepare students who intend to transfer with a chemistry or related interdisciplinary major to a four-year institution. This certificate includes the General Chemistry and Organic Chemistry sequences.

To earn a certificate of achievement, students must complete the required courses with a "C" grade or higher. Course requirements are typically available in the day and evening for the General Chemistry sequence. For the Organic Chemistry sequence, CHEM 226 is only offered in fall terms, and CHEM 227 is only offered in spring term.

Students who intend to transfer to a four-year program should consult with a counselor regarding course and program requirements.

required courses:	units
CHEM-120 General College Chemistry I.....	5
CHEM-121 General College Chemistry II.....	5
CHEM-226 Organic Chemistry I.....	5
CHEM-227 Organic Chemistry II.....	5
total minimum required units	20

Students who intend to transfer to a four-year program in chemistry should consult with a counselor regarding mathematics and science requirements listed below.

plus 0-8 units from:	units
PHYS-130 Physics for Scientists and Engineers A: Mechanics and Wave Motion.....	4
PHYS-230 Physics for Scientists and Engineers B: Heat and Electromagnetism.....	4

plus 0-10 units from:	units
MATH-192 Analytic Geometry and Calculus I.....	5
MATH-193 Analytic Geometry and Calculus II.....	5

CHEM-106 Chemistry for Non-Science Majors

4 units SC

- IGETC: 5A, 5C; CSU GE: B1, B3; DVC GE: II
- 54 hours lecture/54 hours laboratory per term
- Prerequisite: Placement into MATH-121 or higher or MATH 085 or MATH-085SP or beginning algebra or equivalent
- Advisory: College-level reading and writing are expected.
- 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 laboratory. 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. C-ID CHEM 100, CSU, UC (credit limits may apply to UC - see counselor)

CHEM-107 Integrated Inorganic, Organic, and Biological Chemistry

5 units SC

- IGETC: 5A, 5C; CSU GE: B1, B3; DVC GE: II
- 72 hours lecture/54 hours laboratory per term
- Prerequisite: Placement into MATH-121 or higher or MATH 085 or MATH-085SP or beginning algebra or equivalent
- Advisory: College-level reading and writing are expected.
- Note: This course does not fulfill the prerequisite to CHEM-120.

This course is an intensive survey of the fundamentals of chemistry, which explores and applies the topics of inorganic and organic chemistry to biochemistry. This course satisfies the requirements of nursing and other health-career programs that require one term of chemistry. CSU, UC (credit limits may apply to UC - see counselor)

CHEM-108 Introductory Chemistry

4 units SC

- IGETC: 5A, 5C; CSU GE: B1, B3; DVC GE: II
- 54 hours lecture/54 hours laboratory per term
- Prerequisite: Placement into MATH-121 or higher or MATH 085 or MATH-085SP or beginning algebra or equivalent
- Advisory: College-level reading and writing are expected.

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. This course is appropriate for those that have no high school chemistry experience. This course serves as preparation for General Chemistry (CHEM-120/121) or the first course of a two-semester sequence (with CHEM-109) that satisfies the requirements of allied health programs such as nursing and dental hygiene that require one year of chemistry. C-ID CHEM 101, CSU, UC (credit limits may apply to UC - see counselor)

CHEM-109 Introduction to Organic and Biochemistry

4 units SC

- IGETC: 5A, 5C; CSU GE: B1, B3; DVC GE: II
- 54 hours lecture/54 hours laboratory per term
- Prerequisite: CHEM-107 or CHEM-108 or CHEM-120 or equivalent
- Note: This is the second course of a two-semester sequence (with CHEM-108) that satisfies the requirements of allied health programs such as nursing and dental hygiene that require one year of chemistry.

This course provides a focused introduction to the chemistry of living things. Organic Chemistry is the study of carbon compounds that is linked to biochemistry, the chemical basis of life, through the relationship of molecular structure and function. C-ID CHEM 102, CSU, UC (credit limits may apply to UC - see counselor)

CHEM-120 General College Chemistry I

5 units LR

- IGETC: 5A, 5C; CSU GE: B1, B3; DVC GE: II
- 54 hours lecture/108 hours laboratory per term
- Prerequisite: CHEM-108 or score of 3, 4 or 5 on AP Chemistry Test or appropriate chemistry skill level demonstrated through Chemistry Diagnostic Test or equivalents; Placement into MATH-121 or higher; or MATH-119 or MATH 119SP or intermediate algebra or equivalent
- Advisory: College-level reading and writing are expected.

This course is the first semester of a two-semester sequence (CHEM-120 and CHEM-121) that covers the fundamentals of chemistry including atomic theory, chemical reactions, bonding, structure, stoichiometry, gases, solutions, thermochemistry, and chemical kinetics. Basic laboratory techniques are introduced including the preparation of standard solutions, titration, and the generation of calibration curves used in qualitative and quantitative analysis. Students will perform experiments safely, keep a laboratory notebook, and complete laboratory reports. . C-ID CHEM 110, CHEM-120+121=C-ID CHEM 120S, CSU, UC

CHEM-121 General College Chemistry II

5 units LR

- IGETC: 5A, 5C; CSU GE: B1, B3; DVC GE: II
- 54 hours lecture/108 hours laboratory per term
- Prerequisite: CHEM-120 or equivalent

This course is the second semester of a two-semester sequence (CHEM-120 and CHEM-121) that covers gaseous and acid base equilibria, buffers, titration curves, solubility products, thermodynamics, electrochemistry, coordination complexes, nuclear chemistry, as well as qualitative and quantitative experiments. Laboratory work in this course will build upon techniques used in CHEM-120 and includes some independent experimental design. CHEM-120+121=C-ID CHEM 120S, CSU, UC

CHEM-150 Topics in Chemistry

.3-4 units SC

- Variable hours

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

CHEM-226 Organic Chemistry I

5 units LR

- IGETC: 5A, 5C; CSU GE: B1, B3; DVC GE: II
- 54 hours lecture/108 hours laboratory per term
- Prerequisite: CHEM-121 or equivalent

This course is the first semester of a two-semester sequence (CHEM-226 and CHEM-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, alkyl 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 data collection and analysis using GC, IR and UV-Visible spectroscopy. C-ID CHEM 150, CHEM-226 + CHEM-227 = C-ID CHEM 160S, CSU, UC

CHEM-227 Organic Chemistry II

5 units LR

- IGETC: 5A, 5C; CSU GE: B1, B3; DVC GE: II
- 54 hours lecture/108 hours laboratory per term
- Prerequisite: CHEM-121 and CHEM-226 or equivalents

This course is a continuation of Chemistry 226. Topics include spectroscopy, additional reaction mechanisms, the nomenclature, physical properties, and reactions of other basic classes of compounds (aromatics, 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 advanced projects involving synthesis, and a literature research project using university-level chemical literature resources. CHEM-226 + CHEM-227 = C-ID 160S, CSU, UC

CHEM-298 Independent Study

.5-3 units SC

- Variable hours
- Note: Submission of acceptable educational contract to department and Instruction Office is required.

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. CSU

CHEM-299 Student Instructional Assistant

.5-3 units SC

- 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

Janette Funaro, Dean
Arts and Communication Division

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.

**Associate in arts degree
Mandarin Chinese**

Students completing the program will be able to...

- communicate verbally in the target language with accurate pronunciation in meaningful situations present in both informal and formal contexts.
- effectively apply rules of grammar and syntax in tandem with appropriate vocabulary in written and oral communication.
- demonstrate auditory comprehension of instruction, authentic content, and purposeful conversations in the target language.
- discuss, describe, and infer information from authentic texts in the target language.
- demonstrate cultural appreciation by making (comparative) connections, on both an individual and societal level, between the target cultures and students' own cultures.
- create (write or present) narratives and/or arguments that demonstrate cohesive critical thinking in the target language.

The associate in arts degree in Mandarin Chinese at DVC will provide students with skills in understanding, speaking, reading and writing Mandarin Chinese. The curriculum exposes students to Chinese culture and civilization and provides foundational skills in language that can apply to a broad range of international and domestic career opportunities and professions. The degree will provide lower division preparation for transfer to UC, CSU and other four-year colleges and universities to earn a bachelor's degree.

The DVC Mandarin Chinese 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 baccalaureate-granting institutions of their choice are met. Students who intend to transfer are advised to select General Education Option 2 (IGETC) or Option 3 (CSU GE). Option 1 (DVC General Education) is appropriate for those students who do not intend to transfer. Students may not take a pass/no pass option for major courses and each of the major requirements must be completed with a "C" grade or higher. Certain courses may satisfy both major and general education requirements; however, the units are counted only once.

Students must complete the 20 units of major requirements, which will provide students with the essential grammar of the language and culture of China.

<i>major requirements:</i>		<i>units</i>
CHIN-120	First Term Chinese	5
CHIN-121	Second Term Chinese.....	5
CHIN-220	Third Term Chinese	5
CHIN-221	Fourth Term Chinese.....	5
total minimum units for the major		20

**Certificate of achievement
Mandarin Chinese**

Students completing the program will be able to...

- communicate verbally in the target language with accurate pronunciation in meaningful situations present in both informal and formal contexts.
- effectively apply rules of grammar and syntax in tandem with appropriate vocabulary in written and oral communication.
- demonstrate auditory comprehension of instruction, authentic content, and purposeful conversations in the target language.
- discuss, describe, and infer information from authentic texts in the target language.
- demonstrate cultural appreciation by making (comparative) connections, on both an individual and societal level, between the target cultures and students' own cultures.
- create (write or present) narratives and/or arguments that demonstrate cohesive critical thinking in the target language.

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. Students may not take a credit/no credit option for required courses and each course used to meet a certificate requirement must be completed with a "C" grade or higher.

<i>complete at least 15 units from:</i>	<i>units</i>
CHIN 120 First Term Mandarin Chinese.....	5
CHIN 121 Second Term Mandarin Chinese	5
CHIN 220 Third Term Mandarin Chinese.....	5
CHIN-221 Fourth Term Mandarin Chinese	5
total minimum required units	15

CHIN-120 First Term Mandarin Chinese

- 5 units SC
- IGETC: 6A
- 90 hours lecture per term
- Note: This course is equivalent to two years of high school study.

This course provides an introduction to the Chinese language and the culture of Chinese-speaking countries. Topics include the four language skills: speaking, listening, reading, and writing. Emphasis is placed on active use of the language in class as well as basic communicative functions and structures. CSU, UC

CHIN-121 Second Term Mandarin Chinese

- 5 units SC
- IGETC: 3B, 6A; CSU GE: C2; DVC GE: III
- 90 hours lecture per term
- Prerequisite: CHIN-120 or two years of high school study or equivalent
- Note: Students may meet equivalency in a variety of ways. Students should seek assistance at Admissions and Records.

This is the second course in a sequence of Mandarin Chinese language courses. The course continues skill building in understanding, speaking, reading, and writing of the Mandarin Chinese language. The expansion of vocabulary (characters) and more advanced communicative functions and structures, as well as a deeper examination of the cultures of Mandarin Chinese-speaking countries are emphasized. CSU, UC

CHIN-150 Topics in Chinese

- .3-4 units SC
- 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
- IGETC: 3B, 6A; CSU GE: C2; DVC GE: III
- 90 hours lecture per term
- Prerequisite: CHIN-121 or three years of high school study or equivalent
- Note: Students may meet equivalency in a variety of ways. Students should seek assistance at Admissions and Records.

This is the third term Chinese course in a sequence. Students will learn to develop fluency in understanding, speaking, reading and writing Chinese. New vocabulary, idiomatic expressions, and grammatical concepts are introduced. Selected readings about Chinese culture and literature will be explored. This course is taught entirely in Chinese, but students can choose either of the two Chinese written systems to develop their knowledge and ability. CSU, UC

CHIN-221 Fourth Term Mandarin Chinese

- 5 units SC
- IGETC: 3B, 6A; CSU GE: C2; DVC GE: III
- 90 hours lecture per term
- Prerequisite: CHIN-220 or four years of high school study or equivalent
- Note: Students may meet equivalency in a variety of ways. Students should seek assistance at Admissions and Records.

This is the fourth term Chinese course in a sequence. Students will be able to develop fluency in all aspects of the Chinese language with particular attention paid to literary forms as reflected in the contemporary Chinese world. This course reviews grammar and develops advanced reading and writing skills in Chinese. Passages from Chinese literature and readings about Chinese culture will be studied. Computer skills in Chinese will be applied. Students may choose either of the two Chinese writing systems to develop their knowledge and ability. CSU, UC

CHIN-298 Independent Study

- .5-3 units SC
- Variable hours
- Note: Submission of acceptable educational contract to department and Instruction Office is required.

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. CSU

CHIN-299 Student Instructional Assistant

- .5-3 units SC
- 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

In order to earn the degree, students must:

- Complete 60 CSU-transferable units.
- Complete the California State University-General Education pattern (CSU GE); or the Intersegmental General Education Transfer Curriculum (IGETC) pattern, including the Area 1C requirement for Oral Communication.
- Complete a minimum of 18 units in the major.
- Attain a minimum grade point average (GPA) of 2.0.
- Earn a grade of “C” or higher in all courses required for the major.

Students transferring to a CSU campus that accepts the degree will be required to complete no more than 60 units after transfer to earn a bachelor’s degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system, or those students who do not intend to transfer.

Some courses in the major satisfy both major and CSUGE/IGETC general education requirements; however, the units are only counted once toward the 60 unit requirement for an associate degree. 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: *units*
 COMM-120 Public Speaking 3

plus at least 6 units from:
 COMM-123 Argumentation and Debate 3
 COMM-128 Interpersonal Communication 3
 COMM-130 Small Group Communication 3

plus at least 6 units from:
any course not used above or:
 COMM-121 Persuasion and Critical Thinking 3
 COMM-125 Intercultural Communication 3
 COMM-148 Performance of Literature 3
 COMM-163* Forensics - Speech and Debate 1.5-4
 COMM-180 Introduction to Communication Theory 3
 JRNAL-110 Mass Media of Communication 3

plus at least 3 units from:
any course not used in either group above, or:
 COMM-124 Voice and Diction 3
 JRNAL-120 Introduction to Newswriting and Reporting 3

total minimum units for the major 18

**Note: A maximum of 3 units may be taken from this course*

COMMUNICATION STUDIES – COMM

Janette Funaro, Dean
 Arts and Communication Division

Associate in arts in communication studies for transfer

Students completing the program will be able to...

- A. recognize the cultural, ethical, political, psychological and practical aspects of communication systems and models.
- B. develop and present effective public presentations.
- C. demonstrate an understanding of the role critical thinking plays in the effective analysis and development of messages.
- D. demonstrate an understanding of interpersonal communication theory and practice the skills necessary for effective interpersonal interactions.
- E. improve delivery skills when making public presentations.

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. 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 students for careers in the fields of public relations, communication education, the performing arts, marketing, public relations, 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.

The associate in arts in communication studies for transfer is intended for students who plan to complete a bachelor’s degree in a similar major at a CSU campus. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major.

**Certificate of achievement
Communication studies**

Students completing the program will be able to...

- A. create and present a well-structured persuasive presentation.
- B. create and present a well-structured informative presentation.
- C. be aware of and able to apply interpersonal conflict resolution methods.

To earn a certificate of achievement in communication studies, students must complete three core courses supplemented by seven 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 for transfer at Diablo Valley College.

<i>required courses:</i>	<i>units</i>
COMM-120 Public Speaking	3
COMM-121 Persuasion and Critical Thinking	3
COMM-128 Interpersonal Communication	3

<i>plus at least 3 units from:</i>	
COMM-123 Argumentation and Debate.....	3
COMM-124 Voice and Diction	3
COMM-125 Intercultural Communication.....	3
COMM-130 Small Group Communication.....	3
COMM-148 Performance of Literature	3
COMM-155 Topics in Communication Studies.....	0.3-4
COMM-163 Forensics - Speech and Debate	1.5-4
COMM-180 Introduction to Communication Theory	3
COMM-298 Independent Study.....	0.5-3

total minimum required units

12

COMM-120 Public Speaking

- 3 units SC
- *IGETC: 1C; CSU GE: A1; DVC GE: IB*
 - *54 hours lecture per term*
 - *Advisory: College-level reading and writing are expected.*

In this course, students will prepare and present public speeches using the principles of effective communication. Emphasis is placed on speaking to inform, persuade, and special occasion speeches. Key principles covered include audience analysis, determining speech goals, organization, clarity, language, evidence, visual aids, and delivery. C-ID COMM 110, CSU, UC

COMM-121 Persuasion and Critical Thinking

- 3 units LR
- *IGETC: 1B; CSU GE: A3; DVC GE: IB*
 - *54 hours lecture per term*
 - *Prerequisite: ENGL-122 or equivalent*

This course presents an introduction to the principles of reasoning and their application to the analysis and evaluation of political and marketplace communication. The integration of critical thinking principles with techniques of effective written and spoken argument will be emphasized. Topics will include the structure of argument, underlying assumptions, the quality of evidence used to support claims, the use of language, the discovery of formal and informational fallacies, and the effect of print and electronic media on argumentation. C-ID COMM 190, CSU, UC

COMM-123 Argumentation and Debate

- 3 units LR
- *IGETC: 1C; CSU GE: A1, A3; DVC GE: IB*
 - *54 hours lecture per term*
 - *Advisory: College-level reading and writing are expected.*

This course presents the 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. Students will participate in graded debates in class. C-ID COMM 120, CSU, UC

COMM-124 Voice and Diction

- 3 units SC
- *54 hours lecture per term*
 - *Advisory: College-level reading and writing are expected.*

This course focuses on the improvement of 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, as well as communication, speech and drama majors. CSU, UC

COMM-125 Intercultural Communication

- 3 units SC
- *IGETC: 4; CSU GE: D; DVC GE: IV*
 - *54 hours lecture per term*

This course is an introduction to intercultural communication in domestic and/or global contexts. The course studies the influence of cultures, languages, and social patterns on how members of groups relate among themselves and with members of different ethnic and cultural groups. It teaches theory and knowledge of effective communication within and between cultures. Appreciation and comparison of communication of diverse groups is an important part of the course. C-ID COMM 150, CSU, UC

COMM-128 Interpersonal Communication

3 units SC

- 54 hours lecture per term
- *Advisory: College-level reading and writing are expected.*

This course provides an introduction to the theory, basic principles, and methods of oral communication, with emphasis on improving speaking and listening skills within the context of interpersonal communication. Psychological, social, cultural, and linguistic factors which affect human interaction are emphasized. Attention will also be given to perception, listening, conflict resolution, relationship development and stages, and verbal and nonverbal communication. C-ID COMM 130, CSU, UC

COMM-130 Small Group Communication

3 units SC

- *IGETC: 1C; CSU GE: A1; DVC GE: IB*
- 54 hours lecture per term
- *Advisory: College-level reading and writing are expected.*

This course is 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 work. C-ID COMM 140, CSU, UC

COMM-148 Performance of Literature

3 units SC

- *CSU GE: C1*
- 54 hours lecture per term
- *Advisory: College-level reading and writing are expected.*

This course provides an introduction to performance studies. Emphasis is placed on the analysis, appreciation, and application of theories of interpretive performance of various forms of literature including poetry, prose, and drama. C-ID COMM 170, CSU, UC

COMM-155 Topics in Communication Studies

.3-4 units SC

- *Variable hours*

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

COMM-163 Forensics - Speech and Debate

1.5-4 units SC

- *May be repeated three times*
- *Variable hours*
- *Advisory: College-level reading and writing are expected.*

This course prepares students to participate in intercollegiate speech and debate tournaments and/or community events. Students will research, write, and practice speeches. Students will perform speeches at competitive and/or community events. C-ID COMM 160B, CSU, UC

COMM-180 Introduction to Communication Theory

3 units SC

- *IGETC: 4; CSU GE: D; DVC GE: IV*
- 54 hours lecture per term

This course is a survey of the discipline of communication studies with emphasis on multiple epistemological, theoretical, and methodological issues relevant to the systematic inquiry and pursuit of knowledge about human communication. Students will explore the basic history, assumptions, principles, processes, variables, methods, and specializations of human communication as an academic field of study. C-ID COMM 180, CSU, UC

COMM-298 Independent Study

.5-3 units SC

- *Variable hours*
- *Note: Submission of acceptable educational contract to department and Instruction Office is required.*

Students will conduct additional research, a special project, or learning activities in a specific discipline/subject area. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. (This course is not intended to replace an existing course.) CSU

COMM-299 Student Instructional Assistant

.5-3 units SC

- *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

COMPUTER INFORMATION SYSTEMS – CIS

Jennifer Tejada, Dean
 San Ramon Campus Division
 San Ramon Campus

Possible career opportunities

Training in computer information systems prepares students for a broad range of roles. Some possible career options include web author, web developer, web designer, help desk specialist/analyst, desktop support technician, quality assurance technician, executive assistant, office manager, office assistant, entrepreneur, database analyst, database designer, computer trainer, project manager, and team member in a startup.

Associate in science degree Computer information systems

Students completing the program will be able to...

- A. perform the duties of information technologies and management workers as identified by the Bureau of Labor Statistics
- B. provide technical assistance and training to computer system users.
- C. investigate and resolve computer software and hardware problems of users.
- D. perform the professional duties demanded in any modern office environment.
- E. design and maintain static and dynamic web sites.
- F. integrate elements such as graphics, animation and streaming media on web sites.
- G. develop and implement database systems for stand-alone or internet based deployment.
- H. use technology to manage multi-faceted projects.
- I. demonstrate basic graphical user interface operations in a computer environment.
- J. produce spreadsheets, documents and presentations by using basic to advanced software operations.

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 general education 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.

<i>major requirements:</i>		<i>units</i>
<i>core courses:</i>		
CIS-115	Microsoft Word - Comprehensive	2
CIS-116	Microsoft Excel - Comprehensive	2
CIS-118	Microsoft PowerPoint - Comprehensive	2

<i>plus at least 2 units from:</i>		
CIS-100	Microsoft Windows - Comprehensive	2
CIS-101	Apple Mac Operating System.....	2

<i>plus at least 4 units from:</i>		
CIS-117	Microsoft Access - Comprehensive	2
CIS-119	Microsoft Outlook - Comprehensive	2
CIS-170	Networking for Non-IT Professionals.....	2

Core courses units subtotal **12**

Choose one of the following four technical specialization areas:

database management - required courses:

CIS-107	Introduction to Web Databases	2
CIS-117	Microsoft Access - Comprehensive	2
CIS-160	Introduction to MySQL.....	2

project management - required courses:

CIS-180	Introduction to Project Management.....	3
CIS-181	Project Management Fundamentals/ PMI PMP Preparation.....	3

project management - recommended elective:

CIS-185	Project Management Tools	2
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web graphics - required courses:

CIS-130	Adobe Photoshop Elements	2
CIS-132	Adobe Premiere Elements - Comprehensive.....	2
CIS-133	Developing Video Content for the Web	2

web technology - required courses:

CIS-105	Introduction to Web Design	2
CIS-106	Adobe Dreamweaver - Comprehensive.....	2
CIS-107	Introduction to Web Databases	2

web technology - recommended electives:

CIS-108	Introduction to WordPress.....	2
CIS-117	Microsoft Access - Comprehensive	2
CIS-120	iPhone and iPad App Development for Beginners	2
CIS-160	Introduction to MySQL.....	2

total minimum units for the major **18**

Certificate of achievement Computer information systems - core

Students completing the program will be able to...

- demonstrate basic graphical user interface operations in a computer environment.
- produce spreadsheets, documents and presentations by using basic to advanced software operations.

The computer information systems (CIS) certificate of achievement in computer information systems-core prepares students for careers in business and government as information technologies and management workers.

Principal areas of study include computer software applications, web graphics and web technology, cloud-based systems, and database and project management. CIS coursework includes terminology and provides hands-on laboratory experience with operating and network systems. Stand-alone and internet-based applications are also covered.

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, during the day, and online.

<i>required courses:</i>	<i>units</i>
CIS-115 Microsoft Word - Comprehensive	2
CIS-116 Microsoft Excel - Comprehensive	2
CIS-118 Microsoft PowerPoint - Comprehensive	2

<i>plus at least 2 units from:</i>	
CIS-100 Microsoft Windows - Comprehensive	2
CIS-101 Apple Mac Operating System.....	2

<i>plus at least 4 units from :</i>	
CIS-117 Microsoft Access - Comprehensive	2
CIS-119 Microsoft Outlook - Comprehensive	2
CIS-170 Networking for Non-IT Professionals.....	2
total minimum required units	12

Certificate of achievement Computer information systems - database management

Students completing the program will be able to...

- demonstrate basic graphical user interface operations in a computer environment.
- produce spreadsheets, documents and presentations by using basic to advanced software operations.
- apply database syntax, properties, operators, and functions.

The computer information systems (CIS) certificate of achievement in computer information systems-database management prepares students for careers in business and government as information technologies and management workers.

Principal areas of study include computer software applications, web graphics and web technology, cloud-based systems, and database and project management. CIS coursework includes terminology and provides hands-on laboratory experience with operating and network systems. Stand-alone and internet-based applications are also covered.

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, during the day, and online.

<i>required courses:</i>	<i>units</i>
CIS-107 Introduction to Web Databases	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-119 Microsoft Outlook - Comprehensive	2
CIS-160 Introduction to MySQL.....	2
CIS-170 Networking for Non-IT Professionals	2

<i>plus at least 2 units from:</i>	
CIS-100 Microsoft Windows - Comprehensive	2
CIS-101 Apple Mac Operating System.....	2

total minimum required units 18

Certificate of achievement Computer information systems - project management

Students completing the program will be able to...

- demonstrate basic graphical user interface operations in a computer environment.
- produce spreadsheets, documents and presentations by using basic to advanced software operations.
- apply the principles of the Project Management Institute (PMI) processes of project management.

The computer information systems (CIS) certificate of achievement in computer information systems-project management prepares students for careers in business and government as information technologies and management workers.

Principal areas of study include computer software applications, web graphics and web technology, cloud-based systems, and database and project management. CIS coursework includes terminology and provides hands-on laboratory experience with operating and network systems. Stand-alone and internet-based applications are also covered.

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, during the day, and online.

Computer information systems

<i>required courses:</i>		<i>units</i>
CIS-115	Microsoft Word - Comprehensive	2
CIS-116	Microsoft Excel - Comprehensive	2
CIS-118	Microsoft PowerPoint - Comprehensive	2
CIS-180	Introduction to Project Management.....	3
CIS-181	Project Management Fundamentals/ PMI PMP Preparation.....	3

<i>plus at least 2 units from:</i>	
CIS-100	Microsoft Windows - Comprehensive
CIS-101	Apple Mac Operating System.....

<i>plus at least 4 units from:</i>	
CIS-117	Microsoft Access - Comprehensive
CIS-119	Microsoft Outlook - Comprehensive
CIS-170	Networking for Non-IT Professionals

total minimum required units 18

project management - recommended elective:	
CIS-185	Project Management Tools

Certificate of achievement Computer information systems - web graphics

Students completing the program will be able to...

- demonstrate basic graphical user interface operations in a computer environment.
- produce spreadsheets, documents and presentations by using basic to advanced software operations.
- perform the duties demanded in any modern office environment.
- able to prepare images for sharing and distribution.

The computer information systems (CIS) certificate of achievement in computer information systems-web graphics prepares students for careers in business and government as information technologies and management workers.

Principal areas of study include computer software applications, web graphics and web technology, cloud-based systems, and database and project management. CIS coursework includes terminology and provides hands-on laboratory experience with operating and network systems. Stand-alone and internet-based applications are also covered.

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, during the day, and online.

<i>required courses:</i>		<i>units</i>
CIS-115	Microsoft Word - Comprehensive	2
CIS-116	Microsoft Excel - Comprehensive	2
CIS-118	Microsoft PowerPoint - Comprehensive	2
CIS-130	Adobe Photoshop Elements	2
CIS-132	Adobe Premiere Elements - Comprehensive	2
CIS-133	Developing Video Content for the Web	2

<i>plus at least 2 units from:</i>	
CIS-100	Microsoft Windows - Comprehensive
CIS-101	Apple Mac Operating System.....

<i>plus at least 4 units from:</i>	
CIS-117	Microsoft Access - Comprehensive
CIS-119	Microsoft Outlook - Comprehensive
CIS-170	Networking for Non-IT Professionals

total minimum required units 18

Certificate of achievement Computer information systems - web technology

Students completing the program will be able to...

- demonstrate basic graphical user interface operations in a computer environment.
- produce spreadsheets, documents and presentations by using basic to advanced software operations.
- plan and design web pages.

The computer information systems (CIS) certificate of achievement in computer information systems-web technology prepares students for careers in business and government as information technologies and management workers.

Principal areas of study include computer software applications, web graphics and web technology, cloud-based systems, and database and project management. CIS coursework includes terminology and provides hands-on laboratory experience with operating and network systems. Stand-alone and internet-based applications are also covered.

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, during the day, and online.

<i>required courses:</i>		<i>units</i>
CIS-105	Introduction to Web Design	2
CIS-106	Adobe Dreamweaver - Comprehensive.....	2
CIS-107	Introduction to Web Databases	2
CIS-115	Microsoft Word - Comprehensive	2
CIS-116	Microsoft Excel - Comprehensive	2
CIS-118	Microsoft PowerPoint - Comprehensive	2

<i>plus at least 2 units from:</i>	
CIS-100	Microsoft Windows - Comprehensive
CIS-101	Apple Mac Operating System.....

<i>plus at least 4 units from:</i>	
CIS-117	Microsoft Access - Comprehensive
CIS-119	Microsoft Outlook - Comprehensive
CIS-170	Networking for Non-IT Professionals

total minimum required units 18

web technology - recommended electives:	
CIS-108	Introduction to WordPress.....
CIS-117	Microsoft Access - Comprehensive
CIS-120	iPhone and iPad App Development for Beginners
CIS-160	Introduction to MySQL.....

**Certificate of accomplishment
Computer information systems -
database management**

Students completing the program will be able to...

- A. demonstrate basic graphical user interface operations in a computer environment.
- B. apply database syntax, properties, operators, and functions.

The computer information systems (CIS) certificate of accomplishment in computer information systems-database management prepares students for careers in business and government as information technologies and management workers.

Principal areas of study include computer software applications, web graphics and web technology, cloud-based systems, and database and project management. CIS coursework includes terminology and provides hands-on laboratory experience with operating and network systems. Stand-alone and internet-based applications are also covered.

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, during the day, and online.

<i>required courses:</i>	<i>units</i>
CIS-107 Introduction to Web Databases	2
CIS-117 Microsoft Access - Comprehensive	2
CIS-160 Introduction to MySQL.....	2
total minimum required units	6

**Certificate of accomplishment
Computer information systems -
project management**

Students completing the program will be able to...

- A. demonstrate basic graphical user interface operations in a computer environment.
- B. apply the principles of the Project Management Institutes's (PMI) processes of project management.

The computer information systems (CIS) certificate of accomplishment in computer information systems-project management prepares students for careers in business and government as information technologies and management workers.

Principal areas of study include computer software applications, web graphics and web technology, cloud-based systems, and database and project management. CIS coursework includes terminology and provides hands-on laboratory experience with operating and network systems. Stand-alone and internet-based applications are also covered.

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, during the day, and online.

<i>required courses:</i>	<i>units</i>
CIS-180 Introduction to Project Management.....	3
CIS-181 Project Management Fundamentals/ PMI PMP Preparation.....	3
total minimum required units	6

project management - recommended elective:	
CIS-185 Project Management Tools	2

**Certificate of accomplishment
Computer information systems -
web graphics**

Students completing the program will be able to...

- A. demonstrate basic graphical user interface operations in a computer environment.
- B. able to prepare images for sharing and distribution.

The computer information systems (CIS) certificate of accomplishment in computer information systems-web graphics prepares students for careers in business and government as information technologies and management workers.

Principal areas of study include computer software applications, web graphics and web technology, cloud-based systems, and database and project management. CIS coursework includes terminology and provides hands-on laboratory experience with operating and network systems. Stand-alone and internet-based applications are also covered.

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, during the day, and online.

<i>required courses:</i>	<i>units</i>
CIS-130 Adobe Photoshop Elements	2
CIS-132 Adobe Premiere Elements - Comprehensive	2
CIS-133 Developing Video Content for the Web	2
total minimum required units	6

**Certificate of accomplishment
Computer information systems -
web technology**

Students completing the program will be able to...

- A. demonstrate basic graphical user interface operations in a computer environment.
- B. plan and design web pages.

The computer information systems (CIS) certificate of accomplishment in computer information systems-web technology prepares students for careers in business and government as information technologies and management workers.

Principal areas of study include computer software applications, web graphics and web technology, cloud-based systems, and database and project management. CIS coursework includes terminology and provides hands-on laboratory experience with operating and network systems. Stand-alone and internet-based applications are also covered.

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, during the day, and online.

required courses:	units
CIS-105 Introduction to Web Design	2
CIS-106 Adobe Dreamweaver - Comprehensive.....	2
CIS-107 Introduction to Web Databases	2
total minimum required units	6

web technology - recommended electives:

CIS-108 Introduction to WordPress.....	2
CIS-117 Microsoft Access - Comprehensive	2
CIS-120 iPhone and iPad App Development for Beginners	2
CIS-160 Introduction to MySQL.....	2

CIS-100 Microsoft Windows - Comprehensive

- 2 units SC
- 36 hours lecture/18 hours laboratory per term
 - Note: Credit by examination option available. Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This course introduces the functions of the Microsoft Windows Operating System (Win OS), including the graphical user interface, file and folder management, system preferences, and networking. No previous computer experience is required. CSU

CIS-101 Apple Mac Operating System

- 2 units SC
- 36 hours lecture/18 hours laboratory per term
 - Note: Credit by examination option available. Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This course introduces the functions of the Apple Mac Operating System (OS), 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
- 36 hours lecture/18 hours laboratory per term
 - Advisory: CIS-100 or CIS-101 or equivalent
 - Note: Credit by examination option available. Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This course presents fundamentals of the website development cycle. Topics will include basic web design concepts and processes used to design, organize, and maintain basic websites. Emphasis is placed on navigation, organization, presentation, and maintenance of websites. No previous web design experience is required. CSU

CIS-106 Adobe Dreamweaver - Comprehensive

- 2 units SC
- 36 hours lecture/18 hours laboratory per term
 - Advisory: CIS-100 or CIS-101 or equivalent
 - Note: Credit by examination option available. Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This course introduces the web development capabilities of Adobe Dreamweaver. This web authoring program is used for basic and professional web site development. Topics include planning, designing, creating, and troubleshooting web pages using the features of the software. No previous experience with this software is required. CSU

CIS-107 Introduction to Web Databases

- 2 units SC
- 36 hours lecture/18 hours laboratory per term
 - Advisory: CIS-100 or CIS-101 or equivalent
 - Note: Credit by examination option available. Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This course presents the fundamentals of database-driven web page development. Topics will include basic database configuration, the use of server-side tools to connect to a database, and the display and manipulation of database content over the web. CSU

CIS-108 Introduction to WordPress

2 units SC

- 36 hours lecture/18 hours laboratory per term
- Advisory: CIS-100 or CIS-101 or equivalent
- Note: Credit by examination option available. Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This course introduces students to WordPress. This easy to use software is used to create, organize, and maintain web sites. Emphasis is placed on installation, configuration, navigation, organization, presentation, and maintenance of web sites. No previous web design experience is required. CSU

CIS-115 Microsoft Word - Comprehensive

2 units SC

- 36 hours lecture/18 hours laboratory per term
- Advisory: CIS-100 or CIS-101 or equivalent
- Note: Credit by examination option available. Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This course presents the comprehensive functions of Microsoft Word, a powerful word processing program which is part of the Microsoft Office Suite. Topics include formatting and editing documents, forms, charts, and diagrams. Material relevant to the Microsoft certification examination will be covered. No previous experience with this software is required. CSU

CIS-116 Microsoft Excel - Comprehensive

2 units SC

- 36 hours lecture/18 hours laboratory per term
- Advisory: CIS-100 or CIS-101 or equivalent
- Note: Credit by examination option available. Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This course presents the comprehensive functions of Microsoft Excel, a powerful spreadsheet program which is part of the Microsoft Office Suite. Topics include worksheets, charts, formulas, functions, workbooks, and macros. Material relevant to the Microsoft certification examination will be covered. No previous experience with this software is required. CSU

CIS-117 Microsoft Access - Comprehensive

2 units SC

- 36 hours lecture/18 hours laboratory per term
- Advisory: CIS-100 or CIS-101 or equivalent
- Note: Credit by examination option available. Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This course presents the comprehensive functions of Microsoft Access, a powerful database program which is part of the Microsoft Office Suite. Topics include database design, queries, forms, and reports. Material relevant to the Microsoft certification examination will be covered. No previous experience with this software is required. CSU

CIS-118 Microsoft PowerPoint - Comprehensive

2 units SC

- 36 hours lecture/18 hours laboratory per term
- Advisory: CIS-100 or CIS-101 or equivalent
- Note: Credit by examination option available. Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This course presents the comprehensive functions of Microsoft PowerPoint, a powerful presentation program which is part of the Microsoft Office Suite. Topics include presentation development, special effects, slide shows, and the use of text, graphics, and multimedia. Material relevant to the Microsoft certification examination will be covered. No previous experience with this software is required. CSU

CIS-119 Microsoft Outlook - Comprehensive

2 units SC

- 36 hours lecture/18 hours laboratory per term
- Advisory: CIS-100 or CIS-101 or equivalent
- Note: Credit by examination option available. Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This course presents the comprehensive functions of Microsoft Outlook, a powerful email and personal information manager which is part of the Microsoft Office Suite. Topics include managing emails, contacts, calendars, and tasks. Material relevant to the Microsoft certification examination will be covered. No previous experience with this software is required. CSU

CIS-120 iPhone and iPad App Development for Beginners

2 units SC

- 36 hours lecture/18 hours laboratory per term
- Advisory: CIS-100 or CIS-101 or equivalent
- Note: Credit by examination option available. Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This course introduces students to application (app) development for iPhone and iPad devices. Essentials of iPhone and iPad app development including tools, frameworks, and concepts are covered. Hands-on exercises will be used to reinforce theory. No previous app development experience is required. Students will learn the essentials of iPhone and iPad app development: the tools, frameworks, and concepts. Hands-on exercises will be part of this course. CSU

CIS-130 Adobe Photoshop Elements

2 units SC

- 36 hours lecture/18 hours laboratory per term
- Advisory: CIS-100 or CIS-101 or equivalent
- Note: Credit by examination option available. Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This course presents the basics of Adobe Photoshop Elements. Topics include acquiring, organizing, fixing, enhancing, and sharing images. CSU

CIS-132 Adobe Premiere Elements - Comprehensive

2 units SC

- 36 hours lecture/18 hours laboratory per term
- Advisory: CIS-100 or CIS-101 or equivalent
- Note: Credit by examination option available. Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This course introduces students to Adobe Premiere Elements, a full-featured, video-editing program. This course covers how to turn video clips into a single movie, complete with color correction, effects, audio, and titles. Exporting videos to media and devices or online channels such as Facebook and YouTube will be addressed. CSU

CIS-133 Developing Video Content for the Web

2 units SC

- 36 hours lecture/18 hours laboratory per term
- Advisory: CIS-100 or CIS-101 or equivalent
- Note: Credit by examination option available. Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This course prepares students to produce digitally formatted videos and prepare them for use on the Internet. Topics include how to import digital video, create screen captures, edit, and produce video for distribution via online and other digital media. CSU

CIS-140 Introduction to Google Suite

2 units SC

- 36 hours lecture/18 hours laboratory per term

This course covers the applications that comprise the Google Suite cloud tools. Students will use tools to create documents, spreadsheets, presentations, and web forms as well as collaborate in the cloud and connect with other users using chat and video conferencing technology. CSU

CIS-150 Topics in Computer Information Systems

.3-4 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

- 36 hours lecture/18 hours laboratory per term
- Advisory: CIS-100 or CIS-101 or equivalent
- Note: Credit by examination option available. Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

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-170 Networking for Non-IT Professionals

2 units SC

- 36 hours lecture/18 hours laboratory per term
- Note: Credit by examination option available. No previous networking experience is required. Students interested in professional training in computer networking should see the Computer Network Technology (CNT) programs in this catalog.

This course presents the basics of Small Office/Home Office (SOHO) networking. Topics include Internet connectivity, network design, network software, and network devices, such as hubs, switches, and routers. Emphasis is placed on connectivity, hardware, and implementation specifically designed for small office and home networking environments. CSU

CIS-180 Introduction to Project Management

3 units SC

- 54 hours lecture per term
- Note: Credit by examination option available

This course introduces students to project management; topics include key concepts, terminology, principles, and processes. No previous experience with project management is required. CSU

CIS-181 Project Management/PMI PMP Preparation

3 units SC

- 54 hours lecture per term
- Advisory: CIS-180 or equivalent
- Note: Credit by examination option available

This is an intermediate course on project management and builds on skills acquired in CIS-180. This course provides preparation for the internationally-recognized Project Management Institute (PMI) Project Management Professional (PMP) exam, which certifies skills in project management and product delivery. CSU

CIS-185 Project Management Tools

2 units SC

- 36 hours lecture/18 hours laboratory per term
- Advisory: CIS-100 or CIS-101 or equivalent
- Note: Credit by examination option available. Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This course introduces students to the software tools, MS Visio and MS Project used in project management. The software is used to create, save, and publish flow charts, diagrams and task lists as well as to set up and assign project resources, track progress on tasks, organize and format project details, and publish project information. No previous experience with the software is required. CSU

COMPUTER NETWORK TECHNOLOGY – CNT

Charlie Shi, Dean

Business, Computer Sciences, and Culinary Arts Division

Possible career opportunities

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.

The job titles of people employed in computer networking include: systems administrator, network administrator, network engineer, database administrator, LAN specialist and network designer.

Associate in science degree**Information and communication technology**

Students completing the program will be able to...

- terminate, install, and test copper and fiber.
- troubleshoot wireless access points and connections.
- install, configure, and troubleshoot hardware, operating systems, and software applications.
- identify computer components to make informed decisions when purchasing computer hardware and software.
- apply the fundamentals of good programming structure and good programming practices.
- analyze and communicate problem specifications.
- build a simple Ethernet network that includes end-devices and intermediary devices.
- identify security issues with communications, email, web, remote access, and wireless technology.
- differentiate between physical security, disaster recovery, and business continuity.
- identify current network threats and ramifications.
- troubleshoot threats and implement security methods against such threats.

This two-year associate in science degree program is intended to prepare the student for jobs in business and government as introductory positions such as network control specialist, computer system specialists, or specialist network control, entry-level help desk analyst, computer technician, to name a few. A graduate of this program will be able to sit for the Cisco Certified Network Associate (CCNA) exam, the CompTia A+ exam, the CompTia Net+ exam and other industry recognized exams depending on course selection. A graduate will have the required skills to install and configure local area networks that carry data, voice, and video communications, install, operate and maintain network services, routers, switches, and other network devices, resolve network communication problems, support and troubleshoot Personal Computers (PCs), work with a team and demonstrate desirable customer service and communication skills. NOTE: exact skills will depend on course selection.

Computer network technology

DVC information and communication technology 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 GE). 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 information and communication technology, students must complete each course used to meet a major requirement with a "C" grade or higher and complete general education requirements as listed in the catalog. Degree requirements can be completed by attending classes in the day, the evening, or both. Certain courses may satisfy both major and general education requirements; however, the units are only counted once.

<i>major requirements:</i>		<i>units</i>
CNT-103	Voice, Video, and Network Cabling	2
CNT-104	IT Essentials (A+)	4
CNT-106	Introduction to Networks	3
COMSC-101	Computer Literacy	4
COMSC-110	Introduction to Programming.....	4

<i>plus at least 6 units from:</i>		
BUS-250	Business Communications	3
CNT-114	Microsoft Windows Operating System Essentials/Administration	3
CNT-120	Routing and Switching Essentials	3
CNT-140	Introduction to Information Systems Security	4
CNT-148	Introduction to Cybersecurity: Ethical Hacking	3
CNT-149	Digital Forensics Fundamentals	3

<i>plus at least 3 units from:</i>		
BUS-240	Business Statistics.....	3
MATH-142	Elementary Statistics with Probability.....	4
MATH-144	Statway II.....	4
MATH-181	Finite Mathematics.....	3
MATH-182	Calculus for Management, Life Science and Social Science I.....	4
MATH-191	Pre-Calculus.....	5
MATH-192	Analytic Geometry and Calculus I	5

total minimum units for the major 26

Certificate of achievement Information and communication technology Students completing the program will be able to...

- A. terminate, install, and test copper and fiber.
- B. troubleshoot wireless access points and connections.
- C. install, configure, and troubleshoot hardware, operating systems, and software applications.
- D. identify computer components to make informed decisions when purchasing computer hardware and software.
- E. apply the fundamentals of good programming structure and good programming practices.
- F. analyze and communicate problem specifications.
- G. build a simple Ethernet network that includes end-devices and intermediary devices.
- H. identify security issues with communications, email, web, remote access, and wireless technology.
- I. differentiate between physical security, disaster recovery, and business continuity.
- J. identify current network threats and ramifications.
- K. troubleshoot threats and implement security methods against such threats.

This certificate of achievement program is intended to prepare the student for jobs in business and government as introductory positions such as network control specialist, computer system specialists, or specialist network control, entry-level help desk Analyst, computer technician, to name a few. A graduate of this program will be able to sit for the Cisco Certified Network Associate (CCNA) exam, the CompTia A+ exam, the CompTia Net+ exam and other industry recognized exams depending on course selection. A graduate will have the required skills to install and configure local area networks that carry data, voice, and video communications, install, operate and maintain network services, routers, switches, and other network devices, resolve network communication problems, support and troubleshoot Personal Computers (PCs), work with a team and demonstrate desirable customer service and communication skills. NOTE: exact skills will depend on course selection.

To earn a certificate of achievement in information and communication technology, students must complete each course used to meet a major requirement with a "C" grade or higher. Certificate requirements can be completed by attending classes in the day, evening, online, or a combination of those.

<i>major requirements:</i>		<i>units</i>
CNT-103	Voice, Video, and Network Cabling	2
CNT-104	IT Essentials (A+)	4
CNT-106	Introduction to Networks	3
COMSC-101	Computer Literacy	4
COMSC-110	Introduction to Programming.....	4

plus at least 6 units from:

BUS-250	Business Communications	3
CNT-114	Microsoft Windows Operating System Essentials/Administration	3
CNT-120	Routing and Switching Essentials	3
CNT-140	Introduction to Information Systems Security	4
CNT-148	Introduction to Cybersecurity: Ethical Hacking	3
CNT-149	Digital Forensics Fundamentals	3

plus at least 3 units from:

BUS-240	Business Statistics.....	3
MATH-142	Elementary Statistics with Probability.....	4
MATH-144	Statway II.....	4
MATH-181	Finite Mathematics.....	3
MATH-182	Calculus for Management, Life Science and Social Science I.....	4
MATH-191	Pre-Calculus.....	5
MATH-192	Analytic Geometry and Calculus I.....	5
total minimum required units		26

Certificate of achievement

Network cybersecurity

Students completing the program will be able to...

- A. identify computer components to make informed decisions when purchasing computer hardware and software.
- B. build a simple Ethernet network that includes end-deices and intermediary devices.
- C. identify and implement safeguards against common attacks.
- D. identify security issues with communications, email, web, remote access, and wireless technology.
- E. differentiate between physical security, disaster recovery, and business continuity.
- F. demonstrate appropriate and ethical behavior and good work habits.
- G. identify current network threats and ramifications.
- H. troubleshoot threats and implement security methods against such threats.

This program prepares students for a variety of entry-level positions in IT network security and cybersecurity. This program builds on the foundation obtained after completing the network technology fundamentals certificate of achievement. A student completing this program can apply for jobs such as computer network support specialist, computer network defense analysis, computer network defense infrastructure support, network services, penetration tester, systems security analyst; to name a few. 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:

CNT-106	Introduction to Networks	3
CNT-120	Routing and Switching Essentials	3
CNT-140	Introduction to Information Systems Security	4
CNT-146	Internetworking Security.....	2
CNT-148	Introduction to Cybersecurity: Ethical Hacking	3
CNT-149	Digital Forensics Fundamentals	3
total minimum required units.....		19

Certificate of achievement

Network technology fundamentals

Students completing the program will be able to...

- A. terminate, install, and test copper and fiber.
- B. troubleshoot wireless access points and connections.
- C. install, configure, and troubleshoot hardware, operating systems, and software applications.
- D. identify computer components to make informed decisions when purchasing computer hardware and software.
- E. build a simple ethernet network that includes end-devices and intermediary devices.

This program prepares students for a variety of entry level positions in IT networking and the beginning foundation for a student wanting to pursue a career in cyber defense, network forensics, network security and eventually cyber security. 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:

CNT-103	Voice, Video, and Network Cabling	2
CNT-104	IT Essentials (A+).....	4
CNT-106	Introduction to Networks	3
CNT-114	Microsoft Windows Operating System Essentials/Administration	3
CNT-120	Routing and Switching Essentials	3
COMSC-101	Computer Literacy	4
total minimum required units.....		19

CNT-101 Exploring Cyber Safety

1 unit SC

- 13.5 hours lecture/13.5 hours laboratory per term
- Note: This course is open to all, but is particularly appropriate for students in 7th through 12th grade.

This course introduces cybersecurity career opportunities, cyber ethics, online safety, how computers work, and cyber threats. Topics include cybersecurity principles, virtual machines, basic Windows and Linux security policies, tools, account management, fundamental network connectivity, and security. CSU

CNT-102 Exploring Cyber Defense

1 unit SC

- 13.5 hours lecture/13.5 hours laboratory per term
- Advisory: CNT-101
- Note: This course is open to all, but is particularly appropriate for students in 7th through 12th grade.

This course builds on skills presented in CNT-101 and focuses on more advanced cybersecurity principles and skills needed to work with virtual machines. Emphasis is placed on security policies, tools, and account management of both Windows and Linux operating systems. The fundamentals of network connectivity and security are presented. CSU

CNT-103 Voice, Video, and Network Cabling

2 units SC

- 27 hours lecture/27 hours laboratory per term

This course presents the practical aspects of design, installation, testing, and troubleshooting cable carrying voice, data, video, and wireless signals. Successful completion of this course makes a student eligible to sit for the Fiber Optics Association (FOA) certification examination. CSU

CNT-104 IT Essentials (A+)

4 units SC

- 54 hours lecture/54 hours laboratory per term
- Advisory: COMSC-101 or equivalent
- Note: Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This course provides an introduction to the computer hardware and software skills needed to help meet the growing demand for entry-level IT professionals. The fundamentals of computer hardware and software as well as advanced concepts such as security, networking, and the responsibilities of an IT professional will be introduced. Preparation for CompTIA's A+ certification exam is provided. C-ID ITIS 110, CSU

CNT-106 Introduction to Networks

3 units SC

- 36 hours lecture/54 hours laboratory per term
- Advisory: COMSC-101 or equivalent
- Note: Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. The course uses the Open Systems Interconnection (OSI) and Transmission Control Protocol (TCP) layered models to examine the nature and roles of protocols and services at the application, network, data link, and physical layers. The principles and structure of Internet Protocol (IP) addressing, and the fundamentals of Ethernet concepts, media, and operations are introduced. Students build simple Local Area Network (LAN) topologies by applying basic principles of cabling, performing basic configurations of network devices, including routers and switches, and implementing IP addressing schemes. This course is one of the three courses required to prepare for Cisco Certified Network Associate (CCNA) certification exam. C-ID ITIS 150, CSU

CNT-114 Microsoft Windows Operating System Essentials/Administration

3 units SC

- 45 hours lecture/27 hours laboratory per term
- Advisory: CNT-106 or equivalent; COMSC-101 or equivalent

This course is an introduction to Microsoft Windows server operating system and network support. Topics include user accounts, groups and group scopes, permissions, security, Active Directory terminology, optimizing Internet Protocol (IP) address allocation, utilities, and Web Services. CSU

CNT-120 Routing and Switching Essentials

3 units SC

- 36 hours lecture/54 hours laboratory per term
- Advisory: CNT-106 or equivalent
- Note: Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This course presents the architecture, components, and operations of routers and switches in a small network. Students configure and troubleshoot routers and switches for basic functionality and resolve common issues with wireless Local Area Networks (LANs) static routing, virtual LANs, and inter-VLAN (Virtual Local Area Network) routing in both IPv4 (Internet Protocol) and IPv6 networks. This course is one of the three courses required to prepare for Cisco Certified Network Associate (CCNA) certification exam. C-ID ITIS 151, CSU

CNT-125 Introduction to Virtualization Technology

3 units LR

- 45 hours lecture/27 hours laboratory per term
- Advisory: CNT-118 or equivalent
- Note: Students may petition to repeat when software and networking technologies are upgraded. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This course presents an overview of the installation and configuration of both Microsoft and VMWare Virtualization Technologies. Topics include storage systems, business continuity, storage security and management, virtualization technology and concepts. Deployment and administration of various operating systems, Hyper-V, Virtual machine networks will also be covered. CSU

CNT-140 Introduction to Information Systems Security

4 units SC

- 54 hours lecture/54 hours laboratory per term
- Advisory: CNT-106 or equivalent; CNT-120 or equivalent
- Note: Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This course provides an introduction to the fundamental principles and topics of information technology security and risk management at the organizational level. Hardware, software, processes, communications, applications, and policies and procedures with respect to organizational cybersecurity and risk management are addressed. Preparation for the CompTIA Security+ certification exams is provided. C-ID ITIS 160, CSU

CNT-146 Internetworking Security

2 units SC

- 27 hours lecture/27 hours laboratory per term
- Advisory: CNT-140 or equivalent
- Note: Students may petition to repeat this course when software, hardware or certification requirements change. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This course presents a study of network security principles as well as the tools and configurations required to secure a network. CSU

CNT-148 Introduction to Cybersecurity: Ethical Hacking

3 units LR

- 36 hours lecture/54 hours laboratory per term
- Advisory: CNT-114 and CNT-146 or equivalents
- Note: Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This course is intended to prepare students for the following certifications: AccessData Certified Examiner credential, Certified Information Systems Security Professional (CISSP), Cisco Certified Security Professional (CCSP), Security+, and Microsoft Security Certification. Students will analyze computers and networks for vulnerabilities, collect data, and preserve information for forensic investigation. Laws pertaining to computer and network forensic investigation will be presented and students will complete case studies on cyber attack investigations. C-ID ITIS 164, CSU

CNT-149 Digital Forensics Fundamentals

3 units SC

- 36 hours lecture/54 hours laboratory per term
- Advisory: CNT-140 or equivalent
- Note: Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This course introduces the methods used to properly conduct a computer forensics investigation. Topics include ethics, objectives of the International Association of Computer Investigative Specialists (IACIS) certification, computer forensics as a profession, the computer investigation process, operating systems boot processes and disk structures, data acquisition and analysis, technical writing, and computer forensics tools. C-ID ITIS 165, CSU

CNT-150 Topics in Computer Networking

.3-4 units SC

- 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-296 Internship in Occupational Work Experience Education in CNT

2-4 units SC

- *May be repeated eight times*
- *Variable hours*
- *Note: In order to enroll in the CNT-296 course, students must be interning or volunteering, register for the course, complete an online Employment Form, and participate in an orientation. Incomplete grades are not awarded for this course.*

CNT-296 is a supervised internship in a skilled or professional level assignment in the student’s major field of study or area of career interest. Under the supervision of a college instructor, students will engage in on-the-job and other learning experiences that contribute to their employability skills and occupational or educational goals. Internships may be paid, non-paid, or some partial compensation provided. Each unit represents five hours of paid work or four hours of unpaid work per week or 75 hours of paid work or 60 hours of unpaid work per term. Students may earn up to a total of 16 units in any combination of WRKX courses. Repetition allowed per Title 5, Section 55253. CSU

COMPUTER SCIENCE – COMSC

Charlie Shi, Dean
Business, Computer Sciences, and Culinary Arts Division

The computer science department offers courses in three general areas, each targeted to serve students with specific needs:

1. General education students seeking a computer literacy course that 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-101)
2. Computer science transfer students planning to major in computer science or computer engineering at a four-year school (COMSC-110, 165, 200, 210, 255, 260)
3. Information systems (programming) professionals who are seeking to update their skills, (COMSC-120, 171, 172, 255, 256, 257, 275, 276)

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 require more than two years of college study.

Besides offering courses designed to meet lower-division requirements for a major in computer science, there is also a wide variety of courses covering current popular topics and new software development tools and languages. Such courses provide a path for working professionals to upgrade their skill-set and keep abreast with current technology.

**Associate in science degree
Computer science**

Students completing the program will be able to...

- A. create computer programming solutions using either the C++ or Java programming language.
- B. read and write programs written in x86 assembly language, and interface them with C++ programs.
- C. effectively use either the C++ Standard Template Library or the Java util package to manage data structures in programs.
- D. 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.

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. To earn a degree, students must complete each course used to meet a major requirement with a “C” grade or higher and complete all general education requirements as listed in the catalog. Certain courses may satisfy both major and general education requirements; however, the units are only counted once.

<i>major requirements:</i>	<i>units</i>
COMSC-110 Introduction to Programming.....	4
COMSC-165 Advanced Programming with C and C++.....	4
COMSC-210 Program Design and Data Structures	4
COMSC-260 Assembly Language Programming/ Computer Organization.....	4

<i>plus at least 4 units from:</i>	
COMSC-200 Object Oriented Programming C++.....	4
COMSC-256 Advanced Java Programming.....	4

total minimum units for the major 20

Students who intend to transfer to a four-year program in computer science should consult with a counselor regarding mathematics and science requirements listed below.

<i>plus at 0-5 units from:</i>	
MATH-192 Analytic Geometry and Calculus I.....	5
MATH-193 Analytic Geometry and Calculus II.....	5
MATH-195 Discrete Mathematics	4

<i>plus 0-8 units from:</i>	
PHYS-130 Physics for Engineers and Scientists A: Mechanics and Wave Motion.....	4
PHYS-230 Physics for Engineers and Scientists B: Heat and Electro-Magnetism.....	4

Certificate of achievement Computer science - Advanced C++ programming

Students completing the program will be able to...

- create computer programming solutions using C++ and OOP.
- effectively apply inheritance and polymorphism in C++ class design.
- “overload” common C++ operators for objects.

This program prepares students for a variety of programming 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.

<i>required courses:</i>	<i>units</i>
COMSC-110 Introduction to Programming	4
COMSC-165 Advanced Programming with C and C++	4
COMSC-200 Object Oriented Programming C++.....	4
total minimum required units	12

Certificate of achievement Computer science - Advanced Java programming

Students completing the program will be able to...

- create computer programming solutions using Java and GUI.
- write multithreaded Java programs.

This program prepares students for a variety of programming 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.

<i>required courses:</i>	<i>units</i>
COMSC-110 Introduction to Programming	4
COMSC-255 Programming with Java	4
COMSC-256 Advanced Java Programming	4
total minimum required units	12

Certificate of achievement Computer science - Computer architecture

Students completing the program will be able to...

- create computer programming solutions using C++.
- read and write programs written in x86 assembly language, and interface them with C++ programs.

This program prepares students for a variety of programming 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.

<i>required courses:</i>	<i>units</i>
COMSC-110 Introduction to Programming.....	4
COMSC-165 Advanced Programming with C and C++	4
COMSC-260 Assembly Language Programming/ Computer Organization	4
total minimum required units	12

Certificate of achievement Computer science - Mobile and enterprise Java programming

Students completing the program will be able to...

- create networked computer programming solutions using Java.
- write Java programs involving sockets for TCP/IP network communications.
- write Java programs involving Enterprise Java Beans.

This program prepares students for a variety of programming 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.

<i>required courses:</i>	<i>units</i>
COMSC-110 Introduction to Programming.....	4
COMSC-255 Programming with Java	4
COMSC-257 Mobile Programming for Android Using Java	4
total minimum required units	12

Certificate of achievement Computer science - Program design

Students completing the program will be able to...

- create computer programming solutions using C++ and the STL.
- write custom C++ template classes to create and manage data structures.
- evaluate algorithmic efficiency and express in “big oh”.

This program prepares students for a variety of programming 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.

<i>required courses:</i>	<i>units</i>
COMSC-110 Introduction to Programming.....	4
COMSC-165 Advanced Programming with C and C++	4
COMSC-210 Program Design and Data Structures	4
total minimum required units	12

**Certificate of achievement
Computer science -
Python programming**

Students completing this program will be able to...

- A. read and analyze programs written in Python.
- B. write and code programs in Python.
- C. create and develop medium-size applications in Python involving databases, networking, and graphics.

The Python programming language is best known for applications in data analytics and big data processing. Python is also popular in many other software application fields, including graphics, database, network programming, game development, embedded systems, and web and internet development. Organizations running networks on private and public clouds count on Python as a general-purpose solution to fulfill the development requirement of applications. The flexible nature of the language is driving the demand for trained Python programmers.

The certificate of achievement prepares students for jobs that require professional-level Python programming skills. In addition, Python programming skills also provide a good building block as an introduction to programming languages such as JavaScript, Perl, Ruby, and other programming languages.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a "C" grade or higher.

<i>required courses:</i>	<i>units</i>
COMSC-140 Python Programming	3
COMSC-240 Advanced Python Programming.....	3
<i>plus at least 4 units from:</i>	
COMSC-110 Introduction to Programming.....	4
COMSC-275 Introduction to Modern Web Programming Using Python and JavaScript	4
<i>plus at least 4 units from:</i>	
COMSC-165 Advanced Programming with C/C++	4
COMSC-200 Object Oriented Programming C++.....	4
COMSC-255 Programming with Java	4
COMSC-276 Intermediate Web Programming Using PHP and MySQL.....	4
total minimum required units	14

**Certificate of accomplishment
Computer science -
Python programming**

Students completing this program will be able to...

- A. read programs written in Python.
- B. write programs in Python.
- C. create computer programming solutions using Python.

The Python programming language is a very flexible language and is used in database, networking, web development, data analytics, and big data applications. The Python programming certificate of accomplishment will provide students with professional-level training and enhance employability in the above-mentioned fields.

To earn a certificate of accomplishment, students must complete each course used to meet a certificate requirement with a "C" grade or higher.

<i>required courses:</i>	<i>units</i>
COMSC-140 Python Programming	3
COMSC-240 Advanced Python Programming.....	3
total minimum required units	6

COMSC-101 Computer Literacy

- 4 units SC
- *DVC GE: IB*
- *54 hours lecture/54 hours laboratory per term*

This introductory course in computer literacy covers the basics of computer hardware, software, and networking. Topics include local and cloud-based file management, productivity software for word processing, spreadsheets, databases, presentations, and home networks. An introduction to computer programming is also presented. CSU, UC

COMSC-110 Introduction to Programming

- 4 units SC
- *DVC GE: IB*
- *54 hours lecture/54 hours laboratory per term*
- *Prerequisite: Placement into MATH-121 or higher or MATH-085 or MATH-085SP or beginning algebra or equivalent*
- *Advisory: COMSC-101 or equivalent*
- *Note: See schedule of classes for programming language presented. Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.*

This course introduces students to programming concepts 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. C-ID COMP 112, C-ID ITIS 130. CSU, UC

COMSC-120 SQL Programming

- 4 units SC
- *54 hours lecture/54 hours laboratory per term*
- *Advisory: COMSC-110 or ENGIN-135 or equivalent*
- *Note: Refer to class schedule for specific Oracle and SQLServer versions. Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.*

This course presents the creation and maintenance of databases and tables as well as the storage, retrieval and manipulation of data. Topics include both Oracle and Microsoft SQLServer. Structured Query Language (SQL) script that is common to both and product-specific variations are also covered. CSU

COMSC-140 Python Programming

3 units SC

- 45 hours lecture/27 hours laboratory per term
- Note: See schedule of classes for programming language presented. Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This course presents an introduction to the Python language. Topics covered include: primitive and collection data types, operators and statements, loops and branching, functions and variable scoping, modules and packages, object-oriented programming, file handling and exceptions, and an introduction to Graphical User Interface (GUI) programming. CSU, UC

COMSC-150 Topics in Computer Science

.3-4 units SC

- Variable hours
- Note: Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

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-165 Advanced Programming with C and C++

4 units SC

- DVC GE: IB
- 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 is reviewed. Also covered are advanced topics such as string processing, pointers, links lists, queues, stacks, and dynamic memory allocation. C-ID COMP 122. CSU, UC

COMSC-171 Introduction to UNIX and Linux

2 units SC

- 27 hours lecture/27 hours laboratory per term

This is an introductory course in UNIX and Linux operating systems. This course covers scripting and the shell, access control, controlling processes, booting and shutting down, permissions, filesystems, utility programs, editors, usage of network services, storage, AWK scripting, and X Window graphics. CSU, UC

COMSC-172 UNIX and Linux Administration

2 units SC

- 27 hours lecture/27 hours laboratory per term
- Advisory: COMSC-171 or equivalent

This course presents the installation, configuration, and maintenance of UNIX or Linux systems. Topics include installation, booting, user management, hardware configuration, backup, package management, Transmission Control Protocol/Internet Protocol (TCP/IP) configuration, Dynamic Host Control Protocol (DHCP) servers configuration, Domain Name Server (DNS) server configuration, file server configuration, web server configuration, routing, packet filtering, and security. Course content will apply to all UNIX and Linux flavors. CSU

COMSC-200 Object Oriented Programming C++

4 units SC

- 54 hours lecture/54 hours laboratory per term
- Prerequisite: COMSC-165 or equivalent

This course presents the concepts and syntax of the C++ Language. Topics include inheritance, overloaded operators, overloaded default operators, virtual functions, memory management, and templates. CSU, UC

COMSC-210 Program Design and Data Structures

4 units LR

- 54 hours lecture/54 hours laboratory per term
- Prerequisite: COMSC-165 or equivalent
- Advisory: COMSC-200 or equivalent

This course presents techniques relevant to program design and selection of data structures for larger programs. Topics 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 practiced. C-ID COMP 132, CSU, UC

COMSC-230 Discrete Mathematical Structures for Computer Science

3 units LR

- 54 hours lecture per term
- Prerequisite: COMSC-165, COMSC-140 or equivalent

This course introduces students to discrete mathematical structures and their applications in computer science. The course content includes functions, relations and sets, and propositional and predicate logic. Methods of proof, induction, fundamentals of counting, graphs, trees, and discrete probability are also covered. C-ID COMP 152. CSU, UC

COMSC-240 Advanced Python Programming

3 units SC

- 45 hours lecture/27 hours laboratory per term
- Prerequisite: COMSC-140 or Equivalent.
- Note: See schedule of classes for programming language presented. Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This advanced Python programming course is a continuation of COMSC-140, Python Programming, and is designed to prepare students for jobs as Python programmers. Regular expressions and classes are covered extensively along with elements of network programming such as File Transfer Protocol (FTP), web client, and web server. The course also covers graphics, database access, and Python extensions. CSU, UC

COMSC-255 Programming with Java

4 units SC

- DVC GE: IB
- 54 hours lecture/54 hours laboratory per term
- Advisory: 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, Object Oriented Programming (OOP) principles, Graphical User Interface (GUI), Input/Output (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
- Advisory: COMSC-255 or equivalent

This course covers 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 Mobile Programming for Android Using Java

4 units SC

- 54 hours lecture/54 hours laboratory per term
- Advisory: COMSC-255 or equivalent

The course introduces Mobile programming concepts for the Android operating system using Java programming language. The Mobile programming topics covered include activities, services, broadcast receivers, content providers, telephony, text messaging, location services, fragments, user interface file, SQLite database, and Restful web services. CSU

COMSC-260 Assembly Language Programming/Computer Organization

4 units SC

- 54 hours lecture/54 hours laboratory per term
- Prerequisite: COMSC-165 or equivalent

This course covers 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 descriptor tables, virtual memory, cache memory, and dynamic address translation. C-ID COMP 142, CSU, UC

COMSC-275 Introduction to Modern Web Programming Using Python and Javascript

4 units SC

- 54 hours lecture/54 hours laboratory per term
- Advisory: COMSC-110 or equivalent

This introductory course presents the basic concepts and applications of web programming. The course uses the modern JavaScript on the client side and Python on the server side. It introduces the Python language and covers the basics of the JavaScript language as they apply to web programming. HTML (Hyper Text Markup Language) and CSS (Cascading Style Sheets) are also reviewed. CSU

COMSC-276 Intermediate Web Programming Using PHP and MySQL

4 units SC

- 54 hours lecture/54 hours laboratory per term
- Advisory: COMSC-275 or equivalent

This course presents the basic concepts and applications of server side web programming. PHP (Hypertext Preprocessor) is used as the server side programming language and MySQL as the database language. PHP language constructs are used to interface with the database. CSU

COMSC-277 Advanced Web Programming Using PHP

4 units SC

- 54 hours lecture/54 hours laboratory per term
- Advisory: COMSC-275 or equivalent

This is an advanced web programming course that presents advanced concepts and application of both client and server side programming. The JavaScript language as the client side and PHP (Hypertext Preprocessor) as the server side programming language and MySQL as the database will be used. CSU

COMSC-295 Occupational Work Experience Education in COMSC

2-4 units SC

- *May be repeated eight times*
- *Variable hours*
- *Note: In order to enroll in COMSC-295, students must be employed, register for the course, complete an online Employment Form, and participate in an orientation. Incomplete grades are not awarded for this course.*

COMSC-295 is supervised employment that extends classroom learning to the job site and relates to the student's chosen field of study or area of career interest. Under the supervision of a college instructor, students will engage in on-the-job and other learning experiences that contribute to their employability skills and occupational or educational goals. Each unit represents five hours of work per week or 75 hours work per term. Students may earn up to a total of 16 in any combination of WRKX courses. Repetition allowed per Title 5, Section 55253. CSU

COMSC-296 Internship in Occupational Work Experience Education in COMSC

2-4 units SC

- *May be repeated eight times*
- *Variable hours*
- *Note: In order to enroll in the COMSC-296 course, students must be interning or volunteering, register for the course, complete an online Employment Form, and participate in an orientation. Incomplete grades are not awarded for this course.*

COMSC-296 is a supervised internship in a skilled or professional level assignment in the student's major field of study or area of career interest. Under the supervision of a college instructor, students will engage in on-the-job and other learning experiences that contribute to their employability skills and occupational or educational goals. Internships may be paid, non-paid, or some partial compensation provided. Each unit represents five hours of paid work or four hours of unpaid work per week or 75 hours of paid work or 60 hours of unpaid work per term. Students may earn up to a total of 16 units in any combination of WRKX courses. Repetition allowed per Title 5, Section 55253. CSU

CONSTRUCTION – CONST

Despina Prapavessi, Dean
Mathematics and Engineering Division
Mathematics Building, Room 267

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.

Associate in science degree Construction - Construction and building inspection specialization

Students completing the program will be able to...

- interpret the codes related to the construction industry.
- identify code-compliant construction in buildings.
- identify types of zoning used in a jurisdiction.
- write knowledgeable correction notices.
- apply construction terminology.
- identify the effects of various governmental agencies involved in the construction industry on a construction project.
- interpret blueprints and specifications.

Upon successful completion of the construction and building specialization, the student will have the necessary knowledge and skills for a career in building or construction inspection in the construction industry. This program is also valuable for those already employed in the field who wish to upgrade their skills.

To earn an associate in science degree with a major in construction, students must complete each course used to meet a major requirement with a "C" grade or higher and complete all DVC general education requirements as listed in the catalog. A student is eligible for graduation with an associate in science degree after the satisfactory completion of one of three areas of specialization, general education requirements and degree-applicable elective coursework for a total of 60 units. Degree requirements can be completed by attending classes in the day, the evening, or both. Certain courses may satisfy both major and other general education requirements; however, the units are only counted once.

General Education Option 1 (DVC General Education) is appropriate for students who do not intend to transfer. DVC construction 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 GE).

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

Construction

<i>major requirements:</i>	<i>units</i>
CONST-114 Print Reading.....	3
CONST-124 Construction Details and Specifications.....	3
CONST-170 Fundamentals of Building Inspection.....	3
CONST-181 Building Code Interpretation:	
Non-Structural	3
CONST-182 Building Code Interpretation: Structural.....	3
CONST-183 Title 24: Energy Conservation Codes.....	3
CONST-191 Plumbing Code Interpretation	3
CONST-192 Mechanical Code Interpretation	3
CONST-266 Electrical Codes: Articles 90-398.....	3
CONST-267 Electrical Codes: Articles 400-830.....	3
CONST-273 Construction Management.....	3
total minimum units for the major	33

Associate in science degree Construction - Construction and supervision and superintendency specialization

Students completing the program will be able to...

- estimate materials cost (quantity survey).
- apply construction terminology.
- schedule sequences of construction projects.
- identify the effects of various governmental agencies involved in the construction industry on a construction project.
- interpret blueprints and specifications.
- utilize instruments used in surveying.

Upon successful completion of the construction and supervision and superintendency specialization, the student will have the necessary knowledge and skills for a career in building or construction inspection, or for supervision responsibilities in the construction industry. This program is also valuable for those already employed in the field who wish to upgrade their skills.

To earn an associate in science degree with a major in construction, students must complete each course used to meet a major requirement with a "C" grade or higher and complete all DVC general education requirements as listed in the catalog. A student is eligible for graduation with an associate in science degree after the satisfactory completion of one of three areas of specialization, general education requirements and degree-applicable elective coursework for a total of 60 units. Degree requirements can be completed by attending classes in the day, the evening, or both. Certain courses may satisfy both major and other general education requirements; however, the units are only counted once.

General Education Option 1 (DVC General Education) is appropriate for students who do not intend to transfer. DVC construction 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 GE).

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

<i>major requirements:</i>	<i>units</i>
BUS-101 Business English	3
BUSMG-120 Introduction to Management Studies.....	3
BUSMG-121 Practices and Concepts of Supervision.....	3
CONST-114 Print Reading.....	3
CONST-116 Plane Surveying.....	4
CONST-124 Construction Details and Specifications	3
CONST-244 Estimating: Residential	3
CONST-245 Estimating: Commercial.....	3
CONST-273 Construction Management	3
CONST-276 Legal Aspects of the Construction Industry.....	3

<i>plus at least 3 units from:</i>	<i>units</i>
CONST-110 Occupational Safety.....	2
CONST-136 Construction Processes: Commercial.....	4
CONST-181 Building Code Interpretation:	
Non-Structural.....	3
CONST-295 Occupational Work Experience Education in CONST	2-4
total minimum units for the major	34

Associate in science degree Construction - Construction management specialization

Students completing the program will be able to...

- estimate materials cost (quantity survey).
- apply construction terminology.
- schedule sequences of construction projects.
- identify the effects of various governmental agencies involved in the construction industry on a construction project.
- interpret blueprints and specifications.

Upon successful completion of the construction management specialization, the student will have the necessary knowledge and skills for a career in building or construction inspection, or for supervision responsibilities in the construction industry. This program is also valuable for those already employed in the field who wish to upgrade their skills.

To earn an associate in science degree with a major in construction, students must complete each course used to meet a major requirement with a "C" grade or higher and complete all DVC general education requirements as listed in the catalog. A student is eligible for graduation with an associate in science degree after the satisfactory completion of one of three areas of specialization, general education requirements and degree-applicable elective coursework for a total of 60 units. Degree requirements can be completed by attending classes in the day, the evening, or both. Certain courses may satisfy both major and other general education requirements; however, the units are only counted once.

General Education Option 1 (DVC General Education) is appropriate for students who do not intend to transfer. DVC construction 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 GE).

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

<i>major requirements:</i>		<i>units</i>
BUS-101	Business English.....	3
COMSC-101	Computer Literacy	4
CONST-135	Construction Processes: Residential	4
CONST-136	Construction Processes: Commercial.....	4
CONST-144	Materials of Construction	3
CONST-244	Estimating: Residential	3
CONST-273	Construction Management.....	3
CONST-276	Legal Aspects of the Construction Industry.....	3
MATH-119	Beginning and Intermediate Algebra.....	4
PHYS-110	Elementary Physics.....	3
 <i>plus at least 3 units from:</i>		
ARCHI-126	Computer Aided Design and Drafting – AutoCAD.....	3
ARCHI-127	Introduction to Revit.....	3
ARCHI-244	Architectural Practice and Working Drawings.....	3
total minimum units for the major		37

Associate in science degree Pre-apprenticeship

Students completing the program will be able to...

- A. interpret blueprints and specifications.
- B. apply construction terminology.
- C. use currently available basic personal protective equipment and be able to select appropriate equipment for a given environment.
- D. identify the most common sources of occupational injury and death.
- E. apply principles of job site safety.
- F. practice professional behavior on the construction site.
- G. demonstrate a clear understanding of many trades, interactions, interdependencies, and how the basic construction process flows from one trade to another.

This program prepares students for entry-level jobs in the building trades and/or entry into apprenticeship programs. Program content includes introduction to construction processes, occupational health and safety principles, and blueprint reading. In addition, the program provides contextualized math and English, physical education, a survey of trades, and college and workplace successes.

Upon completion of the program students will be able to directly enter the Northern California Laborers’ union, enter the Carpenters Training Committee for Northern California pre-apprenticeship program, or apply to a variety of apprenticeship programs, government agencies, and private-sector employers.

The associate in science degree requires eighteen units in the major, a minimum of units of general education units, and 18.5 elective units from a selection of degree applicable units. The certificate program courses also meet some of the requirements of other construction degrees and certificates. 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. Students are advised that if they have previously completely equivalent or higher level English and/or math courses, these may be substituted for the requirements of the degree major. Many trades require documentation of at least one year of high school or one term of college algebra and higher levels of English and mathematics are highly recommended.

<i>major requirements:</i>		<i>units</i>
CARER-140	Job Search Strategies	1
CONST-105	Survey of the Trades	1.5
CONST-110	Occupational Safety.....	2
CONST-114	Print Reading.....	3
CONST-135	Construction Processes: Residential	4
CONST-215	Construction Job Site Training	2
ENGL-122	First-Year College Writing and Reading.....	3
KNACT-120	Fitness Training	1
MATH-119	Beginning and Intermediate Algebra.....	4
total minimum units for the major		21.5

Certificate of achievement Construction and building inspection

Students completing the program will be able to...

- A. interpret the codes related to the construction industry.
- B. identify code-compliant construction in buildings.
- C. identify types of zoning used in a jurisdiction.
- D. write knowledgeable correction notices.
- E. apply construction terminology.
- F. identify the effects of various governmental agencies involved in the construction industry on a construction project.
- G. interpret blueprints and specifications.

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.

Construction

<i>required courses:</i>	<i>units</i>
CONST-114 Print Reading.....	3
CONST-124 Construction Details and Specifications.....	3
CONST-170 Fundamentals of Building Inspection.....	3
CONST-181 Building Code Interpretation: Non-Structural.....	3
CONST-182 Building Code Interpretation: Structural.....	3
CONST-183 Title 24: Energy Conservation Codes.....	3
CONST-191 Plumbing Code Interpretation.....	3
CONST-192 Mechanical Code Interpretation.....	3
CONST-266 Electrical Codes: Articles 90-398.....	3
CONST-267 Electrical Codes: Articles 400-830.....	3
CONST-273 Construction Management.....	3
total minimum required units	33

Certificate of achievement Construction and supervision and superintendency

Students completing the program will be able to...

- estimate materials cost (quantity survey).
- apply construction terminology.
- schedule sequences of construction projects.
- identify the effects of various governmental agencies involved in the construction industry on a construction project.
- interpret blueprints and specifications.
- utilize instruments used in surveying.

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.

<i>required courses:</i>	<i>units</i>
BUS-101 Business English.....	3
BUSMG-120 Introduction to Management Studies.....	3
BUSMG-121 Practices and Concepts of Supervision.....	3
CONST-114 Print Reading.....	3
CONST-116 Plane Surveying.....	4
CONST-124 Construction Details and Specifications.....	3
CONST-244 Estimating: Residential.....	3
CONST-245 Estimating: Commercial.....	3
CONST-273 Construction Management Studies.....	3
CONST-276 Legal Aspects of the Construction Industry.....	3
total minimum required units	31

Certificate of achievement Construction management

Students completing the program will be able to...

- estimate materials cost (quantity survey).
- apply construction terminology.
- schedule sequences of construction projects.
- identify the effects of various governmental agencies involved in the construction industry on a construction project.
- interpret blueprints and specifications.

This two-year program is designed to prepare students for positions in middle management or as technicians in the construction industry, working with a contractor, architect, engineer, or supplier and including such duties as material takeoff, estimating costs, purchasing, and timekeeping.

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

<i>required courses:</i>	<i>units</i>
BUS-101 Business English.....	3
COMSC-101 Computer Literacy.....	4
CONST-135 Construction Processes: Residential.....	4
CONST-136 Construction Processes: Commercial.....	4
CONST-144 Materials of Construction.....	3
CONST-244 Estimating: Residential.....	3
CONST-273 Construction Management.....	3
CONST-276 Legal Aspects of the Construction Industry.....	3
MATH-119 Beginning and Intermediate Algebra.....	4
PHYS-110 Elementary Physics.....	3

plus at least 3 units from:

ARCHI-126 Computer Aided Design and Drafting – AutoCAD.....	3
ARCHI-127 Introduction to Revit.....	3
ARCHI-244 Architectural Practice and Working Drawings.....	3

total minimum required units 37

Certificate of achievement Pre-apprenticeship

Students completing the program will be able to...

- interpret blueprints and specifications.
- apply construction terminology.
- use currently available basic personal protective equipment and be able to select appropriate equipment for a given environment.
- identify the most common sources of occupational injury and death.
- apply principles of job site safety.
- practice professional behavior on the construction site.
- demonstrate a clear understanding of many trades, interactions, interdependencies, and how the basic construction process flows from one trade to another.

This program prepares students for entry-level jobs in the building trades and/or entry into apprenticeship programs. Program content includes introduction to construction processes, occupational health and safety principles, and blueprint reading. In addition, the program provides contextualized math and English, physical education, a survey of trades, and college and workplace success.

Upon completion of the program students will be able to directly enter the Northern California Laborers' union, enter the Carpenters Training Committee for Northern California pre-apprenticeship program, or apply to a variety of apprenticeship programs, government agencies, and private-sector employers.

The certificate of achievement requires completion of 21 units of study and certain courses also meet requirements of other construction degrees and certificates. Students must complete each course used to meet a certificate requirement with a "C" grade or higher. Students are advised that entry into apprenticeship programs can be highly competitive and that many trades require documentation of at least one year of high school or one term of college algebra. Completion of higher levels of English and mathematics than are required by the certificate are highly recommended. Students will enroll in CARER-140, CONST-105, CONST-135, CONST-215, and KNACT-120 as a cohort and complete these courses in one term.

<i>required courses:</i>	<i>units</i>
CARER-140 Job Search Strategies	1
CONST-105 Survey of the Trades	1.5
CONST-110 Occupational Safety.....	2
CONST-114 Print Reading.....	3
CONST-135 Construction Processes: Residential	4
CONST-215 Construction Job Site Training	2
KNACT-120 Fitness Training	1
MATH-092* Math for Trade Pre-Apprentices	4

<i>plus at least 3 units from*:</i>	
ENGL-096 Introduction to College Reading and Study Skills	3
ENGL-098 Introduction to College Writing.....	3
total minimum required units	21.5

** Higher level Math and English may be substituted for the certificate of achievement. You must have completed English and Math at the level designated or higher through assessment or prior equivalent classes or by concurrent enrollment.*

Certificate of accomplishment Pre-apprenticeship

Students completing the program will be able to...

- A. interpret blueprints and specifications.
- B. apply construction terminology.
- C. use currently available basic personal protective equipment and be able to select appropriate equipment for a given environment.
- D. identify the most common sources of occupational injury and death.
- E. apply principles of job site safety.
- F. practice professional behavior on the construction site.
- G. demonstrate a clear understanding of many trades, interactions, interdependencies, and how the basic construction process flows from one trade to another.

This program prepares students for entry-level jobs in the building trades and/or entry into apprenticeship programs. Certain courses also meet requirements of other construction degrees and certificates. Students must complete each course with a "C" grade or higher.

<i>required courses:</i>	<i>units</i>
CONST-110 Occupational Safety.....	2
CONST-114 Print Reading.....	3
<i>plus at least 3 units from*:</i>	
ENGL-096 Introduction to College Reading and Study Skills	3
ENGL-097 Introduction to College Reading and Writing	5
ENGL-098 Introduction to College Writing.....	3
<i>plus at least 3 units from*:</i>	
MATH-092 Math for Trade Pre-Apprentices.....	4
MATH-119 Beginning and Intermediate Algebra.....	4
MATH-121 Plane Trigonometry	3
total minimum required units	11

**Higher level Math and English may be substituted for the certificate of accomplishment.*

CONST-101 Exploring Construction, Architecture, Manufacturing, and Engineering

- 1 unit P/NP
- 18 hours lecture/22 hours laboratory per term
 - Note: Field trips required.

This course provides an overview of employment trends, work attitudes, values, materials, processes, and career opportunities in construction, architecture, manufacturing, and engineering. Students will explore these topics through lecture and hands-on experience with high-tech equipment and processes, guest lectures, and field trips to industrial sites. CSU

CONST-105 Survey of the Trades

- 1.5 units SC
- 18 hours lecture/36 hours laboratory per term

The course presents a survey of career opportunities and requirements of the skilled trades as well as basic theoretical and practical skills common to all construction trades. CSU

CONST-110 Occupational Safety

2 units SC

- 36 hours lecture/18 hours laboratory per term
- Note: Students meeting all course requirements will be eligible for a 30 hour OSHA Construction Safety Card. Students may petition to repeat when regulatory or industry standards change. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This course covers the principles of health and safety in construction. Occupational Safety and Health Administration (OSHA) and Environmental Protection Agency (EPA) regulations and how they are applied to construction will be covered. CSU

CONST-114 Print Reading

3 units SC

- 54 hours lecture per term

This course presents the interpretation of construction documents, drawings, and specifications used in the building industry. Students are introduced to project plans for single and multi-family dwellings as well as mixed-use and light commercial. CSU

CONST-116 Plane Surveying

4 units SC

- 54 hours lecture/54 hours laboratory per term
- Prerequisite: MATH-121 or equivalent
- Note: Same as ENGIN-140

This course covers the principles and practices of surveying including measurement of distances, directions, elevations and measuring standards. An introduction to electronic measurements and calibration as well as systematic and random error analysis is presented. Students will use surveying instruments, perform Global Positioning System (GPS) measurements; and gain experience with map reading and mapping. CSU, UC

CONST-124 Construction Details and Specifications

3 units SC

- 54 hours lecture per term

This course presents the study of construction drawings and specifications for building systems. Details related to foundations, roofs, windows, doors, stairs, elevators, metal fabrications, and reinforced concrete are covered. The study of thermal and moisture protection, structural steel, wood-framed, and heavy-timber buildings and the interpretation and sketching of details is emphasized. CSU

CONST-135 Construction Processes: Residential

4 units SC

- 54 hours lecture/54 hours laboratory per term
- Note: Credit by examination option available.

This course is an introduction to basic processes of the construction industry. Students will study light wood-frame construction and code requirements in residential construction. The areas of focus include quantity analysis, work activity sequencing, and scheduling. CSU

CONST-136 Construction Processes: Commercial

4 units SC

- 54 hours lecture/54 hours laboratory per term

This course is an overview of the processes of heavy construction including review of the working plans/drawings, construction sites, layout, substructures, superstructures made of concrete, steel, masonry, and wood. CSU

CONST-144 Materials of Construction

3 units SC

- 54 hours lecture per term

This course introduces the performance characteristics of construction materials. Testing concepts and procedures, basic properties of metals, concrete, timber, masonry, and roofing materials with an emphasis on construction applications will also be covered. CSU

CONST-150 Topics in Construction

.3-4 units SC

- Variable hours

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

CONST-170 Fundamentals of Building Inspection

3 units SC

- 54 hours lecture per term

This course is focused on basic construction inspection procedures and the inspector's legal responsibilities. Topics to be covered include inspecting structures, occupancy types, safety, and proper record keeping. CSU

CONST-180 California Building Codes for Disability Access

3 units SC

- 54 hours lecture per term

This course provides an overview of building codes as they relate to disability access. Federal and State statutes, regulations, and case law associated with disability will also be covered. CSU

CONST-181 Building Code Interpretation: Non-Structural

- 3 units SC
 • 54 hours lecture per term

This course provides an overview of the legal requirements associated with building inspection. Nonstructural plan check review, and inspection procedures for commercial and industrial buildings will also be covered. CSU

CONST-182 Building Code Interpretation: Structural

- 3 units SC
 • 54 hours lecture per term
 • Advisory: MATH-085 or MATH-085SP or beginning algebra or equivalent

This course acquaints the student with legal requirements associated with building inspection. The development of code item checklists and structural plan reviews will also be covered. CSU

CONST-183 Title 24: Energy Conservation Codes

- 3 units SC
 • 54 hours lecture per term

This course presents an overview of Title 24, Part 6 of the California Energy Regulation as it covers energy conservation and energy compliance codes. The focus of the course is on residential buildings which includes plan review, field inspection and Home Energy Rating System (HERS) verification during and after construction. Course work also includes energy projects, reviewing computer-generated energy compliance forms, case studies, and reviewing plan-checking procedures. CSU

CONST-191 Plumbing Code Interpretation

- 3 units SC
 • 54 hours lecture per term
 • Note: Students may petition to repeat when code changes. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This course covers the interpretation and application of codes and standards as they apply to the construction of plumbing systems. An overview of the California Plumbing Code and its application to residential and commercial construction will be covered. CSU

CONST-192 Mechanical Code Interpretation

- 3 units SC
 • 54 hours lecture per term

This course acquaints students with legal requirements associated with building inspections. The California Mechanical Code and other standards as they apply to heating, ventilation, and refrigeration will also be discussed. CSU

CONST-215 Construction Job Site Training

- 2 units SC
 • 9 hours lecture/81 hours laboratory per term
 • Note: Job site experiences are scheduled off-campus. Students must provide transportation to and from job sites.

This course provides students with real job site experience in the construction trades. Students will participate as individuals and/or in group projects with organizations such as Habitat for Humanity and other community organizations. CSU

CONST-244 Estimating: Residential

- 3 units SC
 • 54 hours lecture per term
 • Advisory: CONST-114 or CONST-135 or equivalent

This course will present the procedures for estimating materials, labor costs, time management, and bidding strategies for residential construction projects. CSU

CONST-245 Estimating: Commercial

- 3 units SC
 • 54 hours lecture per term
 • Advisory: CONST-114 and CONST-136 or equivalents

This course will present the procedures for estimating materials, labor costs, time management, and bidding strategies for commercial construction projects. CSU

CONST-266 Electrical Codes: Articles 90-398

- 3 units SC
 • 54 hours lecture per term
 • Note: Same as ELECT-266. Students may petition to repeat when code changes. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This course covers the interpretation of the National Electrical Code (NEC) for general requirements, wiring and protection, wiring methods, and materials (articles 90-398). Safety installation practices will be presented. CSU

CONST-267 Electrical Codes: Articles 400-830

- 3 units SC
 • 54 hours lecture per term
 • Note: Same as ELECT-267. Students may petition to repeat when code changes. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This course covers the interpretation of the National Electrical Code (NEC) for equipment for general use, special occupancies and special equipment (Articles 400-830). Safety installation practices will be presented. CSU

Construction

CONST-273 Construction Management

3 units SC

- 54 hours lecture per term

This course introduces administrative procedures, contracts, plans and specifications, schedules, diaries, inspections, report writing, estimating, cost management, safety, and other communication forms in the construction field. The different roles in construction management will also be discussed. CSU

CONST-276 Legal Aspects of the Construction Industry

3 units SC

- 54 hours lecture per term

This course provides a summary of the legal implications of the duties and responsibilities of a construction supervisor, superintendent, and contractor. The emphasis is on the practical aspects of legal theories, codes, and cases that are applied to the construction industry. Attention will also be given to contracts and their interpretations. CSU

CONST-295 Occupational Work Experience Education in CONST

2-4 units SC

- May be repeated eight times
- Variable hours
- Note: In order to enroll in CONST-295, students must be employed, register for the course, complete an online Employment Form, and participate in an orientation. Incomplete grades are not awarded for this course.

CONST-295 is supervised employment that extends classroom learning to the job site and relates to the student's chosen field of study or area of career interest. Under the supervision of a college instructor, students will engage in on-the-job and other learning experiences that contribute to their employability skills and occupational or educational goals. Each unit represents 5 hours of work per week or 75 hours of work per term. Students may earn up to a total of 16 units in any combination of WRKX courses. Repetition allowed per Title 5 Section 55253. CSU

CONST-298 Independent Study

.5-3 units SC

- Variable hours
- Note: Submission of acceptable educational contract to department and Instruction Office is required.

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. CSU

CONST-299 Student Instructional Assistant

.5-3 units SC

- 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

COUNSELING – COUNS

Emily Stone, Dean

Counseling Division

Student Services Center, Room 122

Possible career opportunities

Diablo Valley College's counseling courses are designed to assist students in identifying educational and career goals, and enhancing their success through instruction in career and educational planning and student success strategies.

COUNS-075 Topics in College Readiness

.3-4 units P/NP

- Non degree applicable
- Variable hours

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

COUNS-095 Educational Planning

.3 unit P/NP

- Non degree applicable
- 6 hours lecture per term
- Limitation on Enrollment: Students must complete the Online Orientation and Online Placement process for math and English assessments prior to enrolling in this course.

This course provides an introduction to educational goal setting and course selection. Students will develop a plan to succeed in achieving their educational goal. Topics will include identification of interest area, educational and career goals, academic placement, counseling, and advising services.

COUNS-096 Orientation for Student-Athletes

.3 unit P/NP

- *Non degree applicable*
- *6 hours lecture per term*
- *Limitation on enrollment: Students must complete the online orientation and math and English assessments prior to enrolling in this course.*

This course provides an introduction to educational goal setting and course selection for student-athletes. Students will develop an education plan to succeed in achieving their educational and athletic goals. Topics include general college information, intercollegiate academic eligibility requirements and regulations, registration procedures, and student-athlete academic success strategies. Important college services for student-athletes will be emphasized.

COUNS-097 Educational Planning for DSS Students

.3 unit P/NP

- *Non degree applicable*
- *6 hours lecture per term*
- *Note: Submit disability documentation to the DSS office in SSC-248 prior to registering for this course. Completion of English and mathematics assessment four days prior to this course will facilitate appropriate course selection.*

This course provides an introduction to college for students with disabilities using course content tailored to meet the unique needs of this population. It will provide students in Disability Support Services (DSS) with a concrete plan for enrolling and succeeding in college. Topics include: an overview of DSS services and accommodations at Diablo Valley College (DVC), an explanation of the differences between high school and college, an overview of general information about certificate, associate degree and transfer pathways, and how to build a student educational plan.

COUNS-100 New Student Success Strategies

1 unit SC

- *18 hours lecture per term*

This course introduces new students to information, resources and skills necessary for college success. Topics will include educational opportunities, campus resources, study skills and strategies. The class also provides instruction in educational planning to reach certificate, degree and transfer goals. CSU, UC (Credit limitations may apply to UC - see counselor.)

COUNS-120 Student Success

3 units SC

- *CSU GE: E*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course presents skills and strategies to succeed as a college student. Topics such as motivation and attitudes, time management, decision-making processes, goal-setting, critical thinking skills, study skills, and interpersonal communication will be explored. Students will evaluate their own skills and behaviors in relation to these topics and learn strategies to make meaningful choices about their education, career and personal goals. CSU, UC (credit limits may apply to UC - see counselor)

COUNS-125 Student Strategies for Happiness and Well-being

3 units SC

- *CSU GE: E*
- *54 hours lecture per term*

This course will engage students in the study and application of current research related to happiness and well-being. Students will practice strategies for creating more happiness, well-being, and fulfillment in their lives. Topics include the biological, environmental, and behavioral influences on happiness, as well as the cultural dimensions of well-being. the role of emotional intelligence, mindfulness, gratitude, altruism/activism, optimism, purpose and other factors in the cultivation of happiness is emphasized. Students will also be introduced to campus and community services that address common college mental health challenges. CSU, UC (credit limits may apply to UC - see counselor)

COUNS-130 Transfer Planning

1.5 units SC

- *27 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course presents an overview of the transfer admission requirements, application process, and procedures. Topics include transfer to private, public, in-state, and out-of-state colleges and universities, transfer admission programs, major preparation, and articulation agreements. A key component of this course includes applying research skills and strategies using a variety of techniques to find, retrieve, and evaluate transfer planning information to create a personal education plan. CSU

COUNS-140 Student Success for International Students

- 3 units SC
- CSU GE: E
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This course presents skills and strategies to succeed as an international college student studying on a non-immigrant visa. Topics such as motivation and attitudes, time management, culture shock, decision-making processes, goal setting, critical thinking skills, study skills, interpersonal communication, and successfully navigating the U.S. education system will be explored. Students will evaluate their own skills and behaviors in relation to these topics and learn strategies to make meaningful choices about their education, career, and personal goals. CSU, UC

COUNS-150 Topics in Counseling

- .3-4 units SC
- 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 SC
- Variable hours

An interpersonal experience designed to develop self-awareness and to increase understanding of and competence in interpersonal relationships. CSU

CULINARY ARTS – CULN

Charlie Shi Dean
Business, Computer Science, and Culinary Division

Possible career opportunities

The culinary arts program prepares you with a broad level of skill and provides professional training for employment as a restaurant chef, culinary supervisor, line cook, kitchen manager, food server, caterer, banquet chef, dining room manager, and school foodservice specialist.

The baking and pastry program provides professional training for employment as a baker or pastry chef in restaurants, hotels, resorts, bakeries, grocery food chains, cafés, hospitals, resorts, child care facilities, cafeterias, food preparation centers, and catering facilities. Career options include bakery production finisher, pastry decorator, caterer, baker assistant, bakery entrepreneur, and bakery/pastry chef.

The restaurant management program addresses all aspects of food and beverage operations and provides professional training to enter the restaurant field as a manager-trainee in a food service establishment. Career options include restaurant owner/operator, banquet manager, dining room manager, purchasing specialist, catering manager, and food entrepreneur. Some career options may require more than two years of college study.

**Associate in science degree
Baking and pastry**

Students completing the program will be able to...

- A. identify equipment and utensils used in baking and discuss proper use and care.
- B. discuss the properties and functions of various ingredients, and demonstrate proper scaling and measurement techniques.
- C. explain and apply baking/pastry terms and procedures appropriately.
- D. demonstrate current food service sanitation procedures.
- E. select, organize, and analyze ingredients used in baking and pastry production.
- F. select, recognize, and utilize equipment and tools used in baking and pastry production.
- G. scale and measure ingredients properly.
- H. produce a variety of bakery products using standard baking procedures and evaluate the products based of method, timing, appearance, texture, cell structure and overall eating quality.

DVC has been placing students in small and large bakeries, specialty pastry shops, catering and dessert preparation in restaurants for many years. 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 program’s technical facilities. In addition to training at the DVC facilities, students may gain experience working outside the college through an internship program. DVC’s associate degree 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 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.

<i>major requirements:</i>	<i>units</i>
CULN-105 Kitchen Foundations	2
CULN-153 Safety and Sanitation	2
CULN-161 Baking Foundations	2
CULN-163 Science and Substitutes in Baking and Pastry ...2	
CULN-181 Fundamental Techniques of Baking and Pastry..5	
CULN-185 Nutritional Guidelines in Food Preparation	2
CULN-192 Purchasing Operations and Product Identification.....	1.5
CULN-193 Purchasing Operations and Systems Laboratory	1.5
CULN-209 Plated Seasonal Dessert.....	2
CULN-210 Artisan Bread	2
CULN-212 Candies, Chocolates, and Truffles.....	2
CULN-215 Decorative Confectionery Showpieces	1
CULN-281 Advanced Techniques of Baking and Pastry.....	5

plus at least 3 units from:

CULN-110	Orientation to Hospitality	3
CULN-129	Introduction to Urban Farming: Farm-to-Table ...	1
CULN-186	Sustainable Hospitality – Energy, Water and Waste.....	1
CULN-195	Supervisory Management in Food Service	3
CULN-230A	Culinary Competition I	0.5
CULN-230B	Culinary Competition II	0.5
CULN-235A	Off-Campus Catering I.....	0.5-1
CULN-235B	Off-Campus Catering II.....	0.5-1
CULN-240A	On-Campus Catering I.....	0.5-1
CULN-240B	On-Campus Catering II.....	0.5-1
CULN-240C	On-Campus Catering III.....	0.5-1
CULN-295	Occupational Work Experience Education in CULN.....	2-4
CULN-296	Internship in Occupational Work Experience Education in CULN.....	2-4
CULN-298	Independent Study.....	2-3
CULN-299	Student Instructional Assistant.....	2-3
total minimum units for the major		33

Associate in science degree Culinary arts

Students completing the program will be able to...

- discuss the criteria for excellence in purchasing food, preparing food, and presenting food for service.
- demonstrate teamwork in planning, purchasing, preparing and presenting food for service.
- demonstrate and describe the differences in producing foods for large events vs. à la carte dining.
- demonstrate the proper application of dry, moist, and combination cooking methods to a variety of food products.
- demonstrate current food service sanitation procedures.
- serve food according to professional industry standards.
- calculate costs and apply procedures in order to run a cost effective food service establishment.
- create menus that incorporate menu planning principles that maximize sales and profits.

Diablo Valley College's culinary arts program offers an in-depth, hands-on learning curriculum where students gain both knowledge and experience in the program's technical facilities. In addition to training at the DVC facilities, students may gain experience working outside the college through an internship program. DVC's associate degree 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.

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.

major requirements:

CULN-105	Kitchen Foundations	2
CULN-120	Fundamentals of Cuisine	5
CULN-123	Soups, Stocks, and Sauces.....	2
CULN-124	Breakfast, Brunch, and Bistro Cuisine	2
CULN-127	Garde Manger	2
CULN-153	Safety and Sanitation.....	2
CULN-161	Baking Foundations	2
CULN-175	Protein Fabrication	2
CULN-185	Nutritional Guidelines in Food Preparation	2
CULN-192	Purchasing Operations and Product Identification.....	1.5
CULN-193	Purchasing Operations and Systems Laboratory.....	1.5
CULN-202	Fundamentals of Modern Restaurant.....	5
CULN-228	International Cuisines.....	2

plus at least 3 units from

CULN-110	Orientation to Hospitality	3
CULN-129	Introduction to Urban Farming: Farm-to-Table ...	1
CULN-186	Sustainable Hospitality-Energy, Water and Waste.....	1
CULN-195	Supervisory Management in Food Service	3
CULN-230A	Culinary Competition I	0.5
CULN-230B	Culinary Competition II	0.5
CULN-235A	Off-Campus Catering I.....	0.5-1
CULN-235B	Off-Campus Catering II.....	0.5-1
CULN-240A	On-Campus Catering I.....	0.5-1
CULN-240B	On-Campus Catering II.....	0.5-1
CULN-240C	On-Campus Catering III.....	0.5-1
CULN-295	Occupational Work Experience Education in CULN.....	2-4
CULN-296	Internship in Occupational Work Experience Education in CULN.....	2-4
CULN-298	Independent Study.....	2-3
CULN-299	Student Instructional Assistant.....	2-3
total minimum units for the major		34

Associate in science degree Restaurant management

Students completing the program will be able to...

- demonstrate proper service techniques used in the culinary industry.
- demonstrate teamwork in planning, purchasing, preparing and presenting food for service.
- explore opportunities available in California's hospitality and culinary industry.
- explain factors that determine quality food.
- explain and list both the advantages and disadvantages comparing full service to buffet service.
- demonstrate current food service sanitation procedures.
- plan, organize, setup and serve special events for 50-150 guests.
- calculate cost and apply procedures in order to run a cost effective food service establishment.

Culinary arts

Diablo Valley College's restaurant management program offers an in-depth, hands-on learning curriculum where students gain both knowledge and experience through the program's technical facilities. Restaurant management students work and learn in a fully equipped food production kitchen, a demonstration laboratory, a retail pastry shop and a restaurant that is open to the public. In addition to training at the DVC facilities, students may gain experience working outside the college through an internship program. DVC's associate degree in restaurant management is geared primarily towards DVC's culinary students desiring some additional management course work. Students who are interested in pursuing a management-focused program in hospitality should expect to complete a four-year degree program at a university. These students should see a counselor or faculty advisor and consider the General Education Requirements Options 2 or 3. The associate degree in hospitality studies may be an appropriate program choice for students who wish to transfer to a university.

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 degree requirement with a "C" grade or higher and maintain an overall GPA of 2.5 or higher in the coursework required for the degree.

<i>major requirements:</i>	<i>units</i>
BUSAC-181 Applied Accounting.....	3
CULN-105 Kitchen Foundations	2
CULN-120 Fundamentals of Cuisine	5
CULN-153 Safety and Sanitation.....	2
CULN-160 Fundamentals of Beverage, Wine and Spirits	3
CULN-161 Baking Foundations	2
CULN-192 Purchasing Operations and Product Identification.....	1.5
CULN-193 Purchasing Operations and Systems Laboratory	1.5
CULN-195 Supervisory Management in Food Service	3
CULN-201 Principles of Food, Beverage, and Cost Controls	3
CULN-202 Fundamentals of Modern Restaurant.....	5
<i>plus at least 3 units from:</i>	
CULN-110 Orientation to Hospitality	3
CULN-129 Introduction to Urban Farming: Farm-to-Table ...	1
CULN-186 Sustainable Hospitality – Energy, Water and Waste	1
CULN-230A Culinary Competition I	0.5
CULN-230B Culinary Competition II	0.5
CULN-235A Off-Campus Catering I.....	0.5-1
CULN-235B Off-Campus Catering II	0.5-1
CULN-240A On-Campus Catering I.....	0.5-1
CULN-240B On-Campus Catering II	0.5-1
CULN-240C On-Campus Catering III	0.5-1
CULN-295 Occupational Work Experience Education in CULN	2-4
CULN-296 Internship in Occupational Work Experience Education in CULN.....	2-4
CULN-298 Independent Study.....	2-3
CULN-299 Student Instructional Assistant.....	2-3
total minimum units for the major	34

Associate in science in hospitality management for transfer

The associate in science in hospitality management for Transfer (AS-T) degree is intended to meet the lower division requirements for Hospitality majors (or similar majors) at a CSU campus that offers a hospitality management baccalaureate degree. This degree is designed for students interested in gaining the basic concepts of hospitality management and to prepare them for jobs with local and global hotels, restaurants, airlines, cruise lines, sports arenas, entertainment, and amusement parks. On completion, students are ready to transfer into hospitality management and related degree programs at a CSU.

In order to earn the degree, students must:

- Complete 60 CSU-transferable units.
- Complete the California State University-General Education-pattern (CSU GE); or the Intersegmental General Education Transfer Curriculum (IGETC) pattern, including the Area 1C requirement for oral communication.
- Complete a minimum of 18 units in the major.
- Attain a minimum grade point average (GPA) of 2.0.
- Earn a grade of "C" or higher in all courses required for the major.

Students transferring to a CSU campus that accepts the degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to university or college that is not part of the CSU system, or those students who do not intend to transfer.

Some courses in the major satisfy both major and CSUGE/IGETC general education requirements; however, the units are only counted once toward the 60-unit requirement for an associate's degree. 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.

<i>required course:</i>	<i>units</i>
CULN-110 Orientation to Hospitality.....	3
<i>plus at least 8 units from:</i>	
CULN-120 Fundamentals of Cuisine	5
CULN-153 Safety and Sanitation	2
CULN-201 Principles of Food, Beverage, and Cost Controls	3
ECON-221 Principles of Microeconomics	3
<i>plus at least 7 units from any course not used above or:</i>	
BUSAC-186 Financial Accounting	4
BUS-294 Business Law	3
BUS-240 Business Statistics	3
or	
MATH-142 Elementary Statistics with Probability	4
or	
MATH-144 Statway II	4
PSYCH-101 Introduction to Psychology	3
total minimum units for the major	18

Certificate of achievement**Baking and pastry****Students completing this program will be able to...**

- A. explain and apply baking/pastry terms and procedures appropriately.
- B. select, organize, and analyze ingredients used in baking and pastry production.
- C. select, recognize, and utilize equipment and tools used in baking and pastry production.
- D. scale and measure ingredients properly.
- E. Identify equipment and utensils in baking and discuss proper use and care.
- F. discuss the properties and functions of various ingredients and demonstrate proper scaling and measurement techniques.
- G. demonstrate current food service sanitation procedures.
- H. 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.

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.

<i>required courses:</i>	<i>units</i>
CULN-105 Kitchen Foundations	2
CULN-153 Safety and Sanitation.....	2
CULN-161 Baking Foundations	2
CULN-163 Science and Substitutes in Baking and Pastry ...	2
CULN-181 Fundamental Techniques of Baking and Pastry	5
CULN-185 Nutritional Guidelines in Food Preparation	2
CULN-192 Purchasing Operations and Product Identification.....	1.5
CULN-193 Purchasing Operations and Systems Laboratory	1.5
CULN-209 Plated Seasonal Dessert.....	2
CULN-210 Artisan Bread	2
CULN-212 Candies, Chocolates, and Truffles.....	2
CULN-215 Decorative Confectionery Showpieces	1
CULN-281 Advanced Techniques of Baking and Pastry.....	5

plus at least 3 units from:

CULN-110 Orientation to Hospitality	3
CULN-129 Introduction to Urban Farming: Farm-to-Table ...	1
CULN-186 Sustainable Hospitality – Energy, Water and Waste.....	1
CULN-195 Supervisory Management in Food Service	3
CULN-230A Culinary Competition I	0.5
CULN-230B Culinary Competition II	0.5
CULN-235A Off-Campus Catering I	0.5-1
CULN-235B Off-Campus Catering II	0.5-1
CULN-240A On-Campus Catering I	0.5-1
CULN-240B On-Campus Catering II	0.5-1
CULN-240C On-Campus Catering III	0.5-1
CULN-295 Occupational Work Experience Education in CULN	2-4
CULN-296 Internship in Occupational Work Experience Education in CULN.....	2-4
CULN-298 Independent Study.....	2-3
CULN-299 Student Instructional Assistant.....	2-3
total minimum units for the major	33

Certificate of achievement**Culinary arts****Students completing this program will be able to...**

- A. discuss the criteria for excellence in purchasing food, preparing food, and presenting food for service.
- B. demonstrate teamwork in planning, purchasing, preparing and presenting food for service.
- C. demonstrate and describe the differences in producing foods for large events vs. a la carte dining.
- D. demonstrate the proper application of dry, moist, and combination cooking methods to a variety of food products.
- E. demonstrate current food service sanitation procedures.
- F. serve food according to professional industry standards.
- G. calculate costs and apply procedures in order to run a cost effective food service establishment.
- H. create menus that incorporate menu planning principles that maximize sales and profits.

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.

Culinary arts

<i>required courses:</i>	<i>units</i>
CULN-105 Kitchen Foundations	2
CULN-120 Fundamentals of Cuisine	5
CULN-123 Stocks, Soups, and Sauces.....	2
CULN-124 Breakfast, Brunch, and Bistro Cuisine	2
CULN-127 Garde Manger	2
CULN-153 Safety and Sanitation.....	2
CULN-161 Baking Foundations	2
CULN-175 Protein Fabrication	2
CULN-185 Nutritional Guidelines in Food Preparation	2
CULN-192 Purchasing Operations and Product Identification.....	1.5
CULN-193 Purchasing Operations and Systems Laboratory	1.5
CULN-202 Fundamentals of Modern Restaurant.....	5
CULN-228 International Cuisines.....	2
<i>plus at least 3 units from:</i>	
CULN-110 Orientation to Hospitality	3
CULN-129 Introduction to Urban Farming: Farm-to-Table ...	1
CULN-186 Sustainable Hospitality – Energy, Water and Waste.....	1
CULN-195 Supervisory Management in Food Service.....	3
CULN-230A Culinary Competition I	0.5
CULN-230B Culinary Competition II	0.5
CULN-235A Off-Campus Catering I.....	0.5-1
CULN-235B Off-Campus Catering II.....	0.5-1
CULN-240A On-Campus Catering I.....	0.5-1
CULN-240B On-Campus Catering II.....	0.5-1
CULN-240C On-Campus Catering III.....	0.5-1
CULN-295 Occupational Work Experience Education in CULN	2-4
CULN-296 Internship in Occupational Work Experience Education in CULN.....	2-4
CULN-298 Independent Study.....	2-3
CULN-299 Student Instructional Assistant.....	2-3
total minimum units for the major	34

Certificate of achievement Restaurant management

Students completing this program will be able to...

- A. demonstrate proper management and service techniques used in the culinary industry.
- B. demonstrate teamwork in planning, purchasing, preparing and presenting food for service.
- C. explore opportunities available in California’s hospitality and culinary industry.
- D. explain factors that determine quality food.
- E. explain and list both the advantages and disadvantages comparing full service to buffet service.
- F. demonstrate current food service sanitation procedures.
- G. plan, organize, setup and serve special events for 50-150 guests.
- H. calculate cost and apply procedures in order to run a cost-effective food service establishment.

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.

<i>required courses:</i>	<i>units</i>
BUSAC-181 Applied Accounting.....	3
CULN-105 Kitchen Foundations	2
CULN-120 Fundamentals of Cuisine	5
CULN-153 Safety and Sanitation.....	2
CULN-160 Fundamentals of Beverage, Wine and Spirits	3
CULN-161 Baking Foundations	2
CULN-192 Purchasing Operations and Product Identification.....	1.5
CULN-193 Purchasing Operations and Systems Laboratory	1.5
CULN-195 Supervisory Management in Food Service.....	3
CULN-201 Principles of Food, Beverage, and Cost Controls	3
CULN-202 Fundamentals of Modern Restaurant.....	5

<i>plus at least 3 units from:</i>	
CULN-110 Orientation to Hospitality	3
CULN-129 Introduction to Urban Farming: Farm-to-Table ...	1
CULN-186 Sustainable Hospitality – Energy, Water and Waste.....	1
CULN-230A Culinary Competition I	0.5
CULN-230B Culinary Competition II	0.5
CULN-235A Off-Campus Catering I.....	0.5-1
CULN-235B Off-Campus Catering II.....	0.5-1
CULN-240A On-Campus Catering I.....	0.5-1
CULN-240B On-Campus Catering II.....	0.5-1
CULN-240C On-Campus Catering III.....	0.5-1
CULN-295 Occupational Work Experience Education in CULN	2-4
CULN-296 Internship in Occupational Work Experience Education in CULN	2-4
CULN-298 Independent Study.....	2-3
CULN-299 Student Instructional Assistant.....	2-3

total minimum units for the major 34

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. See a counselor or faculty advisor and consider the associate degree in hospitality management for transfer.

Certificate of accomplishment Baking and pastry foundations

Students completing this program will be able to...

- select and explain the use of the appropriate kitchen equipment for specific kitchen tasks.
- explain proper health and safety procedures in the kitchen environment.
- identify critical control points during all food handling processes as a method to minimize the risk of food-borne illness.
- demonstrate different types of baking methods.
- Identify and prepare artisan breads, candies and plated desserts.
- demonstrate the following tasks: follow a standard recipe, use standard weights and measures, and perform basic skills with baking equipment.
- describe properties and functions of various ingredients and interpret recipes and produce cookies, quick breads, pies, cakes, creams, custards and sauces, and meringues.

This training program prepares students for many entry-level positions in commercial bakery, specialty pastry shops, and catering businesses. This certificate of accomplishment is the first step in pursuing a certificate of achievement in baking and pastry, or restaurant management.

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 accomplishment, 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 scheduled classes.

<i>required courses:</i>	<i>units</i>
CULN-105 Kitchen Foundations	2
CULN-153 Safety and Sanitation.....	2
CULN-161 Baking Foundations	2
CULN-209 Plated Seasonal Dessert.....	2
CULN-210 Artisan Bread	2
CULN-212 Candies, Chocolates, and Truffles.....	2
total minimum units for the major	12

Certificate of accomplishment Beverage management

Students completing this program will be able to...

- select and explain the use of the appropriate kitchen equipment for specific kitchen tasks.
- explain proper health and safety procedures in the kitchen environment.
- identify critical control points during all food handling processes as a method to minimize the risk of food-borne illness.
- demonstrate different types of beverage preparation methods.
- identify and prepare hot and cold non-alcoholic beverages.
- demonstrate the following tasks: follow a standard recipe, use standard weights and measures, and perform basic skills with beverage equipment.
- discuss the basics of wine, including history and geographical distribution of wine production. Learn the pairing of wines with food and successful menu planning.
- describe properties and functions of various ingredients and interpret recipes.

This training program prepares students for many entry-level positions in restaurants and coffee houses, specialty shops, and catering businesses. This certificate of accomplishment is the first step in pursuing a certificate of achievement in restaurant management.

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 accomplishment, 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 scheduled classes.

<i>required courses:</i>	<i>units</i>
CULN-105 Kitchen Foundations	2
CULN-153 Safety and Sanitation.....	2
CULN-160 Beverage, Wine, and Spirits.....	3
CULN-216 Wine and Food Pairing.....	2
CULN-201 Principles of Food, Beverage, and Cost Control.....	3
total minimum units for the major	12

**Certificate of accomplishment
Catering operations**

Students completing this program will be able to...

- A. select and explain the use of the appropriate kitchen equipment for specific kitchen tasks.
- B. explain proper health and safety procedures in the kitchen environment.
- C. identify critical control points during all food handling processes as a method to minimize the risk of food-borne illness.
- D. discuss event planning, price and cost controls, legal issues and equipment requirements for a variety of events such as banquets and plated events
- E. Identify and prepare hot and cold non-alcoholic beverages.
- F. demonstrate the following tasks: follow a standard recipe, use standard weights and measures, and perform basic skills with beverage equipment.
- G. Discuss the basics of wine, including history and geographical distribution of wine production. Learn the pairing of wines with food and successful menu planning.

This training program provides an introduction to operating a catering business. This certificate of accomplishment is the first step in pursuing a certificate of achievement in culinary arts, baking and pastry, or restaurant management.

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 accomplishment, 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 scheduled classes.

<i>required courses:</i>	<i>units</i>
CULN-105 Kitchen Foundations	2
CULN-153 Safety and Sanitation.....	2
CULN-161 Baking Foundations	2
CULN-216 Wine and Food Pairing.....	2
CULN-224 Catering Business Operations.....	2

<i>plus 2 units from:</i>	
CULN-235A Off-Campus Catering I	0.5-1
CULN-235B Off-Campus Catering II	0.5-1
CULN-240A On-Campus Catering I	0.5-1
CULN-240B On-Campus Catering II	0.5-1
CULN-240C On-Campus Catering III	0.5-1

total minimum units for the major 12

**Certificate of accomplishment
Culinary foundations**

Students completing this program will be able to...

- A. select and explain the use of the appropriate kitchen equipment for specific kitchen tasks.
- B. explain proper health and safety procedures in the kitchen environment
- C. identify critical control points during all food handling processes as a method to minimize the risk of food-borne illness.
- D. demonstrate different types of cooking and protein fabrication methods.
- E. identify and prepare basic stocks, soups, and sauces
- F. demonstrate the following tasks: follow a standard recipe, use standard weights and measures, and perform basic skills with culinary equipment.
- G. Describe properties and functions of various ingredients and produce a variety of egg-based dishes, sandwiches, salads, casseroles, creams, cold and hot hors d'oeuvre, and appetizers.

This training program prepares students for many entry-level positions in commercial kitchens, specialty shops, and catering businesses. This certificate of accomplishment is the first step in pursuing a certificate of achievement in culinary arts or restaurant management.

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 accomplishment, 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 scheduled classes.

<i>required courses:</i>	<i>units</i>
CULN-105 Kitchen Foundations	2
CULN-123 Soups, Stocks, and Sauces.....	2
CULN-124 Breakfast, Brunch, and Bistro Cuisine	2
CULN-127 Garde Manger	2
CULN-153 Safety and Sanitation.....	2
CULN-175 Protein Fabrication	2

total minimum units for the major 12

Certificate of accomplishment Food truck entrepreneurship

Students completing this program will be able to...

- create an operational plan for a mobile food business (vehicle, menu, permits).
- locate and establish a commissary kitchen.
- create a business plan for a mobile food business (permits, revenue, margin).
- design a digital marketing plan for a mobile food business.
- create a basic accounting setup to support a mobile food business.

This certificate program will provide students with specific information on owning, licensing/permitting, and operating a mobile food business in addition to exposure to fundamental accounting and marketing practices to support a business.

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:	units
CULN-105 Kitchen Foundations	2
CULN-131 Food Truck Entrepreneur	2
CULN-153 Safety and Sanitation	2

plus at least 3 units from:

BUSMG-191 Small Business Management	3
BUSMG-192 Entrepreneurship and Venture Management	3

plus at least 3 units from:

BUSAC-185 QuickBooks Accounting for Business I	1.5
BUSAC-188 QuickBooks Accounting for Business II	1.5
BUSMK-259 Digital Marketing Fundamentals	3
BUSMK-260 Social Media Marketing	3

total minimum units for the major 12

CULN-100 Exploring Careers in the Hospitality and Culinary Industry

1 unit SC

- 18 hours lecture/20 hours laboratory per term
- Note: This course is open to all, but is particularly appropriate for high school students entering 10th, 11th or 12th grade in the fall term. Chef coat, hat, apron, tools and knives may be provided by college. Instructions will be sent to those enrolled prior to first class meeting.

This course will offer students an overview of current and emerging career opportunities in the hospitality industry. Topics include resume development, career exploration, industry site visits, and development of fundamental skills required in the hospitality industry. Hands-on practice through the preparation of healthy foods, integration of sustainable practices as they relate to the hospitality industry, and employability skills will be emphasized. CSU

CULN-105 Kitchen Foundations

2 units SC

- 9 hours lecture/ 81 hours laboratory per term
- Advisory: CULN-153 or Equiv.
- 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. Credit by Examination option available.

This course introduces students to the requirements of the culinary arts with an emphasis on hygiene, safety, kitchen equipment knowledge, culinary math, terminology, and basic knife skills. It is specifically designed for students with no familiarity with standard culinary protocols. CSU

CULN-110 Orientation to Hospitality

3 units SC

- 54 hours lecture per term
- Note: Credit by examination option available.

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. C-ID HOSP 100, CSU

CULN-120 Fundamentals of Cuisine

5 units SC

- 270 hours laboratory per term
- Prerequisite: CULN-105 or equivalent
- Note: Culinary and food service students must have a current record of satisfactory tuberculosis (TB) screening and a California Food Handlers Certificate 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 practical development of fundamental student skills in knife, tool, and culinary equipment handling and introduces basic food preparation per American Culinary Federation (ACF) standards. Students will develop a working knowledge of laws and regulations relating to food safety, personal safety, and maintenance of proper sanitation in the kitchen. The emphasis is on professional skills required by quantity food service. C-ID HOSP 160, CSU

CULN-123 Stocks, Soups, and Sauces

2 units SC

- 9 hours lecture/81 hours laboratory per term
- Prerequisite: CULN-105 or Equiv.
- 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. See instructor at the first class meeting.

This course introduces the preparation of mother sauces, stocks, soups, classical sauces, contemporary sauces, accompaniments, and the pairing of sauces with a variety of foods. CSU

CULN-124 Breakfast, Brunch, and Bistro Cuisine

2 units SC

- 9 hours lecture/81 hours laboratory per term
- Prerequisite: CULN-105 or Equiv.
- 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 presents a la minute cooking techniques including breakfast, brunch, and light and healthful cookery. Product preparations include eggs, sandwiches, quick breads, soups, and vegetable cookery. Standard presentations, recipe costing, and discussion of nutrition are explored. CSU

CULN-127 Garde Manger

2 units SC

- 9 hours lecture/81 hours laboratory per term
- Prerequisite: CULN-120 or Equiv.
- 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 basic garnishes to advanced forcemeat preparations such as gallantines, pates and mousses with an emphasis on decorated platters and other preparations appropriate for buffet service. CSU

CULN-129 Introduction to Urban Farming: Farm-to-Table

1 unit SC

- 9 hours lecture/27 hours laboratory per term
- Note: Class meets off-campus at Rodger Ranch Urban Farm in Pleasant Hill.

This course introduces students to growing food for restaurants and is useful for anyone who wants to grow their own food. Topics include soil preparation, planting, and organic gardening and farming techniques. Nutrition, menu planning, cooking techniques as well as organic and sustainable practices are also covered. CSU

CULN-131 Food Truck Entrepreneur

2 units SC

- 36 hours lecture per term

This course is designed for entrepreneurs who plan to start a food truck business. The scope of the course is a comprehensive overview of the business of owning and operating a food truck. Topics will include business planning, funding, permitting, vehicles and equipment, maintenance, and legal issues as well as financial accounting. There will also be discussion of food production skills including menus, purchasing, preparation techniques, food safety, and regulations. This course does not include practical cooking skills. CSU

CULN-150 Topics in Culinary Arts

.3-4 units SC

- 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
- Note: Credit by examination option available.

This course presents the principles of safety and sanitation and their application in food service operations. Effective personal hygiene habits and food handling practices for the protection of consumers are reinforced. This course prepares students for the National Restaurant Association Manager's ServSafe Exam. C-ID HOSP 110, CSU

CULN-157 Safety and Sanitation Preparation and Examination

0.5 unit SC

- 9 hours lecture per term
- Prerequisite: CULN-153 or Equiv.

This course is a review of the basic principles of safety and sanitation as presented in CULN-153. Effective personal hygiene habits and food handling practices for the protection of consumers are reinforced. Preparation for successful completion of the National Restaurant Association's ServSafe Manager Certification Examination is emphasized. CSU

CULN-160 Fundamentals of Beverage, Wine, and Spirits

2 units SC

- 27 hours lecture/ 27 hours laboratory per term
- Advisory: College-level reading and writing are expected.

This course provides a comprehensive study of beverage service operations and control. Topics include basic production, types of beer, wine, and spirits, merchandising, and regulations concerning service of alcoholic and non-alcoholic beverages, including coffee and tea. CSU

CULN-161 Baking Foundations

2 units SC

- 9 hours lecture/81 hours laboratory per term
- Prerequisite: CULN-105 or Equiv.
- 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 applied and theoretical study of basic principles of commercial baking as practiced in hotels, restaurants and retail bakeries. CSU

CULN-163 Science and Substitutes in Baking and Pastry

2 units SC

- 9 hours lecture/81 hours laboratory per term
- Prerequisite: CULN-105 or Equiv.
- 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 introduces the science of baking through developing an understanding of the principles of ingredients used in baking and pastry. Students experiment in order to learn about ingredients and how they change during the production of and interaction with other ingredients. CSU

CULN-175 Protein Fabrication

2 units SC

- 9 hours lecture/81 hours laboratory per term
- Prerequisite: CULN-105 or Equiv.
- 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 overview of the meat identification process, including cuts, buying and ordering procedures, nutrition data, food safety and storage, and USDA grading standards. CSU

CULN-181 Fundamental Techniques of Baking and Pastry

5 units SC

- 270 hours laboratory per term
- Prerequisite: CULN-105 (may be taken concurrently) Or Equiv.
- 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 presents both practical and theoretical study of fundamental principles of commercial baked goods and pastry production. Students will have extensive hands-on experience in baking techniques to produce commercial quality products in quantity. CSU

CULN-185 Nutritional Guidelines in Food Preparation

2 units SC

- 36 hours lecture per term

This course provides an introduction to food composition, dietary guidelines, recipe modification, food cooking and storage techniques for nutrient retention. Contemporary nutritional issues will be addressed. CSU

CULN-186 Sustainable Hospitality-Energy, Water and Waste

1 unit SC

- 18 hours lecture per term

This course presents current information on energy efficiency, water efficiency, and waste to ensure efficient, environmentally sustainable operations in food service. Students will practice decision-making regarding these issues based on science and economics to optimize sustainability and profitability. CSU

CULN-192 Purchasing Operations and Product Identification

1.5 units SC

- 81 hours laboratory per term
- Prerequisite: CULN-105 or Equiv.
- 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 presents current practices in foodservice purchasing, receiving, storage, issuance, and documentation. This course is appropriate for entry-level students and presents product identification and evaluation, as well as the organization of a professional foodservice operation. CSU

CULN-193 Purchasing Operations and Systems Laboratory

1.5 units SC

- 81 hours laboratory by arrangement per term
- Prerequisite CULN-105 or Equiv.
- 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 presents current practices in foodservice purchasing, receiving, storage, issuance, and documentation. This course is appropriate for entry-level students and presents purchasing and inventory systems, as well as the organization of a professional foodservice operation. CSU

CULN-195 Supervisory Management in Food Service

3 units SC

- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This course focuses on the application of management principles of supervision to specific business contexts within the food service industry. CSU

CULN-201 Principles of Food, Beverage, and Cost Controls

3 units SC

- 54 hours lecture per term

This course presents the theories and techniques to manage food, beverage, labor, and other costs within a hospitality operation. Emphasis is placed on problem solving and applying cost control techniques to maximize profits while managing expenses. Topics include establishing standards, cost-volume-profit-analysis, forecasting, purchasing and storage controls, menu costing and pricing, theft prevention, and labor control. C-ID HOSP 120, CSU

CULN-202 Fundamentals of Modern Restaurant

5 units SC

- 270 hours laboratory per term
- Prerequisite: CULN-120 Or Equiv.
- 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 practical development of fundamental skills to produce and serve individual plates in a restaurant setting. Students have the opportunity to plan and develop menus focusing on techniques and flavors typical for the type of service being implemented. Dining room service techniques are practiced including rules and styles and basic supervisory skills of the front and back of the house are emphasized. CSU

CULN-209 Plated Seasonal Dessert

2 units SC

- 9 hours lecture/81 hours laboratory per term
- Prerequisite: CULN-105 or Equiv.
- 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 introduces students to the theory and techniques used to produce a variety of basic pastries and desserts specific to the season for hotels, restaurants, wholesale, and retail bakeries/pastry shops. Plating techniques are described and practiced. CSU

CULN-210 Artisan Bread

2 units SC

- 9 hours lecture/81 hours laboratory per term
- Prerequisite: CULN-105 or Equiv.
- Advisory: CULN-161 or CULN-181 or Equiv.
- Note: Culinary and food service students must have a current record of satisfactory tuberculosis (TB) screening on file with the culinary office by the beginning of classes. Students are required to supply their own equipment and uniforms. See instructor at the first class meeting.

This course introduces students to the theory and techniques used in the baking of artisan breads. Topics include the preparation, baking, and presentation of a variety of artisan breads. CSU

CULN-212 Candies, Chocolates, and Truffles

2 units SC

- 9 hours lecture/81 hours laboratory per term
- Prerequisite: CULN-105 or Equiv.
- 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. See instructor at the first class meeting.

This introduces students to the theory and techniques used to produce a variety of candies and chocolates specific to the confectionery industry. Topics include the preparation, formation, and presentation of a variety of candies and chocolates including brittle, toffees, meringues, truffles, and bonbons. CSU

CULN-215 Decorative Confectionary Showpieces

1 unit SC

- 9 hours lecture/27 hours laboratory per term
- Advisory: CULN-181 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. See instructor at the first class meeting.

This course presents theory and production techniques of advanced confectionery showpieces including: chocolate, marzipan, sugar, Isomalt, pastillage, and royal icing. CSU

CULN-216 Wine and Food Pairing

2 units SC

- 9 hours lecture/81 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. See instructor at the first class meeting.

This course presents the history and geographical distribution of wine production. The pairing of wines with food and menu planning will be emphasized. CSU

CULN-220 Advanced Cuisine

5 units SC

- 270 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 and a California Food Handlers Certificate 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 skills developed in the fundamentals of cuisine course (CULN-120), 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. Students will develop basic supervisor and kitchen management skills. CSU

CULN-224 Catering Business and Operations

2 units SC

- 36 hours lecture per term

This course provides an introduction to operating a catering business. Topics discussed will include effective client relations, event planning, pricing and cost controls, legal issues, and equipment requirements. Menu planning for a variety of events such as banquets, and plated events will also be covered. CSU

CULN-228 International Cuisines

2 units SC

- 9 hours lecture/81 hours laboratory per term
- Prerequisite: CULN-105 or Equiv.
- 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 presents an introduction to cuisines from around the world. The importance of ethnic cuisines in today's multi-cultural society and their significance and influence on North American culture will also be discussed. Students will prepare meals representing a wide variety of cuisines. CSU

CULN-230A Culinary Competition I

.5 unit SC

- 27 hours laboratory by arrangement per term
- Prerequisite: CULN-120 (may be taken concurrently) 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 an introduction to the skills required to participate in a variety of culinary competitions. Possible categories include hot and cold foods, buffet platters, desserts, decorated cakes, confectionery showpieces, and ice carvings. CSU

CULN-230B Culinary Competition II

.5 unit SC

- 27 hours laboratory by arrangement per term
- Prerequisite: CULN-230A 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 presents advanced application of skills required to participate in a variety of culinary competitions. Possible categories include hot and cold foods, buffet platters, desserts, decorated cakes, confectionery showpieces, and ice carvings. CSU

CULN-235A Off-Campus Catering I

.5-1 unit SC

- Variable hours
- Prerequisite: CULN-105 and CULN-153 or equivalents
- Advisory: 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.

This open entry/open exit course is an introduction to fundamental catering applications. Students will cater various types of off-campus events such as breakfast, lunch, and dinner buffets and plated events, and hors d'oeuvres. CSU

CULN-235B Off-Campus Catering II

.5-1 unit SC

- Variable hours
- Prerequisite: CULN-235A 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 open entry/open exit intermediate off-campus catering course includes skill development in specific catering preset, setup, service and breakdown techniques. Students participate as group leaders at catering events. Students will cater various types of off-campus events such as breakfast, lunch, and dinner buffets and plated events, and hors d'oeuvres. CSU

CULN-240A On-Campus Catering I

.5-1 unit P/NP

- Variable hours
- Prerequisite: CULN-105 and CULN-153 or equivalents
- Advisory: 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.

This course is an introduction to fundamental catering applications. Students will cater various types of on-campus events such as breakfast, lunch, and dinner buffets and plated events, coffee breaks, and hors d'oeuvres. CSU

CULN-240B On-Campus Catering II

.5-1 unit P/NP

- Variable hours
- Prerequisite: CULN-240A 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 intermediate on-campus catering course includes skill development in specific catering preset, setup, service and breakdown techniques. Students participate as group leaders at catering events and apply the fundamentals catering. Students will cater various types of on-campus events such as breakfast, lunch, and dinner buffets and plated events, coffee breaks, and hors d'oeuvres. CSU

CULN-240C On-Campus Catering III

.5-1 unit P/NP

- Variable hours
- Prerequisite: CULN-240B 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 advanced on-campus catering course emphasizes skill development in effective client relations and event planning. Topics include comprehensive equipment requirements, set-up plans, staff management, and service and breakdown techniques. CSU

CULN-281 Advanced Techniques of Baking and Pastry

5 units SC

- 270 hours laboratory per term
- Prerequisite: CULN-181 or Equiv.
- 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 presents both practical and theoretical study of advanced principles of commercial baked goods and pastry production. Students will have extensive hands-on experience in baking techniques to produce commercial quality products in quantity. CSU

CULN-295 Occupational Work Experience Education in CULN

2-4 units SC

- May be repeated eight times
- Variable hours
- Note: In order to enroll in CULN-295, students must be employed, register for the course, complete an online Employment Form, and participate in an orientation. Incomplete grades are not awarded for this course.

CULN-295 is supervised employment that extends classroom learning to the job site and relates to the student's chosen field of study or area of career interest. Under the supervision of a college instructor, students will engage in on-the-job and other learning experiences that contribute to their employability skills and occupational or educational goals. Each unit represents five hours of work per week or 75 hours work per term. Students may earn up to a total of 16 units in any combination of WRKX courses. Repetition allowed per Title 5, Section 55253. CSU

CULN-296 Internship in Occupational Work Experience Education in CULN

2-4 units SC

- May be repeated eight times
- Variable hours
- Note: In order to enroll in the CULN-296 course, students must be interning or volunteering, register for the course, complete an online Employment Form, and participate in an orientation. Incomplete grades are not awarded for this course.

CULN-296 is a supervised internship in a skilled or professional level assignment in the student's major field of study or area of career interest. Under the supervision of a college instructor, students will engage in on-the-job and other learning experiences that contribute to their employability skills and occupational or educational goals. Internships may be paid, non-paid, or some partial compensation provided. Each unit represents five hours of paid work or four hours of unpaid work per week or 75 hours of paid work or 60 hours of unpaid work per term. Students may earn up to a total of 16 units in any combination of WRKX courses. Repetition allowed per Title 5, Section 55253. CSU

CULN-298 Independent Study

.5-3 units SC

- 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. Submission of acceptable educational contract to department and Instruction Office is required.

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. CSU

CULN-299 Student Instructional Assistant

- .5-3 units SC
- *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

Janette Funaro, Dean
Arts and Communication Division

Possible career opportunities

Students who receive a degree in dance can not only pursue a career as a professional dancer in commercial dances onstage and in film, but they may also seek careers as dance therapists, dance instructors, or choreographers. Degree recipients can apply their knowledge of dance in areas such as arts administration, studio management, arts grant writing, and dance notators for dance companies.

**Associate in arts degree
Dance**

The Dance Department has placed this degree on INACTIVE status during the completion of necessary curriculum work. While the curriculum evaluation is underway, this degree has been removed from the catalog. Students entering in Fall 2022 will not have catalog rights to the degree. Students with catalog rights who are in progress to complete the degree are advised that courses will be offered to ensure requirements can be met during fall 2022, spring 2023, and fall 2023. Coursework transferred from other schools may also meet requirements for the degree and students can request course substitutions from the program lead. Any student in progress to complete this program should contact the Dance program lead or department chair for advisement or contact Counseling to explore other viable educational opportunities.

Limitations on enrollment

Effective fall term 2013, changes to the regulations that govern community college enrollments placed limitations on the number of courses that students may take in certain disciplines within the Contra Costa Community College District. The charts below indicate which Diablo Valley College (DVC) courses are assigned to groups of courses (“families”) for which limitations have been imposed. Certain courses within certain “families” may be repeated (see catalog description), however, students are limited to four enrollments within the family. Certain DVC courses are equivalent to courses at Los Medanos College and Contra Costa College. An enrollment in an equivalent course at one of those colleges will count toward the allowable four enrollments within the family.

NOTE: Diablo Valley College may offer experimental or topics courses. When appropriate, based on content, such courses will be assigned to a “family” and that enrollment will be counted as an experience within the “family”.

Family: Ballet

- KNDAN-110A Ballet Fundamentals I
- KNDAN-110B Ballet Fundamentals II
- DANCE-110A Ballet Fundamentals I
- DANCE-110B Ballet Fundamentals II
- DANCE-212 Ballet I
- DANCE-213 Ballet II
- DANCE-214 Ballet III
- DANCE-216 Pointe Technique

Family: Jazz

- KNDAN-120A Jazz Dance Fundamentals I
- KNDAN-120B Jazz Dance Fundamentals II
- DANCE-120A Jazz Dance Fundamentals I
- DANCE-120B Jazz Dance Fundamentals II
- DANCE-222 Jazz Dance I
- DANCE-223 Jazz Dance II
- DANCE-224 Jazz Dance III

Family: Modern

- KNDAN-130A Modern Dance Fundamentals I
- KNDAN-130B Modern Dance Fundamentals II
- DANCE-130A Modern Dance Fundamentals I
- DANCE-130B Modern Dance Fundamentals II
- DANCE-232 Modern Dance I
- DANCE-233 Modern Dance II
- DANCE-234 Modern Dance III

Family: Ballroom Dance

DANCE-164A Ballroom/Social Dance I
 DANCE-164B Ballroom/Social Dance II
 DANCE-166 Swing Dance
 DANCE-168A Salsa and Latin Dance I
 DANCE-168B Salsa and Latin Dance II
 DANCE-169A Argentine Tango I
 KNDAN-150A Argentine Tango
 KNDAN-164A Ballroom/Social Dance I
 KNDAN-164B Ballroom/Social Dance II
 KNDAN-166 Swing Dance
 KNDAN-168A Salsa and Latin Dance I
 KNDAN-168B Salsa and Latin Dance II
 KNDAN-169A Argentine Tango

Family: Tap

DANCE-160A Tap Dance I
 DANCE-160B Tap Dance II
 KNDAN-160A Tap Dance I
 KNDAN-160B Tap Dance II

Family: Dance Production

DANCE-150A Dance Production II
 DANCE-242 Repertory Dance Production I
 DANCE-244 Repertory Dance Production II
 DANCE-246 Dance Production I
 DANCE-248 Dance Production II
 DANCE-256 Dance Production Choreography

Family: Dance Performance

DANCE-150B Dance Production II - Tech Week
 DANCE-243 Repertory Dance Production I - Tech Week
 DANCE-245 Repertory Dance Production II - Tech Week
 DANCE-247 Dance Production I – Tech Week
 DANCE-249 Dance Production II - Tech Week
 DANCE-257 Dance Production Choreography - Tech Week

Family: Dance Survey

DANCE-100 Introduction to Dance
 KNDAN-100 Introduction to Dance
 DANCE-162 Broadway Dance
 DANCE-162A Broadway Dance I
 KNDAN-162 Broadway Dance

Family: Urban Dance

DANCE-170A Hip-Hop and Urban Funk Dance I
 DANCE-170B Hip-Hop and Urban Funk Dance II
 KNDAN-150B Beginning Hip-Hop and Urban Funk
 KNDAN-150C Intermediate Hip-Hop and Urban Funk
 KNDAN-170A Hip-Hop and Urban Funk Dance I
 KNDAN-170B Hip-Hop and Urban Funk Dance II

DANCE-100 Introduction to Dance

- 1 unit SC
- CSU GE: E
 - 54 hours laboratory per term
 - Note: Formerly KNDAN-100 (20-21)

This is an introductory dance course focusing on the development of coordination, rhythm, strength, flexibility, alignment, and basic dance movement combinations in a variety of genres. Basic musculoskeletal alignment, movement safety, and dance appreciation skills will also be covered. CSU, UC

DANCE-105A Pilates Mat Work I

- 1 unit SC
- CSU GE: E
 - 54 hours laboratory per term
 - Note: Formerly KNDAN-105A (20-21)

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 and core strength development, with emphasis placed on back and abdominal strengthening. CSU, UC (credit limits may apply to UC - see counselor)

DANCE-105B Pilates Mat Work II

- 1 unit SC
- CSU GE: E
 - 54 hours laboratory per term
 - Advisory: DANCE-105A or equivalent
 - Note: Formerly KNDAN-105B (20-21)

This is an activity course introducing intermediate mat exercises developed by Joseph Pilates focusing on intrinsic muscle groups. The class addresses individual needs, body alignment and core strength development, with emphasis placed on back and abdominal strengthening as it relates to intermediate level exercises. CSU UC (credit limits may apply to UC - see counselor)

DANCE-110A Ballet Fundamentals I

- 1 unit SC
- CSU GE: E
 - 54 hours laboratory per term
 - Note: Formerly KNDAN-110A (20-21)

This is an introductory course in ballet techniques. This class will focus on ballet barre, center adagio, allegro work, and across-the-floor combinations. An introduction to the history of the genre and principles of ballet as an art form will also be included. CSU, UC

Dance

DANCE-110B Ballet Fundamentals II

1 unit SC

- *CSU GE: E*
- *54 hours laboratory per term*
- *Advisory: DANCE-110A or equivalent*
- *Note: Formerly KNDAN-110B (20-21)*

This is a beginning class in classical ballet techniques. The focus is on beginning barre, beginning center adagio, allegro work, and beginning ballet movement combinations in the center. The course also explores the history of ballet and principles as a contemporary art form. CSU, UC

DANCE-120A Jazz Dance Fundamentals I

1 unit SC

- *CSU GE: E*
- *54 hours laboratory per term*
- *Note: Formerly KNDAN-120A (20-21)*

This is an introductory course in jazz dance technique. The focus is on proper jazz dance alignment, center work and movement across the floor. Introduction to the history of jazz dance will also be covered. CSU, UC

DANCE-120B Jazz Dance Fundamentals II

1 unit SC

- *CSU GE: E*
- *54 hours laboratory per term*
- *Advisory: DANCE-120A or equivalent*
- *Note: Formerly KNDAN-120B (20-21)*

This is a beginning course in jazz dance technique. The focus is on proper jazz dance alignment, isolations, and beginning jazz dance choreography. The evolution of jazz dance from African and Haitian dance to contemporary jazz dance technique will also be covered. CSU, UC

DANCE-130A Modern Dance Fundamentals I

1 unit SC

- *CSU GE: E*
- *54 hours laboratory per term*
- *Note: Formerly KNDAN-130A (20-21)*

This is an introductory course in modern dance technique. The focus will be on the development of proper modern dance alignment, center work, and movement across the floor. An introduction to modern dance history is also included. CSU, UC

DANCE-130B Modern Dance Fundamentals II

1 unit SC

- *CSU GE: E*
- *54 hours laboratory per term*
- *Advisory: DANCE-130A or equivalent*
- *Note: Formerly KNDAN-130B (20-21)*

This is a course in beginning modern dance technique. The focus is on beginning modern dance alignment, center work, and modern dance movements across the floor. Current events that shape the history of modern dance in the United States and Europe are also covered. CSU, UC

DANCE-150 Topics in Dance

.3-4 units SC

- *Variable hours*

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

DANCE-160A Tap Dance I

1 unit SC

- *CSU GE: E*
- *54 hours laboratory per term*
- *Note: Formerly KNDAN-160A (20-21)*

This is a beginning course in tap dance technique. The focus is on a wide range of tap dance styles. The cultural and historical aspects of this genre will also be studied. CSU, UC

DANCE-160B Tap Dance II

1 unit SC

- *CSU GE: E*
- *54 hours laboratory per term*
- *Advisory: DANCE-160A or equivalent*
- *Note: Formerly KNDAN-160B (20-21)*

This is an intermediate course in tap dance technique. The focus is on the introduction of intermediate tap dance steps and combinations. The contribution of tap dance to American art and culture will also be studied. CSU, UC

DANCE-162A Broadway Dance I

1 unit SC

- *CSU GE: E*
- *54 hours laboratory per term*
- *Note: Formerly KNDAN-162 (20-21)*

This is a course in Broadway musical dance technique. Dance styles from a variety of Broadway genres, as well as audition techniques, will be covered. The history of dance in musical theater and its impact on American culture will also be discussed. CSU, UC

DANCE-164A Ballroom/Social Dance I

1 unit SC

- *CSU GE: E*
- *54 hours laboratory per term*
- *Note: Formerly KNDAN-164A (20-21)*

This is a beginning level course in ballroom/social dance. The course focuses on the history, etiquette, fundamental techniques, and terminology of ballroom/social dances. A variety of dance styles will be practiced, including Fox-trot, Waltz, and Tango. A partner is not necessary as this course will incorporate dance footwork specific to leaders and followers. CSU, UC

DANCE-164B Ballroom/Social Dance II

- 1 unit SC
- CSU GE: E
 - 54 hours laboratory per term
 - Advisory: DANCE-164A or equivalent
 - Note: KNDAN-164B (20-21)

This is an intermediate course in ballroom/social dance. Focus is placed on intermediate techniques, terminology, and other elements, including rhythm, style, and expressions of various ballroom/social dances. A variety of dances will be practiced, including Fox-trot, Waltz, Swing, and Tango. Other dances may also be presented. Complex techniques, patterns, terminology, and rhythms will be explored as well as music history and the development of a variety of ballroom/social dances. A partner is not required. CSU, UC

DANCE-166 Swing Dance

- 1 unit SC
- CSU GE: E
 - 54 hours laboratory per term
 - Note: Formerly KNDAN-166 (20-21)

This is an introductory course in 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

DANCE-168A Salsa and Latin Dance I

- 1 unit SC
- CSU GE: E
 - 54 hours laboratory per term
 - Note: Formerly KNDAN-168A (20-21)

This is an introductory course in 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

DANCE-168B Salsa and Latin Dance II

- 1 unit SC
- CSU GE: E
 - 54 hours laboratory per term
 - Advisory: DANCE-168A or equivalent
 - Note: Formerly KNDAN-168B (20-21)

This is an intermediate level course in the Latin dances including Salsa. Complex techniques, patterns, terminology and rhythms will be explored as well as music history and the development of a variety of Latin dances. CSU, UC

DANCE-169A Argentine Tango I

- 1 unit SC
- CSU GE: E
 - 54 hours laboratory per term
 - Note: Formerly KNDAN-169A (20-21)

This dance activity course focuses on the fundamentals of Argentine Tango and relates the varied and complex rhythms of the music to the movements that are unique to this dance. CSU, UC

DANCE-170A Hip-Hop and Urban Funk Dance I

- 1 unit SC
- CSU GE: E
 - 54 hours laboratory per term
 - Note: Formerly KNDAN-170A (20-21)

This is a beginning course in hip-hop and funk dance technique. Topics will include the history of hip-hop and funk dance technique, its ethnic influences, historical events, and how these dance styles have come to reflect the diversity of America and its impact on popular dance. CSU, UC

DANCE-170B Hip-Hop and Urban Funk Dance II

- 1 unit SC
- CSU GE: E
 - 54 hours laboratory per term
 - Advisory: DANCE-170A or equivalent
 - Note: Formerly KNDAN-170B (20-21)

This is an intermediate course in hip-hop and funk dance technique. This course is designed to increase skill in movement, vocabulary, and technique including complex foot work, polyrhythmic movements, and the ability to improvise in a cipher. Similarities and differences of various popular/social dance styles in the United States will also be presented. CSU, UC

DANCE-200 Dance Appreciation

- 3 units SC
- IGETC: 3A; CSU GE: C1; DVC GE: III
 - 54 hours lecture per term

This course is an introduction to the experience of watching dance with an appreciation of its technical, stylistic, expressive, social, and historical aspects. The cultural relevance of dance, the role of dance to the individual, and its importance in contemporary and historical society will also be discussed. CSU, UC

**DANCE-201 Critical Thinking in Western Culture
Dance History: 20th Century to
Present**

- 3 units SC
- IGETC: 3A; CSU GE: C1; DVC GE: III
 - 54 hours lecture per term
 - Prerequisite: ENGL-122 or equivalent

This course presents the role of dance in Western culture from the beginning of the 20th century through the present day as it is used to create and mediate meaning through performance. Emphasis is placed on understanding and using principals of inductive and deductive reasoning as well as on evaluation and creation of argument, persuasion, and criticism of visual culture topics from both visual, performance, and textual sources. Historic styles and movements of dance including the Diaghilev period of Ballet and the development of modern dance are discussed, emphasizing their influence on present-day ballet, modern, and contemporary dance practice. CSU, UC

DANCE-205 Music Theory for Dancers

2 units SC

- 18 hours lecture/54 hours laboratory per term

This is an introductory course in music and its relationship to dance and dancers. Compositional elements of music and their application to choreography and dance performance are practiced. CSU, UC

DANCE-212 Ballet I

1 unit SC

- 54 hours laboratory per term
- Advisory: DANCE-110A or equivalent

This is an intermediate course in ballet dance. The focus is on intermediate ballet barre, center adagio, allegro work, and across the floor combinations. The history of classical ballet works and their influence on the ballet dancer and current ballet styles are also covered. CSU, UC

DANCE-213 Ballet II

1 unit SC

- 54 hours laboratory per term
- Prerequisite: DANCE-212 or equivalent

This is an advanced course in ballet dance. The focus is on advanced ballet barre, center adagio, allegro work, and across-the-floor combinations. Basic choreographic principles as they relate to ballet are also presented. CSU, UC

DANCE-214 Ballet III

1 unit SC

- 54 hours laboratory per term
- Prerequisite: DANCE-213 or equivalent

This is an advanced/pre-professional course in ballet dance. It will focus on advanced ballet barre, center adagio, allegro work, and across-the-floor combinations at the pre-professional level. Classical ballet variations and basic pas de deux techniques as they relate to classical ballet are practiced. CSU, UC

DANCE-216 Pointe Technique

1 unit SC

- 54 hours laboratory per term
- Prerequisite: DANCE-212 or DANCE-110A or equivalent

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 they relate 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-222 Jazz Dance I

1 unit SC

- 54 hours laboratory per term
- Advisory: DANCE-120A or equivalent

This is an intermediate course in jazz dance. The focus is on contemporary, lyrical, hip-hop and Broadway styles. The history of jazz dance on stage, in movies and videos, and its influence on the jazz dancer and current jazz dance styles are also covered. CSU, UC

DANCE-223 Jazz Dance II

1 unit SC

- 54 hours laboratory per term
- Prerequisite: DANCE-222 or equivalent

This is an advanced course in jazz dance. The focus is on advanced jazz dance technique from contemporary, lyrical, hip-hop, and Broadway styles. Choreographic principles as they relate to jazz dance are also covered. CSU, UC

DANCE-224 Jazz Dance III

1 unit SC

- 54 hours laboratory per term
- Prerequisite: DANCE-223 or equivalent

This is an advanced/pre-professional course in jazz dance. The focus is on advanced jazz dance technique from contemporary, lyrical, hip-hop and Broadway styles utilizing pre-professional dance performance skills. Choreographic principles as they relate to jazz dance to enhance performance potential are also covered. CSU, UC

DANCE-232 Modern Dance I

1 unit SC

- 54 hours laboratory per term
- Advisory: DANCE-130A or equivalent

This is an intermediate course in modern dance. The focus is on intermediate axial and locomotor movements, styles from early modern, post-modern, and contemporary modern innovators. The history of modern dance and its influence on the modern dancer and current modern dance styles are also covered. CSU, UC

DANCE-233 Modern Dance II

1 unit SC

- 54 hours laboratory per term
- Prerequisite: DANCE-232 or equivalent

This is an advanced course in modern dance. The focus is on advanced axial and locomotor movements and styles from early modern, post-modern, and contemporary modern innovators. Choreographic principles related to modern dance are also covered. CSU, UC

DANCE-234 Modern Dance III

1 unit SC

- 54 hours laboratory per term
- Prerequisite: DANCE-233 or equivalent

This is an advanced/pre-professional course in modern dance. The focus is on advanced performance level axial and locomotor movements and styles from early modern, post-modern, and contemporary modern innovators with an emphasis on pre-professional performance quality. Choreographic principles related to modern dance that enhance performance potential are also covered. CSU, UC

DANCE-242 Repertory Dance Production I

1 unit SC

- 54 hours laboratory by arrangement per term
- Co-requisite: DANCE-243 or equivalent

This course prepares students for a dance performance. The emphasis is on the mastery of faculty-choreographed compositions to be presented to a live audience in a professional theater space. CSU, UC

DANCE-243 Repertory Dance Production I - Tech Week

.5 unit SC

- 36 hours laboratory by arrangement per term
- Co-requisite: DANCE-242 or equivalent

Students will participate in a dance performance of faculty-choreographed compositions for a live audience in a professional theater space. CSU, UC

DANCE-244 Repertory Dance Production II

1 unit SC

- 54 hours laboratory by arrangement per term
- Prerequisite: DANCE-242 or equivalent
- Co-requisite: DANCE-245 or equivalent

This course prepares the experienced dancer for a dance performance. The emphasis is on the mastery of intermediate level faculty-choreographed compositions to be presented to a live audience in a professional theater space. CSU, UC

DANCE-245 Repertory Dance Production II - Tech Week

.5 unit SC

- 36 hours laboratory by arrangement per term
- Co-requisite: DANCE-244 or equivalent

This is a dance performance course for the experienced dance student. Students will participate in a dance performance of faculty-choreographed compositions for a live audience in a professional theater space. CSU, UC

DANCE-246 Dance Production I

1.5 units SC

- 72 hours laboratory per term
- Co-requisite: DANCE-247 or equivalent

This course prepares students for a dance performance. The emphasis is on the mastery of student-choreographed compositions to be presented to a live audience in a professional theater space. Students will also participate in the technical and business aspects of the production. CSU, UC

DANCE-247 Dance Production I - Tech Week

.5 unit SC

- 36 hours laboratory by arrangement per term
- Co-requisite: DANCE-246 or equivalent

Students will participate in a dance performance of student-choreographed compositions for a live audience in a professional theater space. CSU, UC

DANCE-248 Dance Production II

1.5 units SC

- 72 hours laboratory per term
- Prerequisite: DANCE-246 or equivalent
- Co-requisite: DANCE-249 or equivalent

This course prepares the experienced dance student for a dance performance. The emphasis is on the mastery of student-choreographed compositions to be presented to a live audience in a professional theater space. Students will also participate in the technical and business aspects of the production. CSU, UC

DANCE-249 Dance Production II - Tech Week

.5 unit SC

- 36 hours laboratory by arrangement per term
- Co-requisite: DANCE-248 or equivalent

This is a dance performance course for the experienced dancer. Students will participate in a dance performance of original student-choreographed compositions for a live audience in a professional theater space. CSU, UC

DANCE-250 Dance Choreography

2 units SC

- 18 hours lecture/54 hours laboratory per term
- Formerly DANCE-240

This course provides an introduction to principles of choreography. Dance movement phrasing, spatial design and relationships, rhythm, theme and development, concert, solo and group work will be presented. Critical evaluation of choreographic dance components through analysis and presentation in the classroom will also be discussed. CSU, UC

Dance

DANCE-256 Dance Production Choreography

1.5 units SC

- 72 hours laboratory per term
- Prerequisite: DANCE-246 and DANCE-250 or equivalents
- Co-requisite: DANCE-257 or equivalent

This is a dance production class with an emphasis on experiential learning by choreographing, staging and rehearsing a student-choreographed dance production. It includes the application of choreographic theory and technique with emphasis on dance as a performing art and participation in the technical and business aspects of a student production. CSU, UC

DANCE-257 Dance Production Choreography - Tech Week

.5 unit SC

- 36 hours laboratory by arrangement per term
- Co-requisite: DANCE-256 or equivalent

This is a dance performance course focusing on the role of the choreographer in the presentation of an original dance composition presented to a live audience in a professional theater space. The emphasis is on staging techniques, incorporation of technical theater elements, and performance development. A final dance concert performance of the student's original choreography culminates the term's work. CSU, UC

DANCE-299 Student Instructional Assistant

.5-3 units SC

- 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

Charles Ramos, Dean

Sciences Division

Physical Sciences Building, Room 263

Possible career opportunities

The Diablo Valley College dental assisting program prepares students to work as an essential member of the dental team. Employment opportunities for the graduates include: chair-side assistant, front office administrator, x-ray technician for dental radiation laboratories, agent for dental insurance companies, or laboratory technician for dental laboratories. The DVC dental assisting program is approved by the Dental Board of California and accredited by the Commission on Dental Accreditation of the American Dental Association. Upon graduation, students are eligible to take state and national board examinations to become a licensed Registered Dental Assistant in California (RDA) and a Certified Dental Assistant (CDA).

Associate in science degree Dental assisting

Students completing the program will be able to...

- act as a member of the dental health team and apply professional, ethical and legal principles while functioning in the role of the Registered Dental Assistant (RDA).
- assume responsibility for prevention of disease transmission utilizing universal precautions in the work environment to protect those entrusted to their care.
- show competence in skills as described in the current California Dental Practice Act. Said professional should perform with a balance of professionalism and sensitivity characteristic of genuine compassionate care.
- exhibit knowledge necessary for successful completion of the California Registered Dental Assistant's Examination and the National Certified Dental Assistant's Examination.
- apply critical thinking and self-assessment skills to enhance learning, research, patient care, professional growth, and continued competency.
- integrate and apply health literacy and culturally competent communication skills to oral health care services, academic endeavors, community projects, and professional activities.

The required dental assisting program classes are taught during the day; however, the general education courses required for the certificate or degree may be taken in the evening or at an alternate location.

The 10-month program is scheduled to begin in summer with program completion in the following spring. The program includes classroom instruction as well as clinical experience in the DVC community clinic and various externship rotations.

The Dental Assisting Program is limited to 24 students. Applicants must submit high school transcripts conferring graduation or equivalent to the DVC Admissions and Records Office, and successfully pass DENTL-120 Orientation to the Dental Assisting Program to be considered.

Dental assisting students must submit the following to the Dental Programs Department by the beginning of classes: (1) CPR/BLS certification for Health Care Providers; (2) current immunizations/titers; (3) proof of satisfactory tuberculosis (TB) screening; (4) current physical examination; (5) background check; and (6) passing certified drug test.

To earn an associate in science degree with a major in dental assisting, students must complete each course used to meet a major requirement with a "C" grade or higher and complete all general education requirements as listed in the catalog. Certain courses may satisfy both major and other general education requirements; however, the units are only counted once.

<i>program prerequisite:</i>	<i>units</i>
DENTL-120 Overview of Dental Assisting	0.3

<i>major requirements:</i>	<i>units</i>
DENHY-124 Dental Radiography	3
DENTL-160 Infection Control and California Dental Practice Act	3
DENTL-171 Oral and Facial Anatomy and Pathology	3.5
DENTL-173 Dental Assisting Chairside Skills	3
DENTL-174 Dental Operative and Laboratory Materials	3
DENTL-176 Anatomy, Physiology, Medical Emergencies, and Pharmacology	2
DENTL-180 Dental Office Management	3
DENTL-182 Dental Radiography Laboratory	0.5
DENTL-183 Advanced Chairside	5
DENTL-184 Transition to Dental Assisting Professional	7

Note: DVC General Education must be satisfied to earn an associate degree. It is strongly recommended to complete ENGL-122 or equivalent prior to entering the dental assisting program.

total minimum units for the major 33.3

Certificate of achievement Dental assisting

Students completing the program will be able to...

- A. act as a member of the dental health team and apply professional, ethical and legal principles while functioning in the role of the Registered Dental Assistant (RDA).
- B. assume responsibility for prevention of disease transmission utilizing universal precautions in the work environment to protect those entrusted to their care.
- C. show competence in skills as described in the current California Dental Practice Act. Said professional should perform with a balance of professionalism and sensitivity characteristic of genuine compassionate care.
- D. exhibit knowledge necessary for successful completion of the California Registered Dental Assistant's Examination and the National Certified Dental Assistant's Examination.
- E. apply critical thinking and self-assessment skills to enhance learning, research, patient care, professional growth, and continued competency.
- F. integrate and apply health literacy and culturally competent communication skills to oral health care services, academic endeavors, community projects, and professional activities.

<i>program prerequisite:</i>	<i>units</i>
DENTL-120 Overview of Dental Assisting	0.3

<i>required courses:</i>	<i>units</i>
DENHY-124 Dental Radiography	3
DENTL-160 Infection Control and California Dental Practice Act	3
DENTL-171 Oral and Facial Anatomy and Pathology	3.5
DENTL-173 Dental Assisting Chairside Skills	3
DENTL-174 Dental Operative and Laboratory Materials	3
DENTL-176 Anatomy, Physiology, Medical Emergencies, and Pharmacology	2
DENTL-180 Dental Office Management	3
DENTL-182 Dental Radiography Laboratory	0.5
DENTL-183 Advanced Chairside	5
DENTL-184 Transition to Dental Assisting Professional	7
ENGL-122 First-Year College Writing and Reading	3

Note: It is strongly recommended to completed ENGL-122 prior to entering the dental assisting program.

total minimum required units 36.3

DENTL-110 Introduction to the Dental Profession

- 1 units P/NP
- 18 hours lecture per term
 - *Advisory: College-level reading and writing are expected*
 - *Note: This course is open to all students*

This course provides an overview of the dental professions, with special emphasis on assisting and hygiene concepts. Content is designed to be helpful to students considering applying to dental assisting or dental hygiene programs. CSU

DENTL-120 Overview or Dental Assisting

- .3 unit P/NP
- 6 hours lecture/3 hours laboratory per term
 - *Advisory: College-level reading and writing are expected*
 - *Note: Students who complete this course with a (P) grade (75% or higher) will be eligible for selection by lottery for admission into the dental assisting program. Students must submit an official high school diploma or equivalent if they are selected to be a part of the program starting in August. Please see the catalog or website for program information.*

This course is designed for all students interested in enrolling into the dental assisting program. The orientation course provides the student with detailed enrollment information and the health protocol standards for dental assisting students. Emphasis is placed on career pathways of dental assistants, professionalism, and dental assisting organizations. Guidelines from the California Dental Practice Act rules and regulations are presented in relationship to the dental assistant, registered dental assistant, and the registered dental assistant in extended functions. An overview of dental terminology, introduction to clinical instrumentation skills, and areas of planning and time management for the dental assisting student are covered. CSU

DENTL-150 Topics in Dental Assisting

.3-4 units SC

- *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

DENTL-160 Infection Control and California Dental Practice Act

3 units LR

- *36 hours lecture/54 hours laboratory per term*
- *Prerequisite: DENTL-120 or equivalent*
- *Advisory: College-level reading and writing are expected*
- *Limitation on enrollment: Acceptance into the DVC Dental Assisting program, including current TB clearance, hepatitis immunization and/or titer, tetanus vaccination, malpractice insurance, and current CPR certificate (Basic Life Support for Healthcare Provider with AED).*
- *Formerly DENTL-175 (22/23)*

This course introduces the student to microbiology, infectious diseases, immunity, infection control in the dental office, agencies concerned with disease control, OSHA standards and guidelines, and hazard communication management. CSU

DENTL-171 Oral and Facial Anatomy and Pathology

3.5 units LR

- *54 hours lecture/36 hours laboratory per term*
- *Prerequisite: DENTL-120 or equivalent*
- *Limitation on enrollment: Acceptance to the DVC Dental Assisting program, including current TB Clearance, hepatitis immunization and/or titer, tetanus vaccination, malpractice insurance, and current CPR certificate (Basic Life Support for Healthcare Provider with AED).*
- *Advisory: College-level reading and writing are expected*

This course introduces students to head and neck anatomy, embryology, histology, dentition, morphology and oral pathology. Emphasis is placed on the teeth, their supporting structures. CSU

DENTL-173 Dental Assisting Chairside Skills

3 units LR

- *36 hours lecture/54 hours laboratory per term*
- *Prerequisite: DENTL-120 or equivalent*
- *Limitation on enrollment: Acceptance to the DVC Dental Assisting program, including current TB clearance, hepatitis immunization and/or titer, tetanus vaccination, malpractice insurance, and current CPR certificate (Basic Life Support for Healthcare Provider with AED).*
- *Advisory: College-level reading and writing are expected.*

Students will be introduced to the principles of chairside assisting. Emphasis is to be placed on operative procedures, which include chairside responsibilities, instrument identification, tray setups, four-handed techniques, and sequences of general dentistry procedures. Identification, care and maintenance of the operatory and equipment will also be presented. CSU

DENTL-174 Dental Operative and Laboratory Materials

3 units LR

- *36 hours lecture/54 hours laboratory per term*
- *Prerequisite: DENTL-120 or equivalent*
- *Limitation on enrollment: Acceptance to the DVC Dental Assisting program, including current TB clearance, hepatitis immunization and/or titer, tetanus vaccination, malpractice insurance, and current CPR certificate (Basic Life Support for Healthcare Provider with AED).*
- *Advisory: College-level reading and writing are expected.*

This course introduces students to the study, characteristics, safe manipulation, and use of dental materials, laboratory equipment and instruments in operative and restorative dentistry. Emphasis is placed on infection control, safety standards, and hazard control protocols. CSU

DENTL-176 Anatomy, Physiology, Medical Emergencies, and Pharmacology

2 units LR

- *36 hours lecture per term*
- *Prerequisite: DENTL-120 or equivalent*
- *Limitation on enrollment: Acceptance to the DVC Dental Assisting program, including current TB clearance, hepatitis immunization and/or titer, tetanus vaccination, malpractice insurance, and current CPR certificate (Basic Life Support for Healthcare Provider with AED).*
- *Advisory: College-level reading and writing are expected.*
- *Formerly DENTL-181 (22-23)*

This course prepares students to assist in the management of medical and dental emergencies, including review of legal and ethical responsibilities. General anatomy and physiology are introduced. Pathology of the hard and soft tissues of the oral cavity and function of pharmacology are also covered. CSU

DENTL-180 Dental Office Management

3 units LR

- *54 hours lecture per term*
- *Prerequisite: DENTL-120 or equivalent*
- *Limitation on enrollment: Acceptance to the DVC Dental Assisting program, including current TB clearance, hepatitis immunization and/or titer, tetanus vaccination, malpractice insurance, and current CPR certificate (Basic Life Support for Healthcare Provider with AED).*
- *Advisory: College-level reading and writing are expected.*

This course covers front office management duties in the dental profession. These duties include dental staff management and interaction, patient management, written communication, telecommunication, bookkeeping/financial transactions, dental office documents, dental insurance, appointment management systems, dental software, recall systems, inventory systems, and supply ordering. Dental jurisprudence, related ethical concerns, and HIPAA compliance are presented in this course. CSU

DENTL-182 Dental Radiography Laboratory

.5 unit LR

- 27 hours laboratory per term
- Prerequisite: DENHY-124 or equivalent
- Limitation of enrollment: Acceptance to the DVC Dental Assisting program, including current TB clearance, hepatitis immunization and/or titer, tetanus vaccination, malpractice insurance, and current CPR certificate (Basic Life Support for Healthcare Provider with AED).
- Advisory: College-level reading and writing are expected.

This course emphasizes patient management, radiation safety and infection control procedures in accordance with Occupational and Safety and Health Administration (OSHA) and Center For Disease Control (CDC) guidelines and regulations from the California Dental Practice Act (DPA). The laboratory and clinical experiences will allow students to enhance the efficiency and quality of their radiographic techniques. Students will perform, evaluate, and interpret various types of intra-oral and extra-oral radiographs using advanced principles and practices of dental radiography with emphasis on technique and diagnostic quality of dental x-rays. CSU

DENTL-183 Advanced Chairside

5 units LR

- 54 hours lecture/108 hours laboratory per term
- Prerequisite: DENTL-173 or equivalent
- Limitation on enrollment: Acceptance to the DVC Dental Assisting program, including current TB clearance, hepatitis immunization and/or titer, tetanus vaccination, malpractice insurance, and current CPR certificate (Basic Life Support for Healthcare Provider with AED).
- Advisory: College-level reading and writing are expected.

This course presents instruction in assisting and instrumentation for the following dental specialties: orthodontics, endodontics, periodontics, pediatric dentistry, prosthodontics, oral maxillofacial surgery, and public health. The theory and practice of coronal polishing and dental sealants are included. Completion of a dental health community service project is required. CSU

DENTL-184 Transition to Dental Assisting Professional

7 units LR

- 18 hours lecture/320 hours laboratory per term
- Prerequisite: DENTL-174 or equivalent
- Limitation on enrollment: Acceptance to the DVC Dental Assisting program, including current TB Clearance, hepatitis immunization and/or titer, tetanus vaccination, malpractice insurance, and current CPR certificate (Basic Life Support for Healthcare Provider with AED).
- Advisory: College-level reading and writing are expected.

This course offers students supervised clinical experience in an externship environment. Students will provide chairside dental assisting in general practice, and specialty clinics. Course will discuss steps for licensure, RDA Exam Preparation and Professional Characteristics of a Dental Assistant. CSU

DENTL-299 Student Instructional Assistant

.5-3 units SC

- 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 HYGIENE – DENHY

Charles Ramos, Dean

Sciences Division

Physical Sciences Building, Room 263

Possible career opportunities

The Diablo Valley College (DVC) dental hygiene program prepares students to work as an essential member of the dental team. The dental hygiene program provides an excellent path for those interested in a variety of positions in the dental field. Working in a private dental office continues to be the primary place of employment for dental hygienists. For today's dental hygiene professional, there are many other career pathways to explore including providing 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 dental education programs, a career in research, public advocacy, or as a sales representative for an oral healthcare company.

Associate in science degree**Dental hygiene****Students completing the program will be able to...**

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

Dental hygiene

The dental hygiene curriculum requires two consecutive academic years including Summer. The program includes classroom, clinical, and laboratory instruction as well as hands-on experience providing dental hygiene services in the DVC Dental Programs Community Clinic. The dental hygiene program is accredited by the American Dental Association Commission on Dental Accreditation (CODA) and approved by the Dental Hygiene Board of California (DHBC).

Entrance into the dental hygiene program is highly competitive with enrollment limited to 20 students. To be eligible, students must complete the specified prerequisite courses prior to submitting an application. Applications for acceptance to the dental hygiene program are generally accepted in January through mid-February for entrance during the following summer term.

Once accepted into the program, students must pass the orientation course DENHY-101 and submit the following to the Dental Programs Department by the beginning of fall classes: (1) CPR/BLS certification for Health Care Providers; (2) current immunizations/titers; (3) proof of satisfactory tuberculosis (TB) screening; (4) current physical examination; (5) passing background check; and (6) passing certified drug test.

Students must achieve a "C" grade or higher in each course used to meet program requirements. The dental hygiene program classes are taught during the day; however, the general education and prerequisite courses may be offered in the evening. For more information and an application packet visit the DVC dental hygiene website.

major requirements: units

program prerequisites or equivalents:

BIOSC-139*	Human Anatomy.....	5
BIOSC-140*	Human Physiology.....	5
CHEM-108*	Introductory Chemistry.....	4
CHEM-109*	Introduction to Organic and Biochemistry.....	4
ENGL-122	First-Year College Writing and Reading.....	3
or		
ENGL-122A	First-Year College Composition and Reading for Multilingual Students.....	3
NUTRI-160*	Nutrition: Science and Applications.....	3
SOCIO-120**	Introduction to Sociology.....	3

plus at least 4 units from:

BIOSC-119*	Fundamentals of Microbiology.....	4
BIOSC-146*	Principles of Microbiology.....	5

plus at least 4 units from:

MATH-135***	College Algebra.....	4
MATH-135SP***	College Algebra – Self-Paced.....	4
MATH-142***	Elementary Statistics with Probability.....	4

plus at least 3 units from:

COMM-120**	Public Speaking.....	3
COMM-130**	Small Group Communication.....	3

plus at least 3 units from:

PSYCH-101**	Introduction to Psychology.....	3
PSYCH-122**	Psychology in Modern Life.....	3

All overall GPA of 3.0 or higher in science, English, and communication studies is required for program admission.

**Science courses must have been completed within the past seven years.*

***Course substitutions for general education requirements require department chair approval. See a counselor or program advisor.*

****Higher-level math courses are accepted without need for course substitution.*

**total minimum required units
- program prerequisites 41**

program requirements:

DENHY-101	Dental Hygiene Orientation.....	0.5
DENHY-120	Introduction to Dental Hygiene: Theory, Process of Care and Practice.....	1
DENHY-121	Introduction to Comprehensive Clinical Dental Hygiene Care.....	5.5
DENHY-122	Clinical Dental Hygiene.....	6
DENHY-123	Oral Health Care Education.....	2
DENHY-124	Dental Radiography.....	3
DENHY-125	Head and Neck Anatomy, Histology, and Embryology.....	4
DENHY-126	Dental Morphology.....	2
DENHY-127	Infection Control: Theory and Practice.....	2.5
DENHY-128	Periodontics for the Dental Hygienist.....	2
DENHY-129	Contemporary Dental Materials for the Dental Hygienist.....	1.5
DENHY-131	Expanded Functions for the Dental Hygienist.....	2
DENHY-133	Behavioral Foundations and Communication Skills.....	1
DENHY-134	Evaluation of Scientific Research.....	2
DENHY-135	Pharmacology for the Dental Hygienist.....	3
DENHY-136	Dental Hygiene Care of Patients with Special Needs.....	1
DENHY-219	Pathology.....	2
DENHY-223	Ethics, Jurisprudence, and Practice Management.....	2
DENHY-225	Community Oral Health.....	1
DENHY-226	Community Oral Health Service Learning.....	1.5
DENHY-227	Advanced Periodontics and Dental Hygiene Topics.....	2
DENHY-230	Advanced Clinical Dental Hygiene Care I.....	5
DENHY-231	Advanced Clinical Dental Hygiene Care II.....	5.5
DENHY-290	Transitioning from Student to Dental Professional.....	1

total minimum required units - program 59

**total minimum required units - program
and program prerequisites 100**

NOTE: DVC GE Area IB and III must also be completed to satisfy associate degree requirements.

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

DENHY-101 Dental Hygiene Orientation

.5 unit P/NP

- 6 hours lecture/12 hours laboratory per term
- *Limitation on enrollment: Provisional acceptance into the Diablo Valley College Dental Hygiene program (or as an alternate) is required for registration in this course.*
- *Note: Refer to the DVC catalog or Dental Hygiene Program website for information concerning program prerequisites and application process.*

This course is designed to provide an overview of dental hygiene curriculum. Time and financial commitments necessary to be successful in the dental hygiene program will be emphasized. CSU

DENHY-120 Introduction to Dental Hygiene: Theory, Process of Care and Practice

1 unit LR

- 18 hours lecture per term
- *Prerequisite: DENHY-101 or equivalent*
- *Limitation on enrollment: Acceptance to the Diablo Valley College Dental Hygiene program includes current TB clearance, hepatitis immunization and/or titer, tetanus vaccination, malpractice insurance, and current CPR certificate (basic life support for healthcare provider with automated external defibrillators [AED])*

This course provides an introduction to the evolving profession of dental hygiene and focuses on the conceptual framework for dental hygiene and the process of care for the promotion of oral health and wellness. Topics include the history of the dental hygiene profession, institutional accreditation and individual licensing, current dental health trends, health promotion strategies and electronic portfolio development. CSU

DENHY-121 Introduction to Comprehensive Clinical Dental Hygiene Care

5.5 units LR

- 54 hours lecture/144 hours laboratory per term
- *Prerequisite: DENHY-101 or equivalent*
- *Limitation on enrollment: Acceptance to the Diablo Valley College Dental Hygiene program, including current TB Clearance, Hepatitis immunization and/or titer, Tetanus vaccination, malpractice insurance, and current CPR certificate (Basic Life Support for Healthcare Provider with Automated External Defibrillator [AED]). Certified background check and negative drug test required as a condition of enrollment in this course.*

This course provides an introduction to the application of the dental hygiene process of care guided by the human needs conceptual model. The course includes clinical experiences focusing on assessment procedures related to comprehensive dental hygiene care. Instrumentation skill development with an emphasis on safety for the client as well as the clinician will also be addressed. CSU

DENHY-122 Clinical Dental Hygiene

6 units LR

- 54 hours lecture/168 hours laboratory per term
- *Prerequisite: DENHY-121 or equivalent*
- *Limitation on enrollment: Acceptance to the Diablo Valley College Dental Hygiene program, including current TB Clearance, Hepatitis immunization and/or titer, tetanus vaccination, malpractice insurance, and current CPR certification (Basic Life Support for the Healthcare Provider with Automated External Defibrillator [AED]).*

This course provides an introduction to clinical dental hygiene practice. Instruction and experiences will emphasize client assessments, dental hygiene diagnosis, treatment planning implementation, and evaluation of dental hygiene care. Application of knowledge, critical thinking, and basic clinical skills acquired in previous dental hygiene courses will be emphasized. CSU

DENHY-123 Oral Health Care Education

2 units LR

- 36 hours lecture per term
- *Prerequisite: DENHY-101 and NUTRI-160 or equivalents*
- *Limitation on enrollment: Acceptance to the Diablo Valley College Dental Hygiene program, including current TB Clearance, Hepatitis immunization and/or titer, tetanus vaccination, malpractice insurance, and current CPR certification (Basic Life Support for the Healthcare Provider with Automated External Defibrillator [AED]).*

This course provides an introduction to 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. CSU

DENHY-124 Dental Radiography

3 units LR

- 36 hours lecture/54 hours laboratory per term
- *Prerequisite: DENHY-101 or DENTL-120 or equivalent*
- *Limitation on enrollment: Acceptance to the Diablo Valley College Dental Assisting or Dental Hygiene program, including current TB Clearance, Hepatitis immunization and/or titer, tetanus vaccination, malpractice insurance, and current CPR certification (Basic Life Support for the Healthcare Provider with Automated External Defibrillator [AED]).*

This course examines the fundamentals of dental radiography. Topics include history, principles, legal considerations, and radiation safety. Clinical applications include exposure techniques, film processing, mounting and interpreting dental radiographs and identifying errors in technique and their methods of correction. CSU

DENHY-125 Head and Neck Anatomy, Histology, and Embryology

4 units LR

- 54 hours lecture/54 hours laboratory per term
- Prerequisite: DENHY-101, BIOSC-139 and BIOSC-140 or equivalents
- Limitation on enrollment: Acceptance to the Diablo Valley College Dental Hygiene program, including current TB Clearance, Hepatitis immunization and/or titer, tetanus vaccination, malpractice insurance, and current CPR certification (Basic Life Support for the Healthcare Provider with Automated External Defibrillator [AED]).

This course provides an introduction to the structure and functions of the head and neck with special attention given to the oral cavity. General micro-anatomy of the tissue and the embryological development of the head and neck are covered. CSU

DENHY-126 Dental Morphology

2 units LR

- 36 hours lecture per term
- Prerequisite: DENHY-101 or equivalent
- Limitation on enrollment: Acceptance to the Diablo Valley College Dental Hygiene program, including current TB Clearance, Hepatitis immunization and/or titer, tetanus vaccination, malpractice insurance, and current CPR certification (Basic Life Support for the Healthcare Provider with Automated External Defibrillator [AED]).

This course provides an introduction to the structures and forms of the human dentition. Aspects related to dental hygiene care such as root morphology, restorative charting, occlusion and dental anomalies are emphasized. CSU

DENHY-127 Infection Control: Theory and Practice

2.5 units LR

- 36 hours lecture/27 hours laboratory per term
- Prerequisite: DENHY-101 and BIOSC-119 or BIOSC-146 or equivalents
- Limitation on enrollment: Acceptance to the Diablo Valley College Dental Hygiene program, including current TB Clearance, Hepatitis immunization and/or titer, tetanus vaccination, malpractice insurance, and current CPR certification (Basic Life Support for the Healthcare Provider with Automated External Defibrillator [AED]).

This course provides an overview of the prevention of disease and disease transmission in the dental environment. Infection control principles, protocols, Center For Disease Control (CDC) and Occupational Safety and Health Administration (OSHA) recommendations/regulations are presented. CSU

DENHY-128 Periodontics for the Dental Hygienist

2 units LR

- 36 hours lecture per term
- Prerequisite: DENHY-101 or equivalent
- Limitation on enrollment: Acceptance to the Diablo Valley College Dental Hygiene program, including current TB Clearance, Hepatitis immunization and/or titer, tetanus vaccination, malpractice insurance, and current CPR certification (Basic Life Support for the Healthcare Provider with Automated External Defibrillator [AED]).

This course presents a structured study of the discipline of periodontics with a focus on the biological, behavioral and clinical aspects of the periodontal diseases. Topics include normal vs. diseased periodontal structures, etiology, risk factors, classification, and epidemiology. Students will apply periodontal assessment techniques leading to the development of appropriate strategies for planning preventative care, initial treatment and maintenance procedures for the periodontal diseases. Students are introduced to evidence-based decision making as they apply course content to simulated cases. 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
- Limitation on enrollment: Acceptance to the Diablo Valley College Dental Hygiene program, including current TB Clearance, Hepatitis immunization and/or titer, tetanus vaccination, malpractice insurance, and current CPR certification (Basic Life Support for the Healthcare Provider with Automated External Defibrillator [AED]).

This course presents the fundamentals of dental materials. Basic science, behavior and manipulation of dental materials in a framework that enables adaptation to the rapidly evolving array of new dental materials and techniques in the professional arena will be covered. CSU

DENHY-131 Expanded Functions for the Dental Hygienist

2 units LR

- 18 hours lecture/54 hours laboratory per term
- Prerequisite: DENHY-127 or equivalent; CHEM-108 and CHEM-109 or equivalent
- Limitation on enrollment: Acceptance to the Diablo Valley College Dental Hygiene program, including current TB Clearance, Hepatitis immunization and/or titer, tetanus vaccination, malpractice insurance, and current CPR certification (Basic Life Support for the Healthcare Provider with Automated External Defibrillator [AED]).

This course presents dental hygiene advanced clinical functions including clinical practice in administration of local anesthetics, topical anesthetic agents, nitrous oxide/oxygen analgesia and soft tissue curettage. CSU

DENHY-133 Behavioral Foundations and Communications Skills

1 unit LR

- 18 hours lecture per term
- Prerequisite: DENHY-101 or equivalent

This course introduces students to principles drawn from the behavioral sciences to guide dental hygienist-client communication. 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 will be covered. Focus is on the modification of teaching, learning, and communication techniques appropriate for clients throughout the life span and development of abilities to interact with all members of our multicultural society. CSU

DENHY-134 Evaluation of Scientific Research

2 units LR

- 36 hours lecture per term
- Prerequisite: DENHY-120 and ENGL-122 or equivalents
- Limitation on enrollment: Acceptance to the Diablo Valley College Dental Hygiene program, including current TB Clearance, Hepatitis immunization and/or titer, tetanus vaccination, malpractice insurance, and current CPR certification (Basic Life Support for the Healthcare Provider with Automated External Defibrillator [AED]).

This course is designed to familiarize the student with scientific research methodology and skills to critically review, evaluate and interpret scientific research and professional literature. CSU

DENHY-135 Pharmacology for the Dental Hygienist

3 units LR

- 54 hours lecture per term
- Prerequisite: DENHY-101 or equivalent
- Limitation on enrollment: Acceptance to the Diablo Valley College Dental Hygiene program, including current TB Clearance, Hepatitis immunization and/or titer, tetanus vaccination, malpractice insurance, and current CPR certification (Basic Life Support for the Healthcare Provider with Automated External Defibrillator [AED]).

This course introduces the discipline of pharmacology. The focus is on categorizing drugs by therapeutic use and understanding the physiologic basis for drug action and interaction. Client case scenarios are introduced to allow students to apply course content to simulated clinical situations. CSU

DENHY-136 Dental Hygiene Care for Clients with Special Needs

1 unit LR

- 18 hours lecture per term
- Prerequisite: DENHY-101 or equivalent
- Limitation on enrollment: Acceptance to the Diablo Valley College Dental Hygiene program, including current TB Clearance, Hepatitis immunization and/or titer, tetanus vaccination, malpractice insurance, and current CPR certification (Basic Life Support for the Healthcare Provider with Automated External Defibrillator [AED]).

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

- Variable hours
- Prerequisite: DENHY-101 or equivalent
- Limitation on enrollment: Acceptance to the Diablo Valley College Dental Hygiene program, including current TB Clearance, Hepatitis immunization and/or titer, tetanus vaccination, malpractice insurance, and current CPR certification (Basic Life Support for the Healthcare Provider with Automated External Defibrillator [AED]).

This course is a supplemental class 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
- Limitation on enrollment: Acceptance to the Diablo Valley College Dental Hygiene program, including current TB Clearance, Hepatitis immunization and/or titer, tetanus vaccination, malpractice insurance, and current CPR certification (Basic Life Support for the Healthcare Provider with Automated External Defibrillator [AED]).

This course provides an introduction to the principles of general and oral pathology. The focus is to gain skill in recognizing pathologic conditions and to develop an understanding of disease mechanisms, the diagnostic process, referral, and treatment options. CSU

DENHY-223 Ethics, Jurisprudence, and Practice Management

2 units LR

- 36 hours lecture per term
- Prerequisite: DENHY-120 or equivalent
- Limitation on enrollment: Acceptance to the Diablo Valley College Dental Hygiene program, including current TB Clearance, Hepatitis immunization and/or titer, tetanus vaccination, malpractice insurance, and current CPR certification (Basic Life Support for the Healthcare Provider with Automated External Defibrillator [AED]).

This course examines jurisprudence, ethics, and practice management as these concepts relate to dental hygiene care and the dental profession. The importance of professional conduct, continuous quality improvement, self-assessment and peer evaluation are emphasized. Management and leadership skills essential for dental hygienists to participate in the practice management and administration of a dental hygiene practice will be covered. CSU

DENHY-225 Community Oral Health

1 unit LR

- 18 hours lecture per term
- Prerequisite: DENHY-120 or equivalent

This course is designed to focus on oral health promotion and disease prevention for a variety of populations with diverse oral health needs. It provides students with an introduction to the dental care delivery system and the significant social, political, cultural and economic forces directing the system. CSU

DENHY-226 Community Oral Health Service Learning

1.5 unit LR

- 18 hours lecture/27 hours laboratory by arrangement per term
- Prerequisite: DENHY-134 and DENHY-225 or equivalents
- Limitation on enrollment: Acceptance to the Diablo Valley College Dental Hygiene program, including current TB Clearance, Hepatitis immunization and/or titer, tetanus vaccination, malpractice insurance, and current CPR certification (Basic Life Support for the Healthcare Provider with Automated External Defibrillator [AED]).

This course provides an introduction to service-learning experiences related to the study of oral health promotion and disease prevention for groups of people. The process of community health program development including assessment, planning, implementation and evaluation will be emphasized. CSU

DENHY-227 Advanced Periodontics and Dental Hygiene Topics

2 units LR

- 36 hours lecture per term
- Prerequisite: DENHY-120 or equivalent
- Limitation on enrollment: Acceptance to the Diablo Valley College Dental Hygiene program, including current TB Clearance, Hepatitis immunization and/or titer, tetanus vaccination, malpractice insurance, and current CPR certification (Basic Life Support for the Healthcare Provider with Automated External Defibrillator [AED]).

This course presents advanced concepts of dental hygiene theory, comprehensive dental hygiene assessment, and treatment planning. Topics will include evidence-based decision making, powered instrumentation, dentinal hypersensitivity, periodontal pharmacology/chemotherapies to control disease activity, advanced instrumentation techniques and root morphology, sharpening skills, periodontal/restorative relationships, evolving technology for evaluation of oral lesions, and practice with comprehensive dental hygiene treatment planning. CSU

DENHY-230 Advanced Clinical Dental Hygiene Care I

5 units LR

- 18 hours lecture/224 hours laboratory per term
- Prerequisite: DENHY-120 and DENHY-127 or equivalents
- Limitation on enrollment: Acceptance to the Diablo Valley College Dental Hygiene program, including current TB Clearance, Hepatitis immunization and/or titer, tetanus vaccination, malpractice insurance, and current CPR certification (Basic Life Support for the Healthcare Provider with Automated External Defibrillator [AED]).

This course continues and expands development of dental hygiene skills in preventive therapy, oral prophylaxis, periodontal initial preparation, periodontal maintenance therapy, scaling and root debridement procedures, pain control and gingival curettage as well as adjunct therapeutic skills. Dental hygiene assessment (diagnostic) and dental hygiene care planning skills will continue to be developed leading to clinical competency. Techniques in the use and interpretation of radiographs, infection control and office procedures will be developed. CSU

DENHY-231 Advanced Clinical Dental Hygiene Care II

5.5 units LR

- 18 hours lecture/256 hours laboratory per term
- Prerequisite: DENHY-120 and DENHY-127 or equivalents
- Limitation on enrollment: Acceptance to the Diablo Valley College Dental Hygiene program, including current TB Clearance, Hepatitis immunization and/or titer, tetanus vaccination, malpractice insurance, and current CPR certification (Basic Life Support for the Healthcare Provider with Automated External Defibrillator [AED]).

This course is a continuation of the advanced clinical dental hygiene care course designed to lead toward the achievement of entry level clinical competence in preventive oral health care, oral prophylaxis, initial therapy and supportive periodontal therapy. Students will become entry level competent in scaling and debridement procedures, administration of local anesthetics and nitrous-oxide sedation, and gingival curettage as well as adjunct therapeutic skills such as the local placement of antimicrobial agents. 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. CSU

DENHY-290 Transitioning from Student to Dental Professional

1 unit SC

- 18 hours lecture per term
- Prerequisite: DENHY-120 or DENTL-181 or equivalent
- Limitation on enrollment: Acceptance to the Diablo Valley College Dental Assisting or Dental Hygiene program, including current TB Clearance, Hepatitis immunization and/or titer, tetanus vaccination, malpractice insurance, and current CPR certification (Basic Life Support for the Healthcare Provider with Automated External Defibrillator [AED]).

This course will prepare students to transition into professional practice in dentistry. Marketing skills, resume and portfolio preparation, interviewing techniques, methods of compensation, malpractice insurance, and navigating licensure applications are emphasized. CSU

DENHY-298 Independent Study

.5-3 units SC

- Variable hours
- Note: Submission of acceptable educational contract to department and Instruction Office is required.

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. CSU

DENHY-299 Student Instructional Assistant

.5-3 units SC

- 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

Janette Funaro, Dean

Arts and Communication Division

Possible career opportunities

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

Associate in arts degree**Drama**

Students completing the program (acting emphasis) will be able to:

- analyze the important impact of historical and current acting training techniques in the American theater.
- demonstrate professional acting techniques and character development.
- analyze the sociological, political, and economic factors that have impacted American theater throughout history.
- demonstrate correct audition techniques for stage.

Students completing the program (musical theater emphasis) will be able to:

- recognize the importance of musical theater in the history and tradition of American Theater.
- demonstrate advanced musicality with a variety of vocal techniques.
- analyze the sociological, political and economic factors that have impacted musical theater throughout history.
- demonstrate the ability to integrate singing, dancing, and acting in the context of a musical theater scene, song, or production.
- demonstrate professional musical theater audition skills.

Drama

The associate of art degree in drama is a two-year course of study that prepares students for transfer to four-year drama programs and professional training schools, as well as entry level opportunities in community and professional theater. To prepare students for this competitive field, the associate of art degree in drama offers students two areas of specialization from which to choose: Acting or Musical Theater. Intensive, hands-on experience is gained through course work and supporting drama productions presented in the Performing Arts Center and the Arena Theater.

Completion of a B.A. or B.F.A. in theater arts can lead to professional careers in acting, musical theater, technical theater, directing, and design.

Students completing the associate of art degree in drama will be well prepared for both the competitive process of gaining entrance into an advanced course of study in drama at a four year or professional training school, and successfully working as an actor.

Students who intend to transfer to a four-year program are advised to select General Education Option 2 (IGETC) or Option 3 (CSU GE).

To earn this degree, students must complete the core major requirements as indicated and select an area of specialization. Students must complete each course used to meet a major requirement with a "C" grade or higher and complete general education requirements as listed in the catalog.

<i>major requirements:</i>	<i>units</i>
DRAMA-122 Beginning Principles of Acting.....	3
DRAMA-123 Intermediate Principles of Acting.....	3
DRAMA-200 Introduction to Technical Theater.....	3
DRAMA-201 Technical Theater Laboratory.....	1

<i>plus at least 3 units from:</i>	
DRAMA-139 Introduction to Theater	3
DRAMA-142 Multicultural Perspectives in American Theater	3

acting emphasis

<i>required course:</i>	
DRAMA 127 Auditioning Techniques.....	3

<i>plus at least 6 units from:</i>	
COMM-124 Voice and Diction	3
DRAMA-114 Script Analysis	3
DRAMA-124 Advanced Principles of Acting.....	6
DRAMA-125 Advanced Styles in Scene Study: From Shakespeare to Shaw	6
DRAMA-127 Auditioning and Preparation for the Camera....	3
DRAMA-130 Principles of Directing.....	3
DRAMA-150 Children's Theater	3

<i>plus at least 2 units from:</i>	
DRAMA 202 Stage Production-Technical Theater	1-2
DRAMA 270 Stage Production	1-2

total minimum units for the major 24

musical theater emphasis

<i>required course:</i>	
DRAMA-170 Introduction to Musical Theater.....	3
DRAMA-171 Musical Theater II.....	3

<i>plus at least 3 units from:</i>	
COMM-124 Voice and Diction	3
DANCE-160A Tap Dance I	1
DANCE-162A Broadway Dance I.....	1
DRAMA-150 Children's Theater	3
DRAMA-127 Auditioning Techniques.....	3
DRAMA-124 Advanced Principles of Acting.....	6
DRAMA-125 Advanced Styles in Scene Study: From Shakespeare to Shaw	6
MUSIC-166 Chamber Singers	1-2
MUSIC-170 Applied Voice Training	1

<i>plus at least 2 units from:</i>	
DRAMA-275 Musical Theater Production	1-2
DRAMA-202 Fundamentals of Stage Production-Technical Theater	1-2

total minimum units for the major 24

Associate in arts degree Technical theater

Students completing the program will be able to...

- A. exhibit the unique collaborative skills necessary to participate in a theater community.
- B. develop the basic skills required in the craft of theater.
- C. demonstrate the ability to articulate the creative process of theatrical tasks.

The associate degree program in technical theater prepares students for an entry-level career in community and professional theater. Based on the principle of total immersion in the theater, students are engaged in every technical aspect of bringing the live theater experience to the audience. Intensive, hands-on experience is gained through supporting drama productions presented in the DVC laboratories, the Performing Arts Center and the Arena Theater, or as interns at local and regional theaters. Careers may include backstage crew, scene shop technician, scenic painter, property artisan, theater electrician, costume technician, makeup technician, sound/projection artisan, or stage manager.

To earn an associate in arts degree, students must complete each course used to meet a major requirement with a "C" grade or higher. Certain courses may satisfy both major and general education requirements; however, the units are only counted once.

<i>major requirements:</i>	<i>units</i>
DRAMA-111 Introduction to Lighting Design	3
DRAMA-112 Introduction to Stage Makeup	3
DRAMA-122 Basic Principles of Acting	3
DRAMA-200 Introduction to Technical Theater	3
DRAMA-201 Technical Theater Laboratory.....	1-2

<i>plus at least 2 units from:</i>	
DRAMA-202 Fundamentals of Stage Production-Technical Theater.....	1-2

<i>plus at least 2 units from:</i>	
DRAMA-295 Occupational Work Experience Education in DRAMA.....	2-4
DRAMA-296 Internship in Occupational Work Experience Education in DRAMA.....	2-4

plus at least 6 units from:

ART-102	Introduction to Three-Dimensional Design and Sculpture.....	3
ART-105	Introduction to Drawing	3
ART-107	Figure Drawing I	3
ART-138	Sculpture I	3
ARCHI-119	Introduction to Technical Drawing	3
ARCHI-126	Computer Aided Design and Drafting	3
ARTDM-149	Fundamentals of Digital Video.....	3
COMM-124	Voice and Diction	3
DRAMA-113	Introduction to Costume Design.....	3
DRAMA-114	Script Analysis	3
DRAMA-130	Principles of Directing.....	3
DRAMA-139	Introduction to Theater	3
DRAMA-142	Multicultural Perspectives in American Theater	2
DRAMA-150	Children's Theater	3
DRAMA-170	Introduction to Musical Theater.....	3
DRAMA-275	Musical Theater Production.....	1-2
DRAMA-299	Student Instructional Assistant	0.5-3
ENGTC-119	Introduction to Technical Drawing.....	3
MUSX-120	Live Sound.....	3
SOCIO-122	Critical Thinking about Social and Cultural Issues.....	3
total minimum units for the major		23

Associate in arts in theater arts for transfer

Students completing the program will be able to...

- demonstrate skill in performing or crewing a production.
- analyze historical and contemporary theatrical literature.

The associate in arts in theater arts for transfer (AA-T) at Diablo Valley College prepares students to move into a program at a CSU university leading to a baccalaureate degree in theater arts. Completion of a B.A. in theater arts can lead to professional careers in acting, technical theater, stage management, stage direction, and design. In addition, many students find the completion of a theatre arts degree a complementary preparation for careers in education, law, communications, and psychology.

The associate in arts in theater arts for transfer is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major.

In order to earn the degree, students must:

- Complete 60 CSU-transferable units.
- Complete the California State University-General Education-pattern (CSU GE); or the Intersegmental General Education Transfer Curriculum (IGETC) pattern, including the Area 1C requirement for oral communication.
- Complete a minimum of 18 units in the major.
- Attain a minimum grade point average (GPA) of 2.0.
- Earn a grade of "C" or higher in all courses required for the major.

Students transferring to a CSU campus that accepts the degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system, or those students who do not intend to transfer.

Students must complete each course used to meet a major requirement with a "C" grade or higher. Some courses in the major satisfy both major and CSU GE/IGETC general education requirements; however, the units are only counted once toward the 60-unit requirement for an associate degree. 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.

<i>major requirements:</i>		<i>units</i>
DRAMA-122	Basic Principles of Acting	3
DRAMA-139	Introduction to Theater	3

plus at least 3 units from:

DRAMA-201	Technical Theater Laboratory.....	1-2*
DRAMA-270	Stage Production	1-2*

plus at least 9 units from:

DRAMA-111	Introduction to Lighting Design	3
DRAMA-112	Introduction to Stage Makeup	3
DRAMA-113	Introduction to Costume Design.....	3
DRAMA-123	Intermediate Principles of Acting.....	3
DRAMA-200	Introduction to Technical Theater.....	3

or, if not used above:

DRAMA-201	Technical Theater Laboratory.....	1-2*
DRAMA-270	Stage Production	1-2*

total minimum units for the major 18

*Note: a maximum of 3 units may be taken from each of these courses.

Certificate of achievement Acting

Students completing the program will be able to...

- analyze the important impact of historical and current acting training techniques in the American theater.
- demonstrate professional acting techniques and character development.
- analyze the sociological, political, and economic factors that have impacted American theater throughout history.
- demonstrate correct audition techniques for stage.

The certificate of achievement in acting prepares students for transfer to four-year drama programs and professional training schools, as well as entry level opportunities as an actor in community and professional theater. To prepare students for this competitive field, the certificate of achievement in acting offers students intensive, hands-on experience through course work and supporting drama productions presented in the performing arts center and the arena theater.

Drama

A certificate of achievement in acting provides a solid foundation to prepare students for transfer as a drama or theater arts major, and can lead to professional careers in acting, musical theater, technical theater, directing, and design.

Students completing the certificate of achievement in acting will be well prepared for both the competitive process of gaining entrance into an advanced course of study in drama or theater arts at a four year or professional training school, and successfully working as an actor in the theater.

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 during the day, evening, and online.

<i>required courses:</i>	<i>units</i>
DRAMA-122 Beginning Principles of Acting	3
DRAMA-123 Intermediate Principles of Acting	3
DRAMA-127 Auditioning Techniques	3
DRAMA-200 Introduction to Technical Theater	3
DRAMA-201 Technical Theater Laboratory	1

<i>plus at least 3 units from:</i>	
DRAMA-139 Introduction to Theater	3
DRAMA-142 Multicultural Perspectives in American Theater	3

<i>plus at least 6 units from:</i>	
COMM-124 Voice and Diction	3
DRAMA-114 Script Analysis	3
DRAMA-124 Advanced Principles of Acting.....	6
DRAMA-125 Advanced Styles in Scene Study: From Shakespeare to Shaw	6
DRAMA-130 Principles of Directing.....	3
DRAMA-150 Children's Theater	3

<i>plus at least 2 units from:</i>	
DRAMA-202 Stage Production-Technical Theater	1-2
DRAMA-270 Stage Production	1-2

total minimum required units 24

Certificate of achievement Musical theater

Students completing the program will be able to...

- recognize the importance of musical theater in the history and tradition of American Theater.
- demonstrate advanced musicality with a variety of vocal techniques.
- analyze the sociological, political and economic factors that have impacted musical theater throughout history.
- demonstrate the ability to integrate singing, dancing, and acting in the context of a musical theater scene, song, or production.
- demonstrate professional musical theater audition skills.

The certificate of achievement in musical theater prepares students for transfer to four-year musical theater programs and professional training schools, as well as entry level opportunities as a musical theater actor in community and professional theater. To prepare students for this competitive field, the certificate of achievement in musical theater offers students intensive, hands-on experience through course work and supporting musical theater drama productions presented in the performing arts center and the arena theater.

A certificate of achievement in musical theater provides a solid foundation to prepare students for transfer as a musical theater or drama major, and can lead to professional careers in acting, musical theater, technical theater, directing, choreography, and design.

Students completing the certificate of achievement in musical theater will be well prepared for both the competitive process of gaining entrance into an advanced course of study in musical theater or drama at a four year or professional training school, and successfully working as an actor in musical theater.

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 during the day, evening, and online.

<i>required courses:</i>	<i>units</i>
DRAMA-122 Beginning Principles of Acting	3
DRAMA-123 Intermediate Principles of Acting	3
DRAMA-170 Introduction to Musical Theater	3
DRAMA-171 Musical Theater II	3
DRAMA-200 Introduction to Technical Theater	3
DRAMA-201 Technical Theater Laboratory	1

<i>plus at least 3 units from:</i>	
DRAMA-139 Introduction to Theater	3
DRAMA-142 Multicultural Perspectives in American Theater	3

<i>plus at least 3 units from:</i>	
COMM-124 Voice and Diction	3
DANCE-160A Tap Dance I	1
DANCE-162A Broadway Dance I	1
DRAMA-124 Advanced Principles of Acting	6
DRAMA-125 Advanced Styles in Scene Study: From Shakespeare to Shaw	6
DRAMA-127 Auditioning Techniques.....	3
DRAMA-150 Children's Theater	3
MUSIC-166 Chamber Singers	1-2
MUSIC-170 Applied Voice Training	1

<i>plus at least 2 units from:</i>	
DRAMA-202 Fundamentals of Stage Production-Technical Theater	1-2
DRAMA-275 Musical Theater Production	1-2

total minimum required units 24

Certificate of achievement Technical theater

Students completing the program will be able to...

- exhibit the unique collaborative skills necessary to participate in a theater community.
- develop the basic skills required in the craft of theater.
- demonstrate the ability to articulate the creative process of theatrical tasks.

The certificate of achievement program in technical theater prepares students for an entry-level career in community and professional theater. Based on the principle of total immersion in the theater, students are engaged in every technical aspect of bringing the live theater experience to the audience. Intensive, hands-on experience is gained through supporting drama productions presented in the DVC laboratories, the Performing Arts Center and the Arena Theater, or as interns at local and regional theaters. Careers may include backstage crew, scene shop technician, scenic painter, property artisan, theater electrician, costume technician, makeup technician, sound/projection artisan, or stage manager.

To earn a certificate of achievement, students must complete each course used to meet a major requirement with a "C" grade or higher.

<i>required courses:</i>	<i>units</i>
DRAMA-111 Introduction to Lighting Design	3
DRAMA-112 Introduction to Stage Makeup	3
DRAMA-122 Basic Principles of Acting	3
DRAMA-200 Introduction to Technical Theater	3
DRAMA-201 Technical Theater Laboratory	1-2

plus at least 2 units from:

DRAMA-202 Fundamentals of Stage Production-Technical Theater.....	1-2
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plus at least 2 units from:

DRAMA-295 Occupational Work Experience Education in DRAMA.....	2-4
DRAMA-296 Internship in Occupational Work Experience Education in DRAMA.....	2-4

total minimum required units 17

Limitations on enrollment

Effective fall term 2013, changes to the regulations that govern community college enrollments placed limitations on the number of courses that students may take in certain disciplines within the Contra Costa Community College District. The charts below indicate which Diablo Valley College (DVC) courses are assigned to groups of courses ("families") for which limitations have been imposed. Certain courses within certain "families" may be repeated (see catalog description), however, students are limited to four enrollments within the family. Certain DVC courses are equivalent to courses at Los Medanos College and Contra Costa College. An enrollment in an equivalent course at one of those colleges will count toward the allowable four enrollments within the family.

NOTE: Diablo Valley College may offer experimental or topics courses. When appropriate, based on content, such courses will be assigned to a "family" and that enrollment will be counted as an experience within the "family".

DRAMA

Family: Acting

DRAMA-122 Basic Principles of Acting
DRAMA-123 Intermediate Principles of Acting
DRAMA-124 Advanced Principles of Acting
DRAMA-125 Advanced Styles in Scene Study: From Shakespeare to Shaw
DRAMA-155SC Stage Conflict
DRAMA-155SH Solving Shakespeare
DRAMA-155TH Theater for Social Change
DRAMA-155XX Advanced Acting Styles in Early Modern Theater

Family: Audition

DRAMA-126 Audition and Preparation for the Camera
DRAMA-127 Audition Techniques
DRAMA-128 Auditioning and Preparation for the Camera II
DRAMA-129 Theatre Festival Competition
DRAMA-155KC KCAC Theater Fest Competition

Family: Directing

DRAMA-130 Principles of Directing
DRAMA-230 Directing Projects
DRAMA-155AC Directing the One-Act
DRAMA-155DV Devised Theater
DRAMA-155DY Directing Yourself – Creating Original Work for the Stage

Family: Musical Theater

DRAMA-150 Children's Theater
DRAMA-170 Introduction to Musical Theater I
DRAMA-155MT Musical Theater
DRAMA-155MO Monsters and Fairytales – The Evolution of Children's Theater
DRAMA-155VA Acting in Musicals

Drama

Family: Performance Acting

DRAMA-270 Stage Production

DRAMA-155GP From Stage to Silver Screen: Great Productions of the 20th Century

Family: Performance - Musical Theater

DRAMA-275 Musical Theater Production

Family: Production/Technical Theater

DRAMA-201 Technical Theater Laboratory

DRAMA-202 Fundamentals of Stage Production - Technical Theater

DRAMA-260 Technical Theater Practicum

DRAMA-111 Introduction to Lighting Design

3 units SC

- 54 hours lecture per term

This course will present the theory and techniques of stage lighting including the function of lighting equipment, the operation of basic dimmer systems, and the creation of lighting designs for selected scenes from plays. C-ID THTR 173, CSU, UC

DRAMA-112 Introduction to Stage Makeup

3 units SC

- 54 hours lecture per term

This course presents the study the aesthetics, materials, and procedures of stage makeup. Corrective makeup, aging techniques, makeups which are inline with a play's given circumstances, character makeup applications, makeups which accurately depict historical eras and cultural demands, and abstract/linear makeup design projects will be covered. C-ID THTR 175, CSU, UC

DRAMA-113 Introduction to Costume Design

3 units SC

- 36 hours lecture/27 hours laboratory/27 hours laboratory by arrangement per term

This course is an introduction to theatrical costume design. Topics include beginning construction theories, techniques, basic applications and practices. Various fabrics, basic patterning, wardrobe plotting, and historical styles will be covered. C-ID THTR 174, CSU, UC

DRAMA-114 Script Analysis

3 units SC

- IGETC: 3A; CSU GE: C1; DVC GE: III
- 54 hours lecture per term

This course explores the analysis of play scripts. Consideration is given to the historical and cultural context of various kinds of scripts, the bearing of technological change on the way script is understood, genre and form, narrative and plot analysis, linguistic analysis, interpreting stage directions, and identification of main themes. C-ID THTR 114, CSU, UC

DRAMA-122 Basic Principles of Acting

3 units SC

- CSU GE: C1
- 54 hours lecture per term

This course focuses on beginning acting fundamentals with an emphasis on the important elements necessary for scene study and the heightening and focusing of physical and vocal energy. Students will practice incorporating movement, memorization, vocal techniques, and character work for the stage. C-ID THTR 151, CSU, UC

DRAMA-123 Intermediate Principles of Acting

3 units SC

- 54 hours lecture per term
- Advisory: DRAMA-122 or equivalent

This course builds on the basic acting skills from DRAMA-122. The focus is on more complex elements in scene study, character development, and developing heightened physical and vocal energies. Students will practice personalization techniques for application in class and performance. C-ID THTR 152, CSU, UC

DRAMA-124 Advanced Principles of Acting

6 units SC

- 108 hours lecture per term
- Prerequisite: DRAMA-123 or equivalent
- Limitation on enrollment: Audition required; see schedule of classes for specific days and times.

This course is a study of advanced acting with extensive focus on selected scenes from contemporary realism. The course covers an organic approach to acting based on the principles of Constantin Stanislavski. Special emphasis is placed on script analysis, personalization, and intensive listening and receptivity work with partners. CSU, UC

DRAMA-125 Advanced Styles in Scene Study: From Shakespeare to Shaw

6 units SC

- 108 hours lecture per term
- Prerequisite: DRAMA-124 or equivalent
- Limitation on enrollment: Audition required; see schedule of classes for specific days and times.

This course applies the skills and techniques learned in DRAMA-124 to a range of different theatrical genres and styles. Students will analyze, prepare, and perform scenes from a wide variety of historical periods and genres, which may include: Classical, Restoration, Theater of the Absurd, and Early Modernism. This course will help the serious drama student prepare for a career in the competitive, professional theater. CSU, UC

DRAMA-126 Auditioning and Preparation for the Camera

3 units SC

- 54 hours lecture per term
- Advisory: DRAMA-123 or equivalent

This course covers practical training and experience in auditioning and working on camera for the actor. Close attention will be paid to adapting acting techniques that have special application to working in television and film. CSU, UC

DRAMA-127 Auditioning Techniques

3 units SC

- 54 hours lecture per term
- Advisory: DRAMA-122 or equivalent

This course covers the elements and techniques of auditioning. Topics include monologue selection and styles, cold reading, actor's preparation, research, resume development, and practical application of acting techniques for audition purposes. Students will also prepare for college, community and professional theater auditions and create a portfolio of audition material. CSU

DRAMA-128 Auditioning and Preparation for the Camera II

3 units SC

- 54 hours lecture per term
- Prerequisite: DRAMA-126 or equivalent
- Advisory: DRAMA-123 or equivalent

This course will continue to build skills learned in DRAMA-126 utilizing more advanced techniques for auditioning for television and film. Students will use scripts from a variety of film and television styles, explore techniques such as: script analysis for camera work, continuity of takes, hitting a mark, finding and working in key light, and using various frame sizes such as long, medium, and close-up shots. This course will also examine the business side of the film and television industry with emphasis on auditioning, talent agents, casting directors, and demo reels. CSU

DRAMA-129 Theatre Festival Competition

2 units SC

- May be repeated three times
- 14 hours lecture/40 hours laboratory by arrangement per term
- Limitation on enrollment: Audition/interview required; see schedule of classes for specific days and times.
- Note: Portions of this class are held off-campus and require travel, often out-of-state. Enrollment may be selective. Priority may be given to students who have taken core drama classes, are involved in productions, and/or have received Irene Ryan nominations or Meritorious Awards.

This course prepares students to audition and present their work at the Kennedy Center American College Theater Festival (KCACTF). Students will compete at the regional and national levels for scholarships, internships, and work related experiences in the fields of technical theatre, stage management, directing, playwriting, dramaturgy, and acting. CSU

DRAMA-130 Principles of Directing

3 units SC

- 54 hours lecture per term
- Advisory: DRAMA-123 or equivalent; DRAMA-230 (concurrent enrollment) or equivalent; College-level reading and writing are expected.

This course covers the function of the stage director; the preparation of a play script from the first reading through casting, rehearsals, and performance. Emphasis will be placed on theory of directing as well as on its practical application for the stage. CSU, UC

DRAMA-139 Introduction to Theater

3 units SC

- IGETC: 3A; CSU GE: C1; DVC GE: III
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This introductory course surveys the roles of actors, directors, playwrights, and designers in the development of theatrical works. The multiple disciplines of theater throughout history are examined. It will also cover the origins of theater, dramatic structure, the audience and theater performance spaces. C-ID THTR 111, CSU, UC

DRAMA-142 Multicultural Perspectives in American Theater

3 units SC

- IGETC: 3A; CSU GE: C1, C2; DVC GE: III
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This course will explore and evaluate contemporary dramatic literature (1965-present) of Native-American, African-American, Asian-Pacific American, Latinx/Chicanx, Arab American, and LGBTQ cultures. The historical as well as the cultural and social conditions in which these plays developed will also be examined. CSU, UC

DRAMA-150 Children's Theater

3 units SC

- CSU GE: C1
- 54 hours lecture per term

This is a course in the theory, principle, and practice of children's theater. It features the creation of a series of scenes or a full-length children's theater work using dialogue, singing, and dancing, with emphasis on techniques used in performance for a young audience. Students will explore the roles of performers, designers, and dramaturges in the creation of contemporary theater for children. CSU

Drama

DRAMA-155 Topics in Drama

.3-4 units SC

- *Variable hours*

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

.3-4 units SC

- *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

3 units SC

- *54 hours lecture per term*
- *Advisory: MUSIC-170 or equivalent*

This course develops performance skills combining singing, dancing, and acting in the presentation of scenes from musical theater. Students will learn and integrate acting, movement, and singing skills to create a believable character on stage. Rehearsal and performance techniques for a wide variety of musical theater styles and historical periods will be covered. CSU, UC

DRAMA-171 Musical Theater II

3 units SC

- *54 hours lecture per term*
- *Prerequisite: DRAMA-170 or equivalent*
- *Advisory: DRAMA-123 or equivalent*

This course is a study of advanced musical theater with extensive focus on selected scenes and songs from the musical theater genre. The course continues to develop skills and techniques learned in DRAMA-170, with emphasis on singing, acting, blocking, and choreographed dance movement. Students will analyze and prepare musical theater material including ballads, up-tempo, duets, trios, and group songs, and will continue to introduce students to a body of musical theater literature, composers, lyricists, and librettists. CSU, UC

DRAMA-200 Introduction to Technical Theater

3 units SC

- *54 hours lecture per term*
- *Co-requisite: DRAMA-201 or equivalent*

This course provides a theoretical as well as a practical overview of the elements of technical theater. Safety precautions, stage management, stage design, scenery, lighting, sound, acting, make-up, and costuming are among the topics to be presented. The course will also cover possible job opportunities in technical theater. C-ID THTR 171, CSU, UC

DRAMA-201 Technical Theater Laboratory

1-2 units SC

- *Variable hours*
- *Co-requisite: DRAMA 200 or equivalent (may be taken concurrently)*
- *Note: This is a variable unit course with hours by arrangement. Students must complete 54 hours for 1.0 unit or 108 for 2.0 units.*

This course covers the practical applications of technical theater including stage management, stage design, scenery construction, painting for the stage, properties, lighting, sound, make-up, and costuming. Students will obtain hands-on experience working on main stage productions, arena productions, and student-directed projects. Safety procedures for working in the shop and on stage performances are emphasized. C-ID THTR 192, CSU, UC

DRAMA-202 Fundamentals of Stage Production - Technical Theater

1-2 units SC

- *May be repeated three times*
- *Variable hours*
- *Limitation on Enrollment: Interview required. Specific days and times are announced in the Schedule of Classes.*

This is an open entry/open exit course where students participate in a technical theater capacity in a faculty directed stage production. Technical theater students are introduced to participating in a full length production in a variety of ways: working with sets, sound, lighting, painting, costume, stage management, and props. Students will be introduced to professional rehearsal and performance standards. All projects culminate in public performance. The organization and function of the technical staff, the structure of the physical theater, and job opportunities in technical theater will also be discussed. CSU, UC

DRAMA-230 Directing Projects

1-2 units SC

- *Variable hours*
- *Advisory: Concurrent enrollment in DRAMA-130 or equivalent; College-level reading and writing are expected.*

This course provides students the opportunity to practice skills learned in DRAMA-130. Students will prepare and direct a scene or one act from script selection through performance. Students will cast, rehearse, and stage a variety of scenes or one acts; projects may culminate in limited public performance. Emphasis is placed on the director-actor relationship and creating effective staging. CSU, UC

DRAMA-260 Technical Theater Practicum

1-2 units SC

- *May be repeated three times*
- *Variable hours*
- *Limitations on enrollment: Interview with instructor and student director required. Specific days and times are announced in the Schedule of Classes.*
- *Advisory: DRAMA-200 and 201 or equivalent*
- *Note: This is an open-entry, open-exit course.*

This course allows technical theater students to receive practical experience through participation in student-directed projects. CSU, UC

DRAMA-270 Stage Production

1-2 units SC

- *May be repeated three times*
- *Variable hours*
- *Limitations on Enrollment: Audition required. Specific days and times are announced in the Schedule of Classes.*
- *Advisory: DRAMA-122 or equivalent*

This is an open entry/open exit course. After audition and evaluation the students participate in a full-length stage production, with emphasis on rehearsal, character development and collaborative production techniques. All projects will culminate in public performance. C-ID THTR 191, CSU, UC

DRAMA-275 Musical Theater Production

1-2 units SC

- *May be repeated three times*
- *Variable hours*
- *Limitation on Enrollment: Audition required. Specific days and times are announced in the Schedule of Classes.*

This is an open entry/open exit course where students participate in a faculty directed musical theater stage production, with emphasis on the combination of singing, dancing, and acting. Musical Theater Production will focus on how to use musicality, song, and dance, to embody emotional life for performance on stage in a musical theater production. Students will be introduced to professional rehearsal and performance standards. All projects culminate in public performance. CSU, UC

DRAMA-295 Occupational Work Experience Education in DRAMA

2-4 units SC

- *May be repeated eight times*
- *Variable hours*
- *Note: In order to enroll in DRAMA-295, students must be employed, register for the course, complete an online Employment Form, and participate in an orientation. Incomplete grades are not awarded for this course.*

DRAMA-295 is supervised employment that extends classroom learning to the job site and relates to the student's chosen field of study or area of career interest. Under the supervision of a college instructor, students will engage in on-the-job and other learning experiences that contribute to their employability skills and occupational or educational goals. Each unit represents five hours of work per week or 75 hours work per term. Students may earn up to a total of 16 units in any combination of WRKX courses. Repetition allowed per Title 5, Section 55253. CSU

DRAMA-296 Internship in Occupational Work Experience Education in DRAMA

2-4 units SC

- *May be repeated eight times*
- *Variable hours*
- *Note: In order to enroll in the DRAMA-296 course, students must be interning or volunteering, register for the course, complete an online Employment Form, and participate in an orientation. Incomplete grades are not awarded for this course.*

DRAMA-296 is a supervised internship in a skilled or professional level assignment in the student's major field of study or area of career interest. Under the supervision of a college instructor, students will engage in on-the-job and other learning experiences that contribute to their employability skills and occupational or educational goals. Internships may be paid, non-paid, or some partial compensation provided. Each unit represents five hours of paid work or four hours of unpaid work per week or 75 hours of paid work or 60 hours of unpaid work per term. Students may earn up to a total of 16 units in any combination of WRKX courses. Repetition allowed per Title 5, Section 55253. CSU

DRAMA-298 Independent Study

.5-3 units SC

- *Variable hours*
- *Note: Submission of acceptable educational contract to department and Instruction Office is required.*

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. CSU

DRAMA-299 Student Instructional Assistant

.5-3 units SC

- *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

Obed Vazquez, Dean
 Social Sciences Division
 Faculty Office Building, Room 136

Possible career opportunities

Early childhood educators focus on children from zero to age five. Some of the positions held by early childhood professionals are: classroom aide, ECE teacher, site supervisor, program director, child care provider, adult educator of families and other professionals, resource and referral professional, social service worker, youth and family service worker, camp counselor, recreation leader, foster care provider, mental health paraprofessional, or child advocate.

Associate in science degree Early childhood education

Students completing this program will be able to...

- A. identify developmentally appropriate activities for infants, toddlers and preschool age children.
- B. analyze the psychological, physical and cognitive influences on child development.
- C. apply the professional code of ethics.
- D. evaluate strategies to maximize the health, safety and nutrition of children in early childhood education programs.
- E. create a developmentally appropriate integrated curriculum.
- F. assess how socializing agents impact the lives of children and families.
- G. apply the principles of anti-bias pedagogy.
- H. apply observation and assessments to create appropriate environments.
- I. apply positive guidance skills with young children.
- J. apply constructivist theory and intentional teaching methodologies to teacher-child interactions.

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 "C" grade or higher and complete general education requirements as listed in the catalog. Attending classes in the day, the evening or both can complete degree requirements.

<i>major requirements:</i>		<i>units</i>
ECE-123	Introduction to Curriculum in Early Childhood Education	3
ECE-124	Child Development and Psychology.....	3
ECE-125	Principles and Practices of Early Childhood Education	3
ECE-126	Health, Safety, and Nutrition for the Young Child	3
ECE-128	Advanced Curriculum Development in ECE.....	3
ECE-130	Child, Family, and Community.....	3
ECE-144	Diversity in Early Childhood Education	3
ECE-249	Observation and Assessment in the Classroom	4
ECE-250	Practicum in Early Childhood Education.....	4
total minimum units for the major		29

<i>recommended degree electives:</i>		
ECE-129	Strategies for Working with Challenging Behaviors.....	3
ECE-230	Developmentally Appropriate Practice for Infants and Toddlers	3
ECE-231	Infant and Toddler Development	3
ECE-237	Current Topics in Early Childhood Education	0.5-3
ECE-240	Language and Literacy for the Young Child	3
ECE-241	Science and Mathematics for Early Childhood Education.....	3
ECE-242	Music, Dance, and Drama for the Young Child	1
ECE-243	Creative Art for the Young Child	1
ECE-251	Administration I: Programs in Early Childhood Education.....	3
ECE-252	Administration II: Personnel and Leadership in ECE.....	3
ECE-253	Adult Supervision and Mentoring in Early Childhood Classrooms	2
ECE-269	Children with Special Needs.....	3
ECE-298	Independent Study.....	0.5-3

Associate in science in early childhood education for transfer

Students completing this program will be able to...

- A. identify developmentally appropriate activities for infants, toddlers and preschool age children.
- B. analyze the psychological, physical and cognitive influences on child development.
- C. apply the professional code of ethics.
- D. evaluate strategies to maximize the health, safety and nutrition of children in early childhood education programs.
- E. create a developmentally appropriate integrated curriculum.
- F. assess how socializing agents impact the lives of children and families.
- G. apply the principles of anti-bias pedagogy.
- H. apply observation and assessments to create appropriate environments.
- I. apply positive guidance skills with young children.

The associate in science in early childhood education for transfer is a 60 unit degree program designed to prepare students to transfer and study child development, human development, and early childhood education. Students will be prepared to take upper division courses their first semester after transferring. Typically, students who complete this program will be able to complete their upper division coursework in only two additional years. In addition to preparation for transfer, this degree also prepares students for various careers working directly with children, families and other adults in the early childhood profession. Upon completion of this program, students will be eligible to apply for the Teacher level permit on the Child Development Permit Matrix from the State of California Commission on Teacher Credentialing. Students will complete lower division courses in child growth and development, principles and practices in early childhood education, curriculum, observation, assessment, child/family/community relationships, diversity, health and safety, and a culminating student teaching practicum.

The associate in science in early childhood education for transfer is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major.

In order to earn the degree, students must:

- Complete 60 CSU-transferable units.
- Complete the California State University-General Education pattern (CSU GE); or the Intersegmental General Education Transfer Curriculum (IGETC) pattern, including the Area 1C requirement for Oral Communication.
- Complete a minimum of 18 units in the major.
- Attain a minimum grade point average (GPA) of 2.0.
- Earn a grade of "C" or higher in all courses required for the major.

Students transferring to a CSU campus that accepts the degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system, or those students who do not intend to transfer.

Some courses in the major satisfy both major and CSU GE/IGETC general education requirements; however, the units are only counted once toward the 60 unit requirement for an associate degree. 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.

<i>major requirements:</i>		<i>units</i>
ECE-123	Introduction to Curriculum in Early Childhood Education	3
ECE-124	Child Development and Psychology.....	3
ECE-125	Principles and Practices of Early Childhood Education	3
ECE-126	Health, Safety, and Nutrition of the Young Child	3
ECE-130	Child, Family, and Community	3
ECE-144	Diversity in Early Childhood Education	3
ECE-249	Observation and Assessment in the Classroom	4
ECE-250	Practicum in Early Childhood Education.....	4
total minimum units for the major		26

Certificate of achievement Early childhood education - Associate teacher

Students completing the program will be able to...

- A. create a developmentally appropriate integrated curriculum.
- B. analyze the psychological, physical, and cognitive influences on child development.
- C. identify the principles and ideas of the Early Childhood Education profession.
- D. assess how socializing agents and culture impacts the lives of children and families

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 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.

<i>required courses:</i>		<i>units</i>
ECE-123	Introduction to Curriculum in Early Childhood Education	3
ECE-124	Child Development and Psychology.....	3
ECE-125	Principles and Practices of Early Childhood Education	3
ECE-130	Child, Family, and Community	3
total minimum required units		12

**Certificate of achievement
Early childhood education - Basic**

Students completing this program will be able to...

- A. identify developmentally appropriate activities for infants, toddlers and preschool age children.
- B. analyze the psychological, physical and cognitive influences on child development.
- C. apply the professional code of ethics.
- D. evaluate strategies to maximize the health, safety and nutrition of children in early childhood education programs.
- E. create a developmentally appropriate integrated curriculum.
- F. assess how socializing agents impact the lives of children and families.
- G. apply the principles of anti-bias pedagogy.
- H. apply observation and assessments to create appropriate environments.
- I. apply positive guidance skills with young children.
- J. apply constructivist theory and intentional teaching methodologies to teacher child interactions.

This certificate prepares students to meet the demands of today’s childcare centers, preschool programs, and nursery schools. The certificate meets the California State Department of Social Services, Community Care Licensing Title 22, and Division 12 requirements for a fully qualified teacher. The early childhood education basic certificate is an alternative certificate to the California State Matrix and to the child development certificate.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a “C” grade or higher. Attending classes in the day, the evening, or both can complete certificate requirements.

<i>required courses:</i>	<i>units</i>
ECE-123 Introduction to Curriculum in Early Childhood Education	3
ECE-124 Child Development and Psychology.....	3
ECE-125 Principles and Practices of Early Childhood Education	3
ECE-126 Health, Safety, and Nutrition for the Young Child	3
ECE-128 Advanced Curriculum Development in ECE.....	3
ECE-130 Child, Family, and Community	3
ECE-144 Diversity in Early Childhood Education	3
ECE-249 Observation and Assessment in the Classroom	4
ECE-250 Practicum in Early Childhood Education.....	4
total minimum required units	29

**Certificate of achievement
Early childhood education - Master teacher**

Students completing this program will be able to...

- A. create a developmentally appropriate integrated curriculum.
- B. analyze the psychological, physical and cognitive influences on child development.
- C. identify and apply the principles and ideals of the Early Childhood Education profession.
- D. assess how socializing agents and culture impact the lives of children and families.
- E. evaluate strategies to maximize the health, safety and nutrition of children in early childhood education programs.
- F. apply the principles of anti-bias pedagogy.
- G. implement the observe, plan, document, reflect and assess cycle for curriculum planning.
- H. develop positive relationships and responsive interactions with young children.
- I. demonstrate techniques for guiding adults working with young children.
- J. demonstration of knowledge in a specialization area.
- K. apply constructivist theory and intentional teaching methodologies to teacher child interactions.

This early childhood education 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 and a fingerprint clearance, graduates are qualified to apply for a Child Development Permit from the California Commission on Teacher Credentialing, 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.

<i>required courses:</i>	<i>units</i>
ECE-123 Introduction to Curriculum in Early Childhood Education	3
ECE-124 Child Development and Psychology.....	3
ECE-125 Principles and Practices of Early Childhood Education	3
ECE-126 Health, Safety, and Nutrition for the Young Child	3
ECE-128 Advanced Curriculum Development in ECE.....	3
ECE-130 Child, Family, and Community	3
ECE-144 Diversity in Early Childhood Education	3
ECE-249 Observation and Assessment in the Classroom	4
ECE-250 Practicum in Early Childhood Education.....	4
ECE-253 Adult Supervision and Mentoring in Early Childhood Classrooms	2

plus at least 6 units in any one of these areas of concentration:

creative expression

ECE-237*	Current Topics in Early Childhood Education	0.5-3
ECE-242	Music, Dance, and Drama for the Young Child	1
ECE-243	Creative Art for the Young Child	1

or one course from:

ART-155	Ceramic Sculpture I	3
ART-160	Photography I	3
DRAMA-150	Children's Theater	3
DANCE-100	Introduction to Dance	1
DANCE-110A	Ballet Fundamentals I	1
DANCE-130A	Modern Dance Fundamentals I	1
DANCE-160A	Tap Dance I	1
MUSIC-112	America's Music – A Multicultural Perspective	3
MUSIC-150	Beginning Piano I	1
MUSIC-151	Beginning Piano II	1
MUSIC-160	Beginning Guitar	1
MUSIC-171	Jazz and Popular Solo Voice	1
MUSIC-262	Intermediate Guitar I	1

curriculum

ECE-237*	Current Topics in Early Childhood Education	0.5-3
ECE-240	Language and Literacy for the Young Child	3
ECE-241	Science and Mathematics for Early Childhood Education	3
ECE-242	Music, Dance, and Drama for the Young Child	1
ECE-243	Creative Art for the Young Child	1
ECE-244	Circle Time Activities	1

infants and toddlers

ECE-230	Developmentally Appropriate Practice for Infants and Toddlers	3
ECE-231	Infant and Toddler Development	3

language and literature

ECE 237*	Current Topics in Early Childhood Education	0.5-3
ECE-240	Language and Literacy for the Young Child	3
ENGL-177	Children's Literature	3
LT-111	Storytelling	2

science and math

ECE-237*	Current Topics in Early Childhood Education	0.5-3
ECE-241	Science and Mathematics for Early Childhood Education	3

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

sign language

SIGN-280	American Sign Language (ASL) I	3
SIGN-281	American Sign Language (ASL) II	3
SIGN-282	American Sign Language (ASL) III	3
SIGN-283	American Sign Language (ASL) IV	3

special needs

ECE-129	Strategies for Working with Challenging Behaviors	3
ECE-269	Children with Special Needs	3
EDUSP-101	Introduction to Disabilities	3
EDUSP-102	Historical Perspectives of Disabilities and the Law	3
EDUSP-103	Classroom Strategies for the Special Education Paraeducator	3
SIGN-280	American Sign Language (ASL) I	3
SIGN-281	American Sign Language (ASL) II	3
SIGN-282	American Sign Language (ASL) III	3
SIGN-283	American Sign Language (ASL) IV	3

plus at least 16 units from:

general education courses

At least 3 units in each of these 4 subject areas: English (only one course from English 116, 117, 117A, or 118 can be used); Math/Science; Humanities (may not use History courses); Social Sciences (may not use ECE courses). CLEP or AP exams may not be used to meet the GE subject area unit requirements.

total minimum required units

53

*Topics for ECE-237 vary. Please contact the Early Childhood Education Department to verify if a specific ECE-237 course meets the requirements for a particular area of specialization.

Certificate of achievement**Early childhood education - Site supervisor**

Students completing this program will be able to...

- A. create a developmentally appropriate integrated curriculum.
- B. analyze the psychological, physical and cognitive influences on child development.
- C. identify and apply the principles and ideals of the Early Childhood Education Profession.
- D. assess how socializing agents and culture impact the lives of children and families.
- E. evaluate strategies to maximize the health, safety and nutrition of children in early childhood education programs.
- F. develop techniques which will create sensitivity for various biases.
- G. implement the observe, plan, document, reflect and assess cycle for curriculum planning.
- H. develop positive relationships and responsive interactions with young children.
- I. demonstrate techniques for guiding adults working with young children.
- J. examine theory and methodology for effective supervision.
- K. apply ethical codes and licensing standards to practices and policies.
- L. identify business requirements for children's centers.
- M. examine theory and methodology for effective supervision.
- N. demonstrate knowledge in specialization area.

Early childhood education

This early childhood education 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 and a fingerprint clearance, graduates are qualified to apply for a Child Development Permit from the California Commission on Teaching Credentialing, 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.

<i>required courses:</i>		<i>units</i>
ECE-123	Introduction to Curriculum in Early Childhood Education.....	3
ECE-124	Child Development and Psychology.....	3
ECE-125	Principles and Practices of Early Childhood Education.....	3
ECE-126	Health, Safety, and Nutrition for the Young Child	3
ECE-128	Advanced Curriculum Development in ECE.....	3
ECE-130	Child, Family, and Community	3
ECE-144	Diversity in Early Childhood Education	3
ECE-249	Observation and Assessment in the Classroom	4
ECE-250	Practicum in Early Childhood Education	4
ECE-251	Administration I: Programs in Early Childhood Education	3
ECE-252	Administration II: Personnel and Leadership in ECE.....	3
ECE-253	Adult Supervision and Mentoring in Early Childhood Classrooms	2

plus at least 16 units from:
general education courses..... 16

At least 3 units in each of these 4 subject areas: English (only one course from English 116, 117, 117A, or 118 can be used); Math/Science; Humanities (may not use History courses); Social Sciences (may not use ECE courses). CLEP or AP exams may not be used to meet the GE subject area unit requirements.

plus 7 units of degree-applicable electives courses
-see suggested courses below

total minimum required units **60**

suggested elective courses

ECE-100	Essential Life Skills of Childhood.....	1-3
ECE-101	Media and the Developing Child.....	1-3
ECE-102	Childhood and Nature.....	1-3
ECE-103	Brain Development in Childhood.....	1-3
ECE-104	Cultural Influences on the Developing Child	1-3
ECE-105	Emotional Intelligence and the Developing Child	1-3
ECE-106	Child Behavior: Is This Normal?	1-3
ECE-110	Current Issues in Child Development	1-3
ECE-111	Current Issues in Child Cognitive Development	1-3
ECE-112	Current Issues in Child Physical Development	1-3
ECE-113	Play and the Developing Child.....	1-3
ECE-114	Current Issues in Child Personality Development	1-3
ECE-126	Health, Safety, and Nutrition for the Young Child	3
ECE-129	Strategies for Working with Challenging Behaviors.....	3
ECE-230	Developmentally Appropriate Practice for Infants and Toddlers	3
ECE-231	Infant and Toddler Development	3
ECE-269	Children with Special Needs.....	3

Certificate of achievement

Early childhood education - Teacher Students completing the program will be able to...

- A. identify developmentally appropriate activities for infants, toddlers and preschool age children.
- B. analyze the psychological, physical and cognitive influences on child development.
- C. apply the professional code of ethics.
- D. evaluate strategies to maximize the health, safety and nutrition of children in early childhood education programs.
- E. create a developmentally appropriate integrated curriculum.
- F. assess how socializing agents impact the lives of children and families.
- G. apply the principles of anti-bias pedagogy.
- H. apply observation and assessments to create appropriate environments.
- I. apply positive guidance skills with young children.
- J. apply constructivist theory and intentional teaching methodologies to teacher child interactions.

This early childhood education certificate meets the education requirements for the teacher level of the Child Development Permit Matrix issued by the State of California Commission on Teacher Credentialing. After meeting additional experience requirements and a fingerprint clearance, graduates are qualified to apply for a Child Development Permit from the California Commission on Teacher Credentialing, 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:	units
ECE-123 Introduction to Curriculum in Early Childhood Education	3
ECE-124 Child Development and Psychology.....	3
ECE-125 Principles and Practices of Early Childhood Education	3
ECE-126 Health, Safety and Nutrition for the Young Child	3
ECE-128 Advanced Curriculum Development in ECE.....	3
ECE-130 Child, Family, and Community.....	3
ECE-144 Diversity in Early Childhood Education	3
ECE-249 Observation and Assessment in the Classroom	4
ECE-250 Practicum in Early Childhood Education.....	4

plus at least 16 units from:
general education courses..... 16

At least 3 units in each of these 4 subject areas: English (only one course from English 116, 117, 117A, or 118 can be used); Math/Science; Humanities (may not use History courses); Social Sciences (may not use ECE courses). CLEP or AP exams may not be used to meet the GE subject area unit requirements.

total minimum required units 45

ECE-100 Essential Life Skills of Childhood

1-3 units P/NP

- Variable hours
- Note: One unit: lecture only. Two units: lecture plus three laboratory hours per week. Three units: lecture plus six hours per week. Participation in the Developmental Children’s Center Laboratory School or approved off-campus mentor site is required for laboratory hours. All students enrolled in laboratory must have a negative TB test and verified immunizations against pertussis, measles and influenza (waiver allowed for influenza).

This course explores essential life skills developed during childhood that make a lifelong difference in our ability to learn, communicate and cope with challenges. Drawing from research in child development and neuroscience, this course outlines practical ways people working with children can foster these skills in young children. CSU

ECE-101 Media and the Developing Child

1-3 units P/NP

- Variable hours
- Note: One unit: lecture only. Two units: lecture plus three laboratory hours per week. Three units: lecture plus six hours per week. Participation in the Developmental Children’s Center Laboratory School or approved off-campus mentor site is required for laboratory hours. All students enrolled in laboratory must have a negative TB test and verified immunizations against pertussis, measles and influenza (waiver allowed for influenza).

This class investigates popular media and implications for the developing child. Focus is on the impact of media on personality, cognition, social attributes and health. Strategies for assessing media and using them effectively will be explored. CSU

ECE-102 Childhood and Nature

1-3 units P/NP

- Variable hours
- Note: One unit: lecture only. Two units: lecture plus three laboratory hours per week. Three units: lecture plus six hours per week. Participation in the Developmental Children’s Center Laboratory School or approved off-campus mentor site is required for laboratory hours. All students enrolled in laboratory must have a negative TB test and verified immunizations against pertussis, measles and influenza (waiver allowed for influenza).

This course explores the vital role of children’s ongoing experiences with nature as a basis for creativity, problem solving, critical thinking and physical and emotional well-being. Multiple resources and practical hands-on activities that support child-nature connections are introduced. CSU

ECE-103 Brain Development in Childhood

1-3 units P/NP

- Variable hours
- Note: One unit: 18 hours lecture only. Two units: 18 hours lecture plus three laboratory hours per week. Three units: 18 hours lecture plus six laboratory hours per week. Participation in the Developmental Children’s Center Laboratory School or approved off-campus mentor site is required for laboratory hours. All students enrolled in laboratory must have a negative TB test and verified immunizations against pertussis, measles and influenza (waiver allowed for influenza).

This class studies the neurological connections that form in a child’s brain during pregnancy and early childhood and the long-term effects of environmental factors during these formative years. Topics range from the connections between the brain and emotional regulation to the complexity of language acquisition. CSU

ECE-104 Cultural Influences on the Developing Child

1-3 units P/NP

- Variable hours
- Note: One unit: lecture only. Two units: lecture plus three laboratory hours per week. Three units: lecture plus six hours per week. Participation in the developmental Children's Center Laboratory School or approved off-campus mentor site is required for laboratory hours. All students enrolled in laboratory must have a negative TB test and verified immunizations against pertussis, measles and influenza (waiver allowed for influenza).

This course explores personality development in young children within the context of culture. The interacting forces that shape personality are discussed. Focus is on the role of caregivers in supporting optimal social-emotional development in young children. CSU

ECE-105 Emotional Intelligence and the Developing Child

1-3 units P/NP

- Variable hours
- Note: One unit: lecture only. Two units: lecture plus three laboratory hours per week. Three units: lecture plus six hours per week. Participation in the Developmental Children's Center Laboratory School or approved off-campus mentor site is required for laboratory hours. All students enrolled in laboratory must have a negative TB test and verified immunizations against pertussis, measles and influenza (waiver allowed for influenza).

This course explores the development of children's emotional intelligence. The interacting forces that shape emotional intelligence are discussed. Focus is on the role of caregivers in supporting optimal emotional intelligence development in young children. CSU

ECE-106 Child Behavior: Is This Normal?

1-3 units P/NP

- Variable hours
- Note: One unit: lecture only. Two units: lecture plus three laboratory hours per week. Three units: lecture plus six hours per week. Participation in the Developmental Children's Center Laboratory School or approved off-campus mentor site is required for laboratory hours. All students enrolled in laboratory must have a negative TB test and verified immunizations against pertussis, measles and influenza (waiver allowed for influenza).

This course explores a broad range of behaviors in young children. Child development information, resources, and suggestions for addressing specific behavior issues will be presented. CSU

ECE-110 Current Issues in Child Development

1-3 units P/NP

- Variable hours
- Note: One unit: lecture only. Two units: lecture plus three laboratory hours per week. Three units: lecture plus six hours per week. All students enrolling in laboratory units must have a negative TB test and verified immunizations against pertussis, measles and influenza (waiver allowed for influenza). Participation in the Developmental Children's Center Laboratory School or approved off-campus mentor site is required for two or three units.

This course presents an in-depth investigation into current research, theories, and issues in the study of child development. The emphasis is on analyzing current and ongoing research along with contemporary trends. Specific current issues will be announced in the schedule of classes. CSU

ECE-111 Current Issues in Child Cognitive Development

1-3 units P/NP

- Variable hours
- Note: One unit: lecture only. Two units: lecture plus three laboratory hours per week. Three units: lecture plus six hours per week. All students enrolling in laboratory units must have a negative TB test and verified immunizations against pertussis, measles and influenza (waiver allowed for influenza). Participation in the Developmental Children's Center Laboratory School or approved off-campus mentor site is required for two or three units.

This course presents an in-depth investigation into current research, theories, and issues in the study of cognitive development. Emphasis is placed on understanding how children's thinking develops and evaluation of major theories and explanations for intellectual growth. Both classic findings and state-of-the-art research are reviewed and applied to contemporary issues related to children's cognitive and language development. CSU

ECE-112 Current Issues in Child Physical Development

1-3 units P/NP

- Variable hours
- Note: One unit: lecture only. Two units: lecture plus three laboratory hours per week. Three units: lecture plus six hours per week. All students enrolling in laboratory units must have a negative TB test and verify immunizations against pertussis, measles and influenza (waiver allowed for influenza). Participation in the Developmental Children's Center Laboratory School or approved off-campus mentor site is required for two or three units.

This course presents an in-depth investigation into current research, theories, and issues related to physical development of young children. It examines the essential nature of physical play for children's development and learning. Issues that impact physical development will be investigated along with resources and practical hand-on developmentally appropriate experiences. CSU

ECE-113 Play and the Developing Child

1-3 units P/NP

- *Variable hours*
- *Note: One unit: lecture only. Two units: lecture plus three laboratory hours per week. Three units: lecture plus six hours per week. All students enrolling in laboratory units must have a negative TB test and verified immunizations against pertussis, measles and influenza (waiver allowed for influenza). Participation in the Developmental Children's Center Laboratory School or approved off-campus mentor site is required for two or three units.*

This class presents an in-depth investigation into current research and theories on the role of play as a significant factor in human success and happiness. Why children play, what they learn through play and how toys facilitate play and broaden development are discussed. Focus is on current research on play and its profound implications for child development and parenting, for education and social policy, and for multiple aspects of the future of our society. CSU

ECE-114 Current Issues in Child Personality Development

1-3 units P/NP

- *Variable hours*
- *Note: One unit: lecture only. Two units: lecture plus three laboratory hours per week. Three units: lecture plus six hours per week. All students enrolling in laboratory units must have a negative TB test and verify immunizations against pertussis, measles and influenza (waiver allowed for influenza). Participation in the Developmental Children's Center Laboratory School or approved off-campus mentor site is required for two or three units.*

This course presents an in-depth investigation in current research, theories, and issues in the study of personality development. The emphasis is on analyzing current and ongoing research along with contemporary trends. CSU

ECE-123 Introduction to Curriculum in Early Childhood Education

3 units SC

- *54 hours lecture per term*
- *Advisory: ECE-124 or equivalent, College-level reading and writing are expected.*
- *Note: Meets the Department of Social Services licensing for DSS III Program and Curriculum Development*

This course presents developmentally appropriate curriculum and environments for young children. Teaching and curriculum development strategies based on theoretical frameworks, observation, and assessment are explored. There is an emphasis on the teacher's role in supporting child development and learning across the curriculum. C-ID ECE 130, CSU

ECE-124 Child Development and Psychology

3 units SC

- *IGETC: 4; CSU GE: D, E; DVC GE: IV*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*
- *Note: Meets the State Department of Social Services licensing requirement for DSS I Child/Human Growth and Development*

This course examines the major physical, psychosocial, and cognitive/language developmental milestones for children, both typical and atypical, from conception through adolescence. Emphasis is placed on interactions between maturational processes and environmental factors. Students will observe children, evaluate individual differences, and analyze characteristics of development at various stages according to developmental theories. C-ID CDEV 100, CSU, UC

ECE-125 Principles and Practices of Early Childhood Education

3 units SC

- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*
- *Note: Meets the State Department of Social Services licensing requirement for DSS III, Program and Curriculum Development*

This course examines the principles of developmentally appropriate practices as applied to early childhood education settings. The history and philosophy of early childhood education, the ethics of professional practices, and orientation to careers working with children are included. Emphasis is placed on types of programs, learning environments, the key role of relationships, constructive adult-child interactions, and teaching strategies supporting the development of all children. C-ID ECE 120, CSU

ECE-126 Health, Safety, and Nutrition for the Young Child

3 units SC

- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*
- *Note: Meets the State Department of Social Services licensing requirement for DSS VII, Health and Safety*

This course presents an Introduction to the laws, regulations, standards, policies and procedures, and early childhood curriculum related to child health, safety and nutrition. The key components that ensure physical and mental health, along with safety for both children and staff will be identified along with the importance of collaboration with families and health professionals. Emphasis will include the integration of the concepts into everyday planning and program development for all children. C-ID ECE 220, 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)*
 - *Advisory: ECE-123 or equivalents, College-level reading and writing are expected.*
 - *Note: Meets the State Department of Social Services licensing requirement for DSS III, Program and Curriculum Development*

This advanced course will focus on new trends, approaches and techniques in early childhood education curriculum. Students will explore and practice various early childhood education curriculum approaches. CSU

ECE-129 Strategies for Working with Challenging Behaviors

- 3 units SC
- 54 hours lecture per term
 - *Advisory: ECE-124 or equivalent, College-level reading and writing are expected.*
 - *Note: Meets the State Department of Social Services licensing requirement for DSS III, Program and Curriculum Development. This course can be applied to professional development units for Child Development Permit holders as well as pre-school, transitional kindergarten, and early-primary teachers.*

This course examines developmentally appropriate behaviors, challenging behaviors, and the various influences that effect how young children respond in a variety of situations. Topics include analysis of children's behaviors and strategies to support social competency. CSU

ECE-130 Child, Family, and Community

- 3 units SC
- CSU GE: D
 - 54 hours lecture per term
 - *Advisory: College-level reading and writing are expected.*
 - *Note: Meets the State Department of Social Services licensing requirements for DSS II, Child, Family, and Community*

This course presents an examination of societal influences and the role of collaboration between family, community, and schools in supporting children's development. Community resources supporting children and their families within their cultures and communities are introduced. C-ID CDEV 110, CSU

ECE-144 Diversity in Early Childhood Education

- 3 units SC
- CSU GE: D
 - 54 hours lecture per term
 - *Advisory: College-level reading and writing are expected.*
 - *Note: Meets the State Department of Social Services licensing requirements for DSS III, Program and Curriculum Development*

This course examines the impact of various societal influences on the development of children's social identity. Developmentally appropriate, inclusive, and anti-bias approaches are discussed. Self-examination and reflection on issues related to social identity, stereotypes, and bias will also be emphasized. C-ID ECE 230, CSU

ECE-230 Developmentally Appropriate Practice for Infants and Toddlers

- 3 units SC
- 54 hours lecture per term
 - *Advisory: ECE-124 or equivalents, College-level reading and writing are expected.*
 - *Note: Meets the State Department of Social Services licensing requirement for DSS IV, Infant Care and Development*

This course applies current theory and research to the care and education of infants and toddlers in group settings. It examines essential policies, principles and practices that lead to quality care and developmentally appropriate curriculum for children birth to 36 months, including elements of responsive environments and collaboration with families. CSU

ECE-231 Infant and Toddler Development

- 3 units SC
- 54 hours lecture per term
 - *Advisory: ECE-124 or equivalent, College-level reading and writing are expected.*

This course studies the physical, cognitive, linguistic, social, and emotional development and growth of infants and toddlers. Students will apply current research and developmental theory to infant and toddler behavior. Emphasis is placed on the role of the family and relationships. CSU

ECE-237 Current Topics in Early Childhood Education

- .5-3 units SC
- *Variable hours*
 - *Advisory: College-level reading and writing are expected.*
 - *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 and Literacy for the Young Child

- 3 units SC
 • 54 hours lecture per term

This course is an introduction to young children's literature, emergent literacy and 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
 • Note: Meets the State Department of Social Services licensing requirement for DSS III, Program and Curriculum Development

This course explores how science, mathematics, the physical and the natural world are integrated into early childhood education curricula. Students will create science and math experiences, select appropriate materials, and learn specific scientific and mathematical techniques for working with young children. The course focuses on tapping into children's natural curiosity by utilizing observation, reasoning skills, inquiry and hands-on, playful experiences. CSU

ECE-242 Music, Dance, and Drama for the Young Child

- 1 unit SC
 • 18 hours lecture per term
 • Note: Meets the State Department of Social Services licensing requirement for DSS III, Program and Curriculum Development. This course can be applied to professional development units for Child Development Permit holders, as well as pre-school, transitional kindergarten, and early-primary teachers.

The course presents an introduction to the performing arts domain of the California Preschool Learning Foundations and Frameworks including the strands of music, dance, and drama throughout the curriculum will be explored. CSU

ECE-243 Creative Art for the Young Child

- 1 unit SC
 • 18 hours lecture per term
 • Advisory: College-level reading and writing are expected.
 • Note: Meets the State Department of Social Services licensing requirement for DSS III, Program and Curriculum Development. This course can be applied to professional development units for Child Development Permit holders, as well as pre-school, transitional kindergarten, and early-primary teachers.

This course presents an introduction to the visual arts domain of the California Preschool Learning Foundations and Frameworks. The developmental stages of children's artistic expression and practical strategies for exploring creative art mediums with young children will be covered. 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-249 Observation and Assessment in the ECE Classroom

- 4 units SC
 • 54 hours lecture/54 hours laboratory by arrangement per term
 • Prerequisite: ECE-124
 • Advisory: ECE-125 (may be taken concurrently) or equivalent. College-level reading and writing are expected.
 • Note: Required negative TB test and verify immunizations against Pertussis, measles and influenza (waiver allowed for influenza) to participate in laborator 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.

This course focuses on the appropriate use of assessment and observation strategies to document development, growth, play and learning in early childhood education settings. Students will utilize practical classroom experiences to apply a variety of observation methodologies including, child portfolios, recording strategies, rating systems, and multiple assessment tools. Students will explore the connections between developmental theory and practical usage of reflective observation in the DVC Children's Center or an approved mentor site. C-ID ECE 200, CSU

ECE-250 Practicum in Early Childhood Education

- 4 units SC
- 36 hours lecture/108 hours laboratory by arrangement per term
 - Prerequisite: ECE-123, ECE-124, ECE-125, ECE-249 or equivalents
 - Advisory: College-level reading and writing are expected.
 - Note: Required negative TB test and verify immunizations against pertussis, measles and influenza (waiver allowed for influenza) to participate in lab work. Meets the State department of Social Services licensing requirement for DSS III, Program and Curriculum Development.

This course provides a 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 from diverse backgrounds. Child centered, play-oriented approaches to teaching, learning, and assessment; and knowledge of curriculum content areas will be emphasized. Student will design, implement, and evaluate learning activities and environments. C-ID ECE 210, CSU

ECE-251 Administration I: Programs in Early Childhood Education

- 3 units SC
- 54 hours lecture per term
 - Prerequisite: ECE-124 or equivalent
 - Note: Meets the State Department of Social Services licensing requirement for DSS VI, Supervision and Administration

This course presents an introduction to the administration of early childhood programs (ECE). Topics include program types, budget, management, regulations, laws, development and implementation of policies and procedures. Administrative tools, philosophies, and techniques needed to organize, open, and operate an early care and education program will be examined. CSU

ECE-252 Administration II: Personnel and Leadership in ECE

- 3 units SC
- 54 hours lecture per term
 - Advisory: ECE-251 or equivalent, College-level reading and writing are expected.
 - Note: Meets the State Department of Social Services licensing requirement for DSS VI, Supervision and Administration

This course provides an overview of effective strategies for personnel management and leadership in early care and education settings. Focus is on the human relations aspects of successful administration. Topics include legal and ethical responsibilities, supervision techniques, professional development, and reflective practices for a diverse and inclusive early care and education program. CSU

ECE-253 Adult Supervision and Mentoring in Early Childhood Classrooms

- 2 units SC
- 36 hours lecture per term
 - Advisory: ECE-124, ECE-125, ECE-130, and ECE-250 or equivalents, College-level reading and writing are expected.

This course is a study of the methods and principles of supervising student teachers, assistant teachers, volunteers and other adults in early childhood education settings. Emphasis is on the roles and development of early childhood professionals as mentors and leaders. CSU

ECE-254 Language and Literacy for the Young Child

- 1 unit SC
- 18 hours lecture per term
 - Advisory: College-level reading and writing are expected.
 - Note: This course can be applied to professional development units for Child Development Permit holders as well as pre-school, transitional kindergarten, and early-primary teachers

This course presents an introduction to children's literature, emergent literacy, and the development of speech and language during infancy and early childhood. The language and literacy development domain of the California Preschool Learning Foundations and Frameworks, including the strands of listening, speaking, reading, and writing will be introduced. Students will explore teaching techniques which promote language and literacy. CSU

ECE-255 English Learners in Early Childhood Classroom Settings

- 1 unit SC
- 18 hours lecture per term
 - Advisory: ENGL-122 or equivalent
 - Note: This course can be applied to professional development units for Child Development Permit holders, as well as pre-school, transitional kindergarten, and early-primary teachers.

This course presents an introduction to the English language learners domain of the California Preschool Learning Foundations and Frameworks, including strands of listening, speaking, reading and writing. Principles and practices for supporting English language development in second language learners are presented. CSU

ECE-269 Children with Special Needs

- 3 units SC
- 54 hours lecture per term
 - Advisory: ECE-124 or equivalent, College-level reading and writing are expected.

This course provides an introduction to the variations in development of children with special needs, as well as the resulting impact on families, and will focus on the years between birth through aged eight. An overview of historical and societal influences, laws relating to children with special needs, and the identification and referral process will also be discussed. CSU

ECE-295 Occupational Work Experience Education in ECE

2-4 units SC

- *May be repeated eight times*
- *Variable hours*
- *Note: In order to enroll in ECE-295, students must be employed, register for the course, complete an online Employment Form, and participate in an orientation. Incomplete grades are not awarded for this course.*

ECE-295 is supervised employment that extends classroom learning to the job site and relates to the student's chosen field of study or area of career interest. Under the supervision of a college instructor, students will engage in on-the-job and other learning experiences that contribute to their employability skills and occupational or educational goals. Each unit represents five hours of work per week or 75 hours work per term. Students may earn up to a total of 16 units in any combination of WRKX courses. Repetition allowed per Title 5 Section 55253. CSU

ECE-296 Internship in Occupational Work Experience Education in ECE

2-4 units SC

- *May be repeated eight times*
- *Variable hours*
- *Note: In order to enroll in the ECE-296 course, students must be interning or volunteering, register for the course, complete an online Employment Form, and participate in an orientation. Incomplete grades are not awarded for this course.*

ECE-296 is a supervised internship in a skilled or professional level assignment in the student's major field of study or area of career interest. Under the supervision of a college instructor, students will engage in on-the-job and other learning experiences that contribute to their employability skills and occupational or educational goals. Internships may be paid, non-paid, or some partial compensation provided. Each unit represents five hours of paid work or four hours of unpaid work per week or 75 hours of paid work or 60 hours of unpaid work per term. Students may earn up to a total of 16 units in any combination of WRKX courses. Repetition allowed per Title 5, Section 55253. CSU

ECE-298 Independent Study

.5-3 units SC

- *Variable hours*
- *Note: Submission of acceptable educational contract to department and Instruction Office is required.*

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. CSU

ECE-299 Student Instructional Assistant

.5-3 units SC

- *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

ECONOMICS – ECON

Obed Vazquez, Dean
Social Sciences Division
Faculty Office Building, Room 136

Possible career opportunities

Economics is a basic component for a career in law, management, sales, banking, health care industry, utility industry, consulting, statistical analysis, finance, and government. Most career options require more than two years of college study.

Associate in arts in economics for transfer

Students completing the program will be able to...

- apply economic theories and economic reasoning to real life situations.
- use analytical techniques to measure economic conditions related to the individual, business firms, industries, and economic systems.
- explain the role that households, business organizations, governments, and the international sector, play in free markets, command economies, and mixed economies.
- evaluate the objectives, limitations, and mechanics of regulation, taxation, tariffs, quotas, and monetary and fiscal policies.
- use quantitative methodology to measure economic outcomes.

The associate in arts in economics for transfer is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major.

Economics

In order to earn the degree, students must:

- Complete 60 CSU-transferable units.
- Complete the California State University-General Education-Breadth pattern (CSU GE-Breadth); or the Intersegmental General Education Transfer Curriculum (IGETC) pattern, including the Area 1C requirement for Oral Communication.
- Complete a minimum of 18 units in the major
- Attain a minimum grade point average (GPA) of 2.0.
- Earn a grade of C or higher in all courses required for the major.

Students transferring to a CSU campus that accepts the degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system, or those students who do not intend to transfer.

Students must complete each course used to meet a major requirement with a "C" grade or higher. Some courses in the major satisfy both major and CSUGE/IGETC general education requirements; however, the units are only counted once toward the 60 unit requirement for an associate degree. 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:	units
ECON-220 Principles of Macroeconomics	3
ECON-221 Principles of Microeconomics	3

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

plus at least 4 units from:	
MATH-182 Calculus for Management, Life Science and Social Science I	4
MATH-192 Analytic Geometry and Calculus I	5

plus at least 3 units from:	
BUS-294 Business Law	3
BUSAC-186 Financial Accounting	4
BUSAC-187 Managerial Accounting	4
MATH-181 Finite Mathematics	3
MATH-193 Analytic Geometry and Calculus II	5

plus at least 3 units from any course above not already used or:	
ECON-101 Economics of Public Issues	3
ECON-200 Introduction to Economics	3
MATH-194 Linear Algebra	3
MATH-292 Analytic Geometry and Calculus III	5

total minimum units for the major 19

ECON-101 Economics of Public Issues

3 units SC

- IGETC: 4; CSU GE: D; DVC GE: IV
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This course examines economic aspects of selected current public issues such as price controls, crime, education, poverty, pollution, international trade, and taxes. It will analyze the role of economics as a social science in understanding causes of and policies for dealing with current public issues. CSU, UC (credit limits may apply to UC - see counselor)

ECON-200 Introduction to Economics

3 units SC

- IGETC: 4; CSU GE: D; DVC GE: IV
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This course is an overview of the basic principles of economics, including both microeconomics and macroeconomics. Concepts such as market supply and demand, market structures, resource markets, economic growth, and business cycles, fiscal policy, and the national debt, the Federal Reserve System, monetary policy, and international trade are introduced. CSU, UC (credit limits may apply to UC - see counselor)

ECON-210 Economic Justice

3 units SC

- IGETC: 4; CSU GE: D; DVC GE: IV
- 54 hours lecture per term
- Advisory: College level reading and writing are expected

This course will present the principles and theories of justice and their economic applications. Students will examine economic systems and evaluate how these systems can either promote or obstruct the pursuit of justice. Using economic theory and analysis, students will critically evaluate contemporary issues through a justice lens. The historical contexts behind these issues will be explored as well as interdisciplinary connections with fields such as public policy, political science, sociology, and social justice. CSU, UC

ECON-220 Principles of Macroeconomics

3 units SC

- *IGETC: 4; CSU GE: D; DVC GE: IV*
- *54 hours lecture per term*
- *Prerequisite: Placement into MATH-121 or higher or MATH-119 or MATH 119SP or intermediate algebra or equivalent*
- *Advisory: College-level reading and writing are expected.*

This course provides an introduction 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 applies macroeconomic theories to current economic issues. C-ID ECON 202, CSU, UC

ECON-221 Principles of Microeconomics

3 units SC

- *IGETC: 4; CSU GE: D; DVC GE: IV*
- *54 hours lecture per term*
- *Prerequisite: Placement into MATH-121 or higher or MATH-119 or MATH 119SP or intermediate algebra or equivalent*
- *Advisory: College-level reading and writing are expected.*

This course provides an introduction to fundamental microeconomic principles. 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. C-ID ECON-201, CSU, UC

ECON-255 Topics in Economics

.3-4 units SC

- *Variable hours*

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

ECON-298 Independent Study

.5-3 units SC

- *Variable hours*
- *Note: Submission of acceptable educational contract to department and Instruction Office is required.*

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. CSU

ECON-299 Student Instructional Assistant

.5-3 units SC

- *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

EDUCATION – EDUC

Obed Vazquez, Dean

Social Sciences Division

Faculty Office Building, Room 136

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 a baccalaureate degree at a minimum.

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.

Associate in arts in elementary teacher education for transfer**Students completing this program will be able to...**

- analyze models and methods of effective teaching, especially in relation to the needs of a diverse student body.
- examine the physical, cognitive/language, social-emotional milestones in school age children.
- understand and analyze how concepts of mathematics, English and language arts, social studies, visual and performing arts and science apply to teaching at an elementary level.

The associate in arts in elementary teacher education for transfer is an interdisciplinary program which meets state guidelines in order to prepare students to begin their path toward becoming elementary school teachers. Students majoring in elementary teacher education develop critical thinking, problem solving, and written and verbal communication skills. As elementary teacher education majors, students have learning opportunities that are relevant to many types of careers working with children and parents including special education, elementary education, and social work. This major provides early field work experience working with children in an elementary school.

Education

The associate in arts in elementary teacher education for transfer is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major. The associate in arts in elementary teacher education for transfer is consistent with the mission of the community college to assist students in achieving a seamless transfer to the CSU system.

In order to earn the degree, students must:

- Complete 60 CSU-transferable units.
- Complete the California State University-General Education pattern (CSU GE); or the Intersegmental General Education Transfer Curriculum (IGETC) pattern, including the Area 1C requirement for Oral Communication.
- Complete a minimum of 18 units in the major.
- Attain a minimum grade point average (GPA) of 2.0.
- Earn a grade of "C" or higher in all courses required for the major.

Students transferring to a CSU campus that accepts the degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to university or college that is not part of the CSU system, or those students who do not intend to transfer.

Students must complete each course used to meet a major requirement with a "C" grade or higher. Some courses in the major satisfy both major and CSUGE/IGETC general education requirements; however, the units are only counted once toward the 60 unit requirement for an associate degree. 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.

<i>major requirements:</i>	<i>units</i>
BIOSC-102 Fundamentals of Biological Science with Laboratory	4
COMM-120 Public Speaking	3
ECE-124 Child Development and Psychology.....	3
EDUC-120 Introduction to Teaching in Elementary Schools.....	3
ENGL-122 First-Year College Writing and Reading.....	3
ENGL-123 Critical Thinking: Writing about Literature	3
GEOG-135 World Regional Geography.....	3
GEOL-130 Earth Science.....	4
HIST-120 History of the United States before 1865	3
HIST-180 World History to 1500	3
MATH-125 Mathematical Concepts for Elementary School Teachers.....	3
PHYS-110 Elementary Physics.....	3
PHYS-111 Physics Laboratory	1
POLSC-121 Introduction to United States Government	3

at least 4 units from:

CHEM-106 Chemistry for Non-Science Majors	4
CHEM-108 Introductory Chemistry	4

at least 3 units from:

COMM-121 Persuasion and Critical Thinking	3
ENGL-126 Critical Thinking: Writing about Non-Fiction	3
HIST-122 Critical Reasoning in History	3
PHILO-130 Logic and Critical Thinking	3
PSYCH-145 Critical Thinking in Psychology.....	3
SOCIO-122 Critical Thinking About Social and Cultural Issues.....	3

plus at least 3 units from:

DANCE-201 Critical Thinking in Western Culture Dance History: 20th Century to Present	3
DRAMA-139 Introduction to Theater	3
MUSIC-110 Music Appreciation	3

total minimum units for the major 52

EDUC-120 Introduction to Teaching in Elementary Schools

3 units LR

- 36 hours lecture/54 hours laboratory by arrangement per term
- *Limitations on enrollment: Students are required to provide evidence of a current TB clearance and background check prior to the start of class. Students are responsible for any fees incurred.*
- *Advisory: ENGL-122 or equivalent*
- *Note: Credit by examination option available*

This course introduces students to the concepts and issues related to teaching diverse learners in today's contemporary schools, pre-kindergarten through grade twelve. Topics include teaching as a profession and career, historical and philosophical foundations of the United States' education system, contemporary educational issues, California's content standards and frameworks, and teacher performance standards. In addition to lecture, this course requires structured fieldwork in public school elementary classrooms that represent California's diverse student population, and includes cooperation with at least one carefully selected and campus-approved certificated classroom teacher. C-ID EDUC 200, CSU, UC

EDUCATION – SPECIAL EDUCATION – EDUSP

Emily Stone, Dean
Student Services Center, Room 122

Possible career opportunities

Students who earn a special education paraeducator/instructional assistant certificate of achievement or degree are prepared for entry-level employment assisting students and individuals with disabilities in education and rehabilitation settings.

Associate in arts degree Special education paraeducator/ instructional assistant

Students completing this program will be able to...

- analyze state and federal legislation pertaining to general and special education.
- use a variety of instruction strategies and materials that respect individual differences.
- understand how culture affects relationships among children, families, and schooling.

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. Certain courses may satisfy both a major and a graduation requirement; however, the units are only counted once. Students who intend to transfer to a four-year program in education/teacher preparation should consult with a counselor regarding specific requirements.

major requirements:	units
ECE-124 Child Development and Psychology.....	3
EDUSP-101 Introduction to Disabilities	3
EDUSP-102 Historical Perspectives of Disabilities and the Law	3
EDUSP-103 Classroom Strategies for the Special Education Paraeducator	3
PSYCH-122 Psychology in Modern Life.....	3

plus 2-4 units from:

EDUSP-295 Occupational Work Experience Education in EDUSP	2-4
EDUSP-296 Internship in Occupational Work Experience Education in EDUSP	2-4

plus at least 6 units from:

COMM-128 Interpersonal Communication	3
ECE-123 Introduction to Curriculum in Early Childhood Education.....	3
ECE-125 Principles and Practices of Early Childhood Education	3
ECE-126 Health, Safety, and Nutrition for the Young Child	3
ECE-129 Strategies for Working with Challenging Behaviors.....	3
ECE-130 Child, Family, and Community.....	3
ECE-269 Children with Special Needs.....	3
EDUC-120 Introduction to Teaching in Elementary Schools.....	3
SIGN-280 American Sign Language (ASL) I.....	3
SIGN-281 American Sign Language (ASL) II.....	3
SIGN-282 American Sign Language (ASL) III	3
total minimum units for the major	23

Certificate of achievement Special education fundamentals

Students completing this program will be able to...

- analyze state and federal legislation pertaining to general and special education.
- use a variety of instructional strategies and materials that respect individual differences.
- demonstrate an understanding of how culture affects relationships among children, families, and schooling

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:	units
EDUSP-101 Introduction to Disabilities	3
EDUSP-102 Historical Perspectives of Disabilities and the Law	3
EDUSP-103 Classroom Strategies for the Special Education Paraprofessional.....	3
ECE-124 Child Development and Psychology.....	3
total minimum required units	12

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

Students completing the program will be able to...

- A. analyze state and federal legislation pertaining to general and special education.
- B. use a variety of instruction strategies and materials that respect individual differences.
- C. demonstrate an understanding of how culture affects relationships among children, families, and schooling.

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.

<i>required courses:</i>	<i>units</i>
ECE-124 Child Development and Psychology.....	3
EDUSP-101 Introduction to Disabilities	3
EDUSP-102 Historical Perspectives of Disabilities and the Law	3
EDUSP-103 Classroom Strategies for the Special Education Paraeducator	3

plus at least 6 units from:

ECE-125 Principles and Practices of Early Childhood Education	3
ECE-129 Strategies for Working with Challenging Behaviors	3
ECE-130 Child, Family, and Community.....	3
ECE-269 Children with Special Needs	3
EDUC-120 Introduction to Teaching in Elementary Schools.....	3
SIGN-280 American Sign Language (ASL) I.....	3

total minimum required units 18

EDUSP-101 Introduction to Disabilities

3 units SC

- IGETC: 4; CSU GE: D; DVC GE: IV
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This course examines the historical and cultural context of disability issues and integrates international perspectives on the changing roles of people with disabilities. The legal and functional definitions of physical, communicative, sensory, psychological, neurological, and developmental disabilities will be covered. Acquired versus congenital disabilities will be differentiated, and all forms of chronic/progressive illnesses will be explored. CSU, UC

EDUSP-102 Historical Perspectives of Disabilities and the Law

3 units SC

- IGETC: 4; CSU GE: D; DVC GE: IV
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This course examines the legal rights of people with disabilities, beginning with historical roots of the disability movement in the United States. The evolution of legislation governing access to education for people with disabilities will be emphasized. CSU, UC

EDUSP-103 Classroom Strategies for the Special Education Paraeducator

3 units SC

- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This course explores the basic principles of pragmatic professional skills strategies used by the special education para-professional within the educational workplace. Emphasis is placed on effective communication techniques that facilitate and manage appropriate student behavior and learning. CSU

EDUSP-295 Occupational Work Experience Education in EDUSP

2-4 units SC

- May be repeated eight times
- Variable hours
- Note: In order to enroll in EDUSP-295, students must be employed, register for the course, complete an online Employment Form, and participate in an orientation. Incomplete grades are not awarded for this course.

EDUSP-295 is supervised employment that extends classroom learning to the job site and relates to the student's chosen field of study or area of career interest. Under the supervision of a college instructor, students will engage in on-the-job and other learning experiences that contribute to their employability skills and occupational or educational goals. Each unit represents five hours of work per week or 75 hours work per term. Students may earn up to a total of 16 in any combination of WRKX courses. Repetition allowed per Title 5, Section 55253. CSU

EDUSP-296 Internship in Occupational Work Experience Education in EDUSP

2-4 units SC

- *May be repeated eight times*
- *Variable hours*
- *Note: In order to enroll in the EDUSP-296 course, students must be interning or volunteering, register for the course, complete an online Employment Form, and participate in an orientation. Incomplete grades are not awarded for this course.*

EDUSP-296 is a supervised internship in a skilled or professional level assignment in the student’s major field of study or area of career interest. Under the supervision of a college instructor, students will engage in on-the-job and other learning experiences that contribute to their employability skills and occupational or educational goals. Internships may be paid, non-paid, or some partial compensation provided. Each unit represents five hours of paid work or four hours of unpaid work per week or 75 hours of paid work or 60 hours of unpaid work per term. Students may earn up to a total of 16 units in any combination of WRKX courses. Repetition allowed per Title 5, Section 55253. CSU

ELECTRICAL/ELECTRONICS TECHNOLOGY – ELECT/ELTRN

Despina Prapavessi, Dean
 Mathematics and Engineering Division
 Mathematics Building, Room 267

Possible career opportunities

The types of jobs and careers involving electrical/electronics include: electrical, medical, industrial, and commercial electrical programmable logic controller systems; computers; consumer products; radio and television; instrumentation; communications; automotive and others.

Associate in science degree Electrical/electronics technology

Students completing the program will be able to...

- A. identify common electrical circuit components and their use.
- B. solve AC and DC circuits for voltage, current, resistance, power, and other parameters.
- C. operate and understand common laboratory instruments used in the analysis, construction, and troubleshooting of AC and DC circuits.
- D. apply specific sections of the national electrical code to electrical systems.

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: ELECT-120, 121, 130, 220, 230, 266, 267, 271, ELTRN-210 and CNT-103.

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 with a major in electricity/electronics, 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 general education requirements as listed in the catalog. Certain courses may satisfy both major and general education requirements; however, the units are only counted once.

required courses:

	<i>units</i>
ELECT-266 Electrical Codes: Articles 90-398.....	3

plus at least 4 units from:

ELECT-120 Direct Current Circuits	4
ELTRN-120 Direct Current Circuits	4

plus at least 4 units from:

ELECT-121 Alternating Current Circuits	4
ELTRN-121 Alternating Current Circuits	4

plus at least 12 units from:

ELECT-130 Motor and Motor Controllers	4
ELECT-220 Circuit Diagnosis and Analysis: Troubleshooting	2
ELECT-230 Electro-Mechanical Equipment	2
ELECT-271 Programmable Logic Controllers	4
ELTRN-210 Linear Circuits	4

plus at least 3 units from any course not used above, or:

CNT-103 Voice, Video and Network Cabling	2
CONST-110 Occupational Safety.....	2
ELECT-267 Electrical Codes: Articles 400-830.....	3
ELTRN-107 Introduction to Robotics	2
ELTRN-116 Electronics I.....	3

total minimum units for the major 26

**Certificate of achievement
Electrical/electronics technology**

Students completing the program will be able to...

- A. identify common electrical circuit components and their use.
- B. solve AC and DC circuits for voltage, current, resistance, power, and other parameters.
- C. operate and understand common laboratory instruments used in the analysis, construction, and troubleshooting of AC and DC circuits.
- D. apply specific sections of the national electrical code to electrical systems.

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: ELECT-120, 121, 130, 220, 230, 266, 267, 271, ELTRN-210 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: *units*
 ELECT-266 Electrical Codes: Articles 90-398..... 3

plus at least 4 units from:
 ELECT-120 Direct Current Circuits 4
 ELTRN-120 Direct Current Circuits 4

plus at least 4 units from:
 ELECT-121 Alternating Current Circuits 4
 ELTRN-121 Alternating Current Circuits 4

plus at least 12 units from:
 ELECT-130 Motors and Motor Controllers 4
 ELECT-220 Circuit Diagnosis and Analysis:
 Troubleshooting 2
 ELECT-230 Electro-Mechanical Equipment 2
 ELECT-271 Programmable Logic Controllers 4
 ELTRN-210 Linear Circuits 4

plus at least 3 units from any course not used above, or:
 CNT-103 Voice, Video and Network Cabling 2
 CONST-110 Occupational Safety..... 2
 ELECT-267 Electrical Codes: Articles 400-830..... 3
 ELTRN-107 Introduction to Robotics 2
 ELTRN-116 Electronics I..... 3

total minimum required units 26

**Certificate of accomplishment
Electrical/electronics technology**

Students completing the program will be able to...

- A. identify common electrical circuit components and their use.
- B. solve AC and DC circuits for voltage, current, resistance, power, and other parameters.
- C. operate and understand common laboratory instruments used in the analysis, construction, and troubleshooting of AC and DC circuits.
- D. apply specific sections of the national electrical code to electrical systems.

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.

required courses: *units*
 ELECT-266 Electrical Codes: Articles 90-398..... 3

plus at least 4 units from:
 ELECT-120 Direct Current Circuits 4
 ELTRN-120 Direct Current Circuits 4

plus at least 4 units from:
 ELECT-121 Alternating Current Circuits 4
 ELTRN-121 Alternating Current Circuits 4

total minimum required units 11

ELECT-110 Survey of Electricity

- 2 units SC
- 27 hours lecture/27 hours laboratory per term
 - Advisory: MATH-085 or equivalent
 - Note: This course does not meet a requirement of the electronics/electricity degree or certificate. Credit by examination option available.

This is a survey course in electrical concepts, components, systems, and equipment. Ohm's and Kirchhoff's laws are used to calculate and measure resistance, voltage, amperage, and power in circuits. AC components, such as coils, transformers, capacitors, and motors are also covered. Students will build and measure circuits and everyday electrical devices using both digital and analog equipment with an emphasis on practical aspects of circuits and components. CSU

ELECT-120 Direct Current Circuits

4 units LR

- 54 hours lecture/54 hours laboratory per term
- Note: This course is approved by the Division of Apprenticeship Standards in the electrician trainee program.

This course introduces scientific principles and hands-on applications of direct current (DC) electricity, focusing on measurement and diagnosis of series, parallel, and combination circuits. These fundamental knowledge and skills are necessary for those planning careers and/or further study in electronics, electricity, or related fields, such as heating, ventilation, and air conditioning (HVAC), building systems, industrial maintenance, electrical/electronics (EE) technology, and energy systems. CSU

ELECT-121 Alternating Current Circuits

4 units LR

- 54 hours lecture/54 hours laboratory per term
- Advisory: ELECT-120 or equivalent
- Note: This course is approved by the Division of Apprenticeship Standards in the electrician trainee program.

This course is an in-depth study of the theory and application of alternating current (AC) including series, parallel, and combination resistive/inductive (RL), resistive/capacitive (RC), and resistive/inductive/capacitive (RLC) circuits. Students will construct, measure, and analyze circuits using computer simulation and actual components with signal generators and oscilloscopes. CSU

ELECT-130 Motors and Motor Controllers

4 units SC

- 54 hours lecture/54 hours laboratory per term
- Advisory: ELECT-120 or equivalent

This course introduces the function, operation, and characteristics of various types of direct current, alternating current, single phase, and three phase motors. The course will explore the basic principles and practices of electric motor control including electro-mechanical and solid state digital devices, ladder logic, standard circuits, starters, transformers, relays, timers, and other devices. CSU

ELECT-150 Topics in Electricity

.3-4 units SC

- Variable hours

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

ELECT-220 Circuit Diagnosis and Analysis: Troubleshooting

2 units SC

- 27 hours lecture/27 hours laboratory per term
- Prerequisite: ELECT-120 or equivalent
- Advisory: ELECT-121 or equivalent

This course presents troubleshooting of electro-mechanical systems and sub-systems for various machines and equipment used in residences, commercial buildings, and industrial complexes. Emphasis is placed on developing skills in reading and understanding diagrams in conjunction with proper troubleshooting procedures. Several types of diagrams will be examined during this course including block, pictorial, single-line, ladder, wiring, terminal, schematic, and esterline. CSU

ELECT-230 Electro-Mechanical Equipment

2 units SC

- 27 hours lecture/27 hours laboratory per term
- Prerequisite: ELECT-120 or equivalent
- Advisory: ELECT-121 or equivalent

This course presents the identification, installation, operation, and maintenance of residential/commercial/industrial systems and components. The focus is on electrical components and systems, which are related to interface devices such as mechanical, hydraulic, and pneumatic systems and their controllers. CSU

ELECT-266 Electrical Codes: Articles 90-398

3 units SC

- 54 hours lecture per term
- Note: Same as CONST-266. Students may petition to repeat when code changes. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This course covers the interpretation of the National Electrical Code (NEC) for general requirements, wiring and protection, wiring methods, and materials (articles 90-398). Safety installation practices will be presented. CSU

ELECT-267 Electrical Codes: Article 400-830

3 units SC

- 54 hours lecture per term
- Note: Same as CONST-267. Students may petition to repeat when code changes. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This course covers the interpretation of the National Electrical Code (NEC) for equipment for general use, special occupancies, and special equipment (articles 400-830). Safety installation practices will be presented. CSU

ELECT-271 Programmable Logic Controllers

4 units LR

- 54 hours lecture/54 hours laboratory per term
- Advisory: ELECT-120 or equivalent

This course introduces the fundamentals of Programmable Logic Controllers (PLCs) and associated programs, which are used in industrial, commercial, and process applications. Students will program, maintain, troubleshoot, and modify PLCs and controlled systems. Software interfaces will be used to write, enter, and execute PLC applications. CSU

ELECT-299 Student Instructional Assistant

.5-3 units SC

- 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-107 Introduction to Robotics

2 units SC

- 27 hours lecture/27 hours laboratory per term
- Note: Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree. Credit by examination option available.

This course introduces the science and technology involved in robotic systems. Beyond basic science, topics include input and output devices and programmable controllers and programming coding. Working independently or in teams, students will design and build circuits and kinematic structures that sense and interact with their environment. Using simple programming languages, students will work with a variety of microprocessors, including Arduino, Parallax, VEX, Lego, and others. This course prepares students for more advanced studies in robotics and related technologies, such as those used in building controls systems and industrial applications. CSU

ELTRN-116 Electronics I

3 units SC

- 45 hours lecture/27 hours laboratory per term
- Note: Credit by examination option available.

This course is an overview of electronic circuit fundamentals and devices. Students will construct, analyze, verify, and troubleshoot common electronic circuits using appropriate techniques and test equipment. CSU

ELTRN-120 Direct Current Circuits

4 units LR

- 54 hours lecture/54 hours laboratory per term

This course introduces the scientific principles and hands-on applications of direct current (DC) electricity. Topics include measurement and diagnosis of series, parallel, combination circuits, basic DC industrial control circuits, and commercial and residential circuits. In laboratory, students will use basic electrical test instruments and participate in building and software simulation of electrical circuits. CSU

ELTRN-121 Alternating Current Circuits

4 units LR

- 54 hours lecture/54 hours laboratory per term
- Advisory: ELTRN-120 or equivalent

This course is a continuation of ELTRN-120 and presents an in-depth study of alternating current (AC) circuits involving capacitance and inductance. Topics include resistor-inductor (RL), resistor-capacitor (RC), resistor-inductor-capacitor (RLC), and resonant circuits, three phase circuits and computer-simulated circuits. In laboratory, students will apply the principles of AC circuitry to real life applications. CSU

ELTRN-150 Topics in Electronics

.3-4 units SC

- 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-210 Linear Circuits

4 units LR

- 54 hours lecture/54 hours laboratory per term
- Advisory: ELECT-121 or equivalent
- Note: This course is part of the Electrician Trainee Program approved by the Division of Apprenticeship Standards

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-299 Student Instructional Assistant

.5-3 units SC

- *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

Despina Prapavessi, Dean

Mathematics and Engineering Division

Mathematics Building, Room 267

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.

Associate in science degree**Energy systems****Students completing the program will be able to...**

- identify, measure, and analyze the major energy uses in typical businesses operations, focusing beyond the building and into processes.
- demonstrate the electrical and energy systems skills to successfully interact with builders, architects, engineers, and constructors and advise on building and systems energy use.
- design medium complexity solar photovoltaic or other energy system for medium size commercial buildings and processes.

This program provides students with a broad view of energy and energy systems and specific skills for those planning on entering the field designing, installing, servicing/repairing and maintaining renewable/sustainable energy systems. This includes wind energy, biodiesel and biofuels, biomass, fuel cells, hydrogen, and other technologies.

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 general education requirements as listed in the catalog.

<i>major requirements:</i>	<i>units</i>
ENSYS-120 Introduction to Energy Systems	3
ENSYS-125 Building Envelope and Systems	3
ENSYS-130 Photovoltaic Systems Design and Installation	2
ENSYS-230 Advanced Photovoltaic Systems	2

plus at least 4 units from:

ELECT-120 Direct Current Circuits	4
ELTRN-120 Direct Current Circuits	4

plus at least 12 units from:

ARCHI-207 Environmental Control Systems	3
CONST-110 Occupational Safety	2
CONST-183 Title 24: Energy Conservation Codes	3
ELECT-121 Alternating Current Circuits	4
ELECT-266 Electrical Codes: Articles 90-398	3
ELECT-267 Electrical Codes: Articles 400-830	3

total minimum required units 26**Certificate of achievement****Energy systems****Students completing the program will be able to...**

- identify, measure, and analyze the major energy uses in typical businesses operations, focusing beyond the building and into processes.
- demonstrate the electrical and energy systems skills to successfully interact with builders, architects, engineers, and constructors and advise on building and systems energy use.
- design medium complexity solar photovoltaic or other energy system for medium size commercial buildings and processes.

This program provides students with a broad view of energy and energy systems and specific skills for those planning on entering the field designing, installing, servicing/repairing and maintaining renewable/sustainable energy systems. This includes wind energy, biodiesel and biofuels, biomass, fuel cells, hydrogen, and other technologies.

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.

<i>required courses:</i>	<i>units</i>
ENSYS-120 Introduction to Energy Systems	3
ENSYS-125 Building Envelope and Systems	3
ENSYS-130 Photovoltaic Systems Design and Installation	2
ENSYS-230 Advanced Photovoltaic Systems	2

Energy systems

plus at least 4 units from:

ELECT-120	Direct Current Circuits	4
ELTRN-120	Direct Current Circuits	4

plus at least 12 units from:

ARCHI-207	Environmental Control Systems	3
CONST-110	Occupational Safety.....	2
CONST-183	Title 24: Energy Conservation Codes	3
ELECT-121	Alternating Current Circuits	4
ELECT-266	Electrical Codes: Articles 90-398	3
ELECT-267	Electrical Codes: Articles 400-830.....	3

total minimum required units **26**

Certificate of accomplishment

Energy systems

Students completing the program will be able to...

- identify, measure, and analyze the major energy uses in typical businesses operations, focusing beyond the building and into processes.
- demonstrate the electrical and energy systems skills to successfully interact with builders, architects, engineers, and constructors and advise on building and systems energy use.
- design medium complexity solar photovoltaic or other energy system for medium size commercial buildings and processes.

This program provides students with a broad view of energy, energy systems, and specific entry-level skills for those planning on entering the field of installing, servicing/repairing, and maintaining renewable/sustainable energy systems with a focus on photovoltaic systems. Technologies include wind energy, biodiesel and biofuels, biomass, fuel cells, hydrogen, and other technologies.

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.

required courses:	units	
ENSY-120	Introduction to Energy Systems	3
ENSY-125	Building Envelope and Systems	3
ENSY-130	Photovoltaic Systems Design and Installation	2
ENSY-230	Advanced Photovoltaic Systems.....	2

plus at least 4 units from:

ELECT-120	Direct Current Circuits	4
ELTRN-120	Direct Current Circuits	4

total minimum required units **14**

ENSY-120 Introduction to Energy Systems

3 units SC

- 45 hours lecture/27 hours laboratory per term

This course provides an introduction to energy and energy conversion systems and examines issues related to the sustainability of each system. Renewable energy sources, such as hydro, wind, and solar as well as geothermal, fuel cells, and nuclear are examined. The use and impacts of traditional energy resources such as fuels, wood, coal, oil, and natural gas are also discussed. Energy policy, efficiency, conservation, storage, climate change, and demand side management are also examined. CSU

ENSY-125 Building Envelope and Systems

3 units SC

- 45 hours lecture/27 hours laboratory per term
- Advisory: ENSYS-120 or Equiv. and MATH-085 or MATH-085SP or beginning algebra or equivalents

This course provides an introduction to buildings and building systems, including the envelope and major electro-mechanical equipment used in the building. Students will gain knowledge of and experience with various strategies and tools used to measure and analyze building energy use such as infrared thermography, duct and envelope leak testers, light and sound meters, energy analysis programs. Mitigation strategies to save energy and improve occupancy health are emphasized. CSU

ENSY-130 Photovoltaic Systems Design and Installation

2 units SC

- 36 hours lecture/18 hours laboratory per term

This course presents an introduction to the theory, application, installation, and operation of photovoltaic systems. Topics include performance of solar site evaluations, calculation of electrical loads, sizing panel arrays, and techniques for installation of photovoltaic systems. This course is approved by the North American Board of Certified Energy Practitioners (NABCEP) and upon completion of the course, students will be eligible to sit for the Photovoltaic Systems Associate certification exam. CSU

ENSY-150 Topics in Energy Systems

.3-4 units SC

- Variable hours

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 SC
- 27 hours lecture/27 hours laboratory per term
 - Advisory: ENSYS-130 or equivalent

This course presents intermediate and advanced theories and skills for photovoltaic systems. Topics include installation, maintenance, evaluation, troubleshooting, and repair of commercial photovoltaic systems, including application of all applicable codes. CSU

ENSYS-299 Student Instructional Assistant

- .5-3 units SC
- 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

ENGINEERING – ENGIN

Despina Prapavessi, Dean
Mathematics and Engineering Division
Mathematics Building, Room 267

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.

Associate in science degree**Civil engineering**

Students completing the program will be able to...

- apply the skills and knowledge acquired to analyze issues, solve problems, and critically evaluate a proposal or a process.
- use appropriate quantitative tools to answer scientific questions, represent data, and document scientific findings.
- demonstrate effective communication with fellow team members, the public, and members of the scientific community, using written, oral, and visual communication methods.
- safely and appropriately use standard laboratory or field equipment to make precise and reliable measurements.
- analyze the internal forces and moments in statically determinate structures.

The associate in science degree in civil engineering (ASCE) is offered to prepare students to transfer to a four-year institution in the civil engineering major.

The graduates of this program will be able to apply the basic principles of civil engineering to a variety of technical projects related to the design, construction, managing and sustaining of a wide range of developments such as structural systems, buildings, highways, waterways, lifelines, and infrastructures.

The DVC ASCE degree is intended for transfer. Degree requirements at four-year programs differ from institution to institution, so students wishing to transfer to a particular four-year program must consult with a counselor regarding specific major requirements of a particular university program. Additionally, students are advised that other courses in math, physics and chemistry may be required and that engineering courses have science and math prerequisites. It is recommended that the students contact the counseling office for advisement regarding appropriate sequencing. Finally, the ASCE is a high-unit major; students are advised to meet with a counselor to determine appropriate general education courses to complete their degree requirements.

To earn an ASCE degree students must complete each course used to meet a major requirement with a "C" grade or higher and complete general education requirements as listed in the catalog. Major requirements may be taken only on a "for grade" basis. Certain courses may satisfy both major and general education requirements; however the units are only counted once.

major requirements:	units
CHEM-120* General College Chemistry I.....	5
ENGIN-110 Introduction to Engineering	3
ENGIN-120 Engineering Drawing.....	3
ENGIN-230* Introduction to Circuits and Devices	4
ENGIN-240* Properties of Engineering Materials	4
ENGIN-255* Statics.....	3
MATH-192* Analytic Geometry and Calculus I	5
MATH-193* Analytic Geometry and Calculus II	5
MATH-292* Analytic Geometry and Calculus III	5
MATH-294* Differential Equations	5
PHYS-130* Physics for Engineers and Scientists A: Mechanics and Wave Motion.....	4
PHYS-230* Physics for Engineers and Scientists B: Heat and Electro-magnetism.....	4

plus at least 3 units from:

ENGIN-135 Programming for Scientists and Engineers.....	4
ENGIN-136* Computer Programming for Engineers Using MATLAB.....	4
ENGIN-140* Plane Surveying.....	4
ENGIN-257* Statics and Strength of Materials	3

total minimum units for the major 53

*These courses have prerequisites. See a counselor for program sequence.

**Associate in science degree
Electrical engineering and computer
engineering**

Students completing the program will be able to...

- A. apply analysis tools and computer tools in problem solving.
- B. identify interdisciplinary aspects of engineering projects.
- C. apply software engineering principles and procedures.
- D. do computer algorithm development using C and C++ techniques.
- E. understand the operation and control of electrical measuring equipment.
- F. use computer programming skills to develop software for automation, decision making and control of equipment.
- G. develop test software for evaluation of digital circuits.
- H. analyze the operation of small scale digital and analog circuits.
- I. design simple operational amplifier circuits.
- J. demonstrate knowledge of magnetism and its applications in the design of transformers and actuators.
- K. assemble and test digital and analog circuits from circuit diagrams.

The associate degree program in electrical engineering and computer engineering (EECE) prepares the students for a career in the EECE field or to transfer to a four-year degree program. Graduates entering the workforce will be able to perform the tasks typically expected of an assistant engineer. Students who intend to transfer are advised to select general education Option 2 (IGETC) or Option 3 (CSU GE). General education option 1 (DVC general education) is appropriate for students who do not intend to transfer.

Most core requirement courses have math and science prerequisites. Students must see a counselor for planning appropriate coursework sequence.

To earn an associate degree in electrical engineering and computer engineering, students must complete the core requirements with a "C" grade or higher. Students must also complete general education requirements as listed in the catalog. Certain courses may satisfy both major and general education requirement; however the units are only counted once.

<i>major requirements:</i>		<i>units</i>
CHEM-120*	General College Chemistry I.....	5
COMSC-165*	Advanced Programming with C and C++.....	4
COMSC-210*	Program Design and Data Structures.....	4
ENGIN-110	Introduction to Engineering	3
ENGIN-230*	Introduction to Circuits and Devices	4
MATH-192*	Analytic Geometry and Calculus I	5
MATH-193*	Analytic Geometry and Calculus II	5
MATH-292*	Analytic Geometry and Calculus III	5
MATH-294*	Differential Equations.....	5
PHYS-130*	Physics for Engineers and Scientists A: Mechanics and Wave Motion.....	4
PHYS-230*	Physics for Engineers and Scientists B: Heat and Electro-Magnetism.....	4
PHYS-231*	Physics for Engineers and Scientists C: Optics and Modern Physics.....	4
 <i>plus at least 3 units from:</i>		
ENGIN-120	Engineering Drawing	3
ENGIN-121	Engineering Drawing/Descriptive Geometry	3
ENGIN-135	Programming for Scientists and Engineers.....	4
ENGIN-136*	Computer Programming for Engineers Using MATLAB	4
ENGTC-126	Computer Aided Design and Drafting - Auto CAD.....	3
MATH-194*	Linear Algebra	3
MATH-195*	Discrete Mathematics	4
total minimum units for the major		55

**Certain courses required for this degree have prerequisite coursework that could add additional units.*

**Associate in science degree
Mechanical engineering**

Students completing the program will be able to...

- A. apply the skills and knowledge acquired to analyze issues, solve problems, and critically evaluate a proposal or a process.
- B. use appropriate quantitative tools to answer scientific questions, represent data, and document scientific findings.
- C. demonstrate effective communication with fellow team members, the public, and members of the scientific community, using written, oral, and visual communication methods.
- D. safely and appropriately use standard laboratory or field equipment to make precise and reliable measurements.

The associate in science degree in mechanical engineering (ASME) is designed to prepare mechanical engineering students for transfer to a four-year institution. This program enables graduates to apply basic engineering principles and technical skills in support of engineers engaged in the design and development phases of a wide variety of projects involving mechanical systems.

The DVC ASME degree is intended for transfer. Degree requirements at four-year programs differ from institution to institution, so students wishing to transfer to a particular four-year program must consult with a counselor regarding specific major requirements of a particular university program. Additionally, students are advised that other courses in math, physics and chemistry may be required and that engineering courses have science and math prerequisites. It is recommended that the students contact the counseling office for advisement regarding appropriate sequencing. Finally, the ASME is a high-unit major; students are advised to meet with a counselor to determine appropriate general education courses to complete their degree requirements.

To earn an ASME degree students must complete each required course for the major with a "C" grade or higher and complete all the requirements as listed in the catalog. Major requirements may be taken only on a "for grade" basis. Certain courses may satisfy both major and general education requirements; however the units are only counted once.

major requirements:	units
CHEM-120* General College Chemistry I.....	5
ENGIN-110 Introduction to Engineering	3
ENGIN-120 Engineering Drawing	3
ENGIN-230* Introduction to Circuits and Devices	4
ENGIN-240* Properties of Engineering Materials	4
ENGIN-255* Statics.....	3
MATH-192* Analytic Geometry and Calculus I	5
MATH-193* Analytic Geometry and Calculus II	5
MATH-292* Analytic Geometry and Calculus III	5
MATH-294* Differential Equations	5
PHYS-130* Physics for Engineers and Scientists A: Mechanics and Wave Motion.....	4
PHYS-230* Physics for Engineers and Scientists B: Heat and Electro-magnetism.....	4

plus at least 3 units from:

ENGIN-135 Programming for Scientists and Engineers.....	4
ENGIN-136* Computer Programming for Engineers Using MATLAB.....	4
ENGIN-257* Statics and Strength of Materials	3
total minimum units for the major	53

*These courses have prerequisites. See counselor for program sequence.

ENGIN-110 Introduction to Engineering

3 units SC

- 36 hours lecture/72 hours laboratory per term
- Advisory: College-level reading and writing are expected.
- Note: Credit by examination option available.

This course is an 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. C-ID ENGR 110, CSU, UC

ENGIN-120 Engineering Drawing

3 units SC

- 36 hours lecture/72 hours laboratory per term
- Advisory: MATH-114 and ENGIN-119 or equivalents

This course presents modern drafting using board techniques as well as computer aided design (CAD) principles. Orthographic, oblique, and perspective projection of objects and visualization of the object from projected views are emphasized. Other topics include relationships of points, lines, and planes as well as auxiliary views, dimensioning, tolerancing, threads and fasteners. During the CAD part of the course, students use solid modeling techniques and methods to produce working drawings from CAD solids. CSU, UC

ENGIN-121 Engineering Drawing/Descriptive Geometry

3 units LR

- 36 hours lecture/72 hours laboratory per term
- Advisory: ENGIN-120 or equivalent and MATH-121 or equivalent (may be taken concurrently)

This course covers space relationships of points, lines, and surfaces. Double auxiliaries, curved and warped surfaces, intersections, developments and vector analysis are presented in relation to solving problems. Three-dimensional (3D) computer aided drafting (CAD) systems and solid modeling for civil engineering and mechanical engineering problems are also introduced. CSU, UC

ENGIN-130 Energy, Society, and the Environment

3 units SC

- IGETC: 4; CSU GE: D; DVC GE: IV
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected. MATH-085 or MATH-085SP or beginning algebra or equivalent

This course presents 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-131 Technology and Society

3 units SC

- *IGETC: 4; CSU GE: D; DVC GE: IV*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course explores the interrelationships between technology and the social sciences. Specifically, the course investigates the societal factors that impact technology (historical, political, economic, ethical and environmental), and the ways in which technology affects society (language, art, music, psychology and sociology). This course is appropriate for students in both technical and non-technical majors. CSU, UC

ENGIN-135 Programming for Scientists and Engineers

4 units LR

- *54 hours lecture/54 hours laboratory per term*
- *Prerequisite: MATH-192 (may be taken concurrently) or equivalent*
- *Advisory: College-level reading and writing are expected.*

This course presents an introduction to programming in C/C++ for engineers and scientists. Topics include flowcharts, algorithm design principles, algebraic operations, decision making, loops, records, data structures, file input output operations and linked lists. Students will apply programming principles of numerical methods in science and engineering. CSU, UC

ENGIN-136 Computer Programming for Engineers Using MATLAB

4 units LR

- *54 hours lecture/54 hours laboratory per term*
- *Prerequisite: MATH-192 or equivalent*
- *Advisory: MATH-193 (may be taken concurrently) or equivalent*

The 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. C-ID ENGR 220, CSU, UC

ENGIN-140 Plane Surveying

4 units SC

- *54 hours lecture/54 hours laboratory per term*
- *Prerequisite: MATH-121 or equivalent*
- *Note: Same as CONST-116*

This course covers the principles and practices of surveying including measurement of distances, directions, elevations and measuring standards. An introduction to electronic measurements and calibration as well as systematic and random-error analysis is presented. Students will use surveying instruments, perform Global Positioning System (GPS) measurements, and gain experience with map reading and mapping. CSU, UC

ENGIN-150 Topics in Engineering

.3-4 units SC

- *Variable hours*

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

ENGIN-210 Thermodynamics

3 units LR

- *54 hours lecture/18 hours laboratory per term*
- *Prerequisite: CHEM-120 and PHYS-230 or equivalents*

This course introduces the fundamentals of energy storage, thermophysical properties of liquids and gases, and the basic principles of thermodynamics. The course focuses on application of the concepts to various areas of engineering related to energy conversion and air conditioning. The use of computing tools that facilitate problem solving, design analysis, and parametric studies in thermodynamics will be integrated throughout the course. CSU, UC

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*
- *Advisory: College-level reading and writing are expected.*

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. C-ID ENGR 260 L, CSU, UC

ENGIN-240 Properties of Engineering Materials

4 units LR

- 54 hours lecture/72 hours laboratory per term
- Prerequisite: CHEM-120 and PHYS-130 or equivalents

This course is a study of properties of engineering materials as related to their atomic, microscopic, and macroscopic structures. The application of the basic principles of physics and chemistry to the engineering properties of materials will be covered. Special emphasis will be devoted to the relation between microstructure and the mechanical properties of metals, concrete, polymers, and ceramics, and the electrical properties of semiconducting materials. C-ID ENGR 140B, CSU, UC

ENGIN-255 Statics

3 units LR

- 54 hours lecture per term
- Prerequisite: PHYS-130 or equivalent and MATH-193 or equivalent
- Advisory: ENGIN-135 or ENGIN-136 or equivalents

This course covers equilibrium of rigid bodies, structures, beams, flexible cables and fluids under concentrated and distributed forces. The application of the method of sections and free-body diagrams to solve truss problems as well as shear diagrams and bending diagrams and their application to forces in beams, are covered. Wedges, screws, bearings, brakes and other problems involving friction are examined. Virtual work and potential energy methods in the determination of equilibrium conditions in machines and structures are discussed. C-ID ENGR 130, CSU, UC

ENGIN-257 Statics and Strength of Materials

3 units LR

- 54 hours lecture/18 hours lab per term
- Prerequisite: PHYS-130 and MATH-193 or equivalents
- Advisory: MATH-194 or equivalent

This course is 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, torsion in circular and hollow shafts, and shear and moment diagrams in beams. Deflection of beams, buckling of columns and energy methods are also discussed. CSU, UC

ENGIN-298 Independent Study

.5-3 units SC

- Variable hours
- Note: Submission of acceptable educational contract to department and Instruction Office is required.

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. CSU

ENGIN-299 Student Instructional Assistant

.5-3 units SC

- 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

ENGINEERING TECHNOLOGY - ENGTC

Despina Prapavessi, Dean

Mathematics and Engineering Division

Mathematics Building, Room 267

Possible career opportunities

Career options in engineering technology include civil engineering technicians, surveying and mapping technicians (cartography), architectural and civil drafters, and mechanical engineering technicians. Engineering technicians may work as computer-aided design drafters, engineering aides, land surveyors, field assistants, planning technicians and technical sales people.

Associate in science degree

Civil design drafting technology

Students completing the program will be able to...

- use technical drafting principles to develop technical drawings.
- interpret construction blueprints.
- use geometric construction and descriptive geometry to solve geometric problems.
- create 2-dimensional and 3-dimensional computer aided drawings (CAD).
- interpret global positioning data.
- measure land forms using ground surveying equipment.
- apply trigonometry to math problems.
- apply the basic laws of physics to everyday situations.

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 general education requirements as listed in the catalog. Students who wish to transfer should consult with program faculty and college counselors to ensure that the requirements for transfer to appropriate institutions are met. Certain courses may satisfy both major and general education requirements; however, the units are only counted once.

<i>major requirements:</i>	<i>units</i>
CONST-114 Print Reading.....	3
ENGIN-121 Engineering Drawing/Descriptive Geometry.....	3
PHYS-110 Elementary Physics.....	3

<i>plus at least 3 units from:</i>	
ENGTC-111 Mathematics for Technicians.....	3
MATH-121 Plane Trigonometry.....	3
MATH-191 Pre-Calculus.....	5

<i>plus at least 3 units from:</i>	
ARCHI-119 Introduction to Technical Drawing.....	3
ENGTC-119 Introduction to Technical Drawing.....	3

<i>plus at least 3 units from:</i>	
ARCHI-126 Computer Aided Design and Drafting - AutoCAD.....	3
ENGTC-126 Computer Aided Design and Drafting - AutoCAD.....	3

<i>plus at least 3 units from:</i>	
ARCHI-226 Computer Aided Drafting Design, Advanced Concepts - AutoCAD.....	3
ENGTC-226 Computer Aided Drafting Design, Advanced Concepts - AutoCAD.....	3

<i>plus at least 3 units from:</i>	
GEOG-124 Thinking and Communicating Geospatially.....	3
GEOG-129 Field Data Acquisition and Management	3

<i>plus at least 6 units from:</i>	
CONST-116 Plane Surveying.....	4
ENGIN-140 Plane Surveying.....	4
ENGTC-123 Principles of Civil Drafting.....	3
GEOG-125 Introduction to Geographic Information Systems (GIS).....	3
GEOG-126 Advanced Geographic Information Systems	3
GEOG-160 Introduction to Remote Sensing.....	4
GEOG-162 Map Design and Visualization.....	3

total minimum units for the major 30

Associate in science degree

Machining for mechanical engineering technology

Students completing the program will be able to...

- read the drawing for an object and visualize the geometry.
- choose the correct manufacturing method for the object.
- manufacture an object from a given drawing using machine tools.
- use algebra, spreadsheets and measurement data to produce QC statistics.
- verify that products meet the design criteria.
- design and prototype mechanical parts under the supervision of engineers.
- use computer integrated manufacturing (CIM) and computer numerical control (CNC) software for automation of manufacturing.

The associate of science degree in machining for mechanical engineering technology is offered to prepare students with the required aptitude and skills to enter the workforce as entry-level machinists, tool and die makers, or mold makers. Students will be prepared for careers that are highly in demand for aerospace, medical, electronic, high tech, and automotive and transport industries. Graduates of this program will be well equipped to continue their career advancement as engineers, product developers, prototype/model builders, production machinist, or electro-mechanical maintenance and repair specialists.

Students completing this program will develop familiarity with lathes, mills, drill presses, and precision measuring. They will also be introduced to the concepts of computer numerical control (CNC) machines and 3D (additive) manufacturing processes, geometric dimension and tolerance (GD&T), and modern technical drawing (CAD) techniques.

The DVC machining for mechanical engineering technology major is not intended for transfer. Option 1 (DVC General Education) is advised for students who do not intend to transfer. Students who intend to transfer to a four-year baccalaureate program should consult with a counselor regarding specific major preparation requirements at the transfer institution of their choice. Students who intend to transfer are advised to select General Education Option 2 (IGETC) or Option 3 (CSU GE).

Students must complete each of the courses required for the major with a "C" grade or higher. Students may not take a pass/no pass option for major courses. Certain courses may satisfy both major and general education requirements; however, the units are only counted once.

<i>major requirements:</i>		<i>units</i>
ENGTC-119	Introduction to Technical Drawing.....	3
ENGTC-126	Computer Aided Design and Drafting- AutoCAD.....	3
ENGTC-129	Product Design I Using Solidworks.....	3
ENGTC-160	Introduction to Industrial and Manufacturing Engineering	3
ENGTC-162	Geometric Dimensioning and Tolerancing	1
ENGTC-165	Machining and Manufacturing I.....	3
ENGTC-166	Machining and Manufacturing II.....	3
ENGTC-168	Introduction to Computer Numerical Control... 3	3

plus at least 3 units from:

ENGTC-111	Mathematics for Technicians.....	3
MATH-119	Beginning and Intermediate Algebra.....	4
MATH-121	Plane Trigonometry.....	3
MATH-191	Pre-Calculus	5
MATH-192	Analytic Geometry and Calculus I.....	5

total minimum units for the major 25

Associate in science degree mTECH - Industrial maintenance machinist/ mechanic

Students completing the program will be able to...

- A. discuss the role of the industrial maintenance machinist/mechanic in shop and field maintenance safety.
- B. interpret blueprints and technical drawings for parts manufacturing and maintenance repair operations
- C. grind high speed steel tool bits for general purpose turning and threading.
- D. cut multiple lead and acme threads on a lathe.
- E. use the vertical milling machine to drill holes, index, bore hole to a specified diameter and depth, mill surfaces and edges, and use an indicator to reference work.
- F. replace a single mechanical seal in a centrifugal pump.
- G. align a pump shaft to a motor to a specified tolerance.

This program prepares students for jobs in the manufacturing industry including industrial machinery mechanics, maintenance specialists or technicians, and machinery maintenance workers in industries including chemical, refinery, and public works. These jobs involve repairing, installing, adjusting, or maintaining industrial production and processing machinery or refinery and pipeline distribution systems. The labor market for these high-wage occupations in the Bay Area is strong.

Graduates of this program will gain skills and knowledge in areas that include machining, industrial hydraulics and pneumatics, shop and field maintenance, basic electricity, technical drawing, basic drafting, and applied mathematics. Students are advised to meet with a counselor or program advisor to develop an educational plan that meets their needs

The DVC mTECH major is not intended for transfer. Option 1 (DVC General Education) is advised for students who do not intend to transfer. Students who intend to transfer to a four-year baccalaureate program should consult with a counselor regarding specific major preparation requirements at the transfer institution of their choice. Students who intend to transfer are advised to select General Education Option 2 (IGETC) or Option 3 (CSU GE).

Students must complete each of the courses required for the major with a "C" grade or higher. Students may not take a pass/no pass option for major courses. Certain courses may satisfy both major and general education requirements; however, the units are only counted once.

<i>major requirements:</i>		<i>units</i>
CONST-110	Occupational Safety.....	2
ELECT-110	Survey of Electricity	2
ENGTC-119	Introduction to Technical Drawing.....	3
ENGTC-165	Machining and Manufacturing I.....	3
ENGTC-166	Machining and Manufacturing II.....	3
ENGTC-175	Hydraulic and Pneumatic Systems and Components.....	3
ENGTC-176	Mechanical Systems and Components	3

plus 0-5 units from:

ENGTC-111	Mathematics for Technicians.....	3
MATH-119	Beginning and Intermediate Algebra.....	4
MATH-121	Plane Trigonometry	3
MATH-191	Pre-Calculus.....	5
MATH-192	Analytic Geometry and Calculus I.....	5

total minimum units for the major 19

**Certificate of achievement
Civil design drafting technology**

Students completing the program will be able to...

- A. use technical drafting principles to develop technical drawings.
- B. interpret construction blueprints.
- C. use geometric construction and descriptive geometry to solve geometric problems.
- D. create 2-dimensional and 3-dimensional computer aided drawings (CAD).
- E. interpret global positioning data.
- F. measure land forms using ground surveying equipment.
- G. apply trigonometry to math problems.
- H. apply the basic laws of physics to everyday situations.

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.

<i>required courses:</i>	<i>units</i>
CONST-114 Print Reading.....	3
ENGIN-121* Engineering Drawing /Descriptive Geometry.....	3
PHYS-110 Elementary Physics.....	3

<i>plus at least 3 units from:</i>	
ENGTC-111 Mathematics for Technicians.....	3
MATH-121 Plane Trigonometry.....	3
MATH-191 Pre-Calculus.....	5

<i>plus at least 3 units from:</i>	
ARCHI-119 Introduction to Technical Drawing.....	3
ENGTC-119 Introduction to Technical Drawing.....	3

<i>plus at least 3 units from:</i>	
ARCHI-126 Computer Aided Design and Drafting - AutoCAD.....	3
ENGTC-126 Computer Aided Design and Drafting - AutoCAD.....	3

<i>plus at least 3 units from:</i>	
ARCHI-226 Computer Aided Drafting Design, Advanced Concepts - AutoCAD.....	3
ENGTC-226 Computer Aided Drafting Design, Advanced Concepts - AutoCAD.....	3

<i>plus at least 3 units from:</i>	
GEOG-124 Thinking and Communicating Geospatially.....	3
GEOG-129 Field Data Acquisition and Management.....	3

<i>plus at least 6 units from:</i>	
CONST-116* Plane Surveying.....	4
ENGIN-140* Plane Surveying.....	4
ENGTC-123 Principles of Civil Drafting.....	3
GEOG-125 Introduction to Geographic Information Systems (GIS).....	3
GEOG-126 Advanced Geographic Information Systems.....	3
GEOG-160 Introduction to Remote Sensing.....	4
GEOG-162 Map Design and Visualization.....	3
total minimum required units	30

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

**Certificate of achievement
Civil drafting, CAD**

Students completing the program will be able to...

- A. apply civil drafting principles to interpret and develop civil engineering maps.
- B. interpret construction blueprints.
- C. create 2-dimensional and 3-dimensional computer aided drawings (CAD).
- D. interpret global positioning data.
- E. measure land forms using ground surveying equipment.
- F. use general computer software such as Microsoft Word and Excel.
- G. apply trigonometry to math problems.

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.

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.

<i>required courses:</i>	<i>units</i>
CONST-114 Print Reading.....	3
ENGTC-111 Mathematics for Technicians.....	3
MATH-121* Plane Trigonometry.....	3

<i>plus at least 3 units from:</i>	
ARCHI-119 Introduction to Technical Drawing.....	3
ENGTC-119 Introduction to Technical Drawing.....	3

<i>plus at least 3 units from:</i>	
ARCHI-126 Computer Aided Design and Drafting - AutoCAD.....	3
ENGTC-126 Computer Aided Design and Drafting - AutoCAD.....	3

<i>plus at least 3 units from:</i>	
ARCHI-226 Computer Aided Drafting Design, Advanced Concepts - AutoCAD.....	3
ENGTC-226 Computer Aided Drafting Design, Advanced Concepts - AutoCAD.....	3

<i>plus at least 3 units from:</i>	
GEOG-124 Thinking and Communicating Geospatially.....	3
GEOG-129 Field Data Acquisition and Management.....	3

plus at least 6 units from:

ARCHI-135	Digital Tools for Design	3
ARCHI-136	Digital Tools for Architecture	3
CONST-116*	Plane Surveying.....	4
ENGIN-140*	Plane Surveying.....	4
ENGTC-123	Principles of Civil Drafting.....	3
GEOG-125	Introduction to Geographic Information Systems (GIS).....	3
GEOG-126	Advanced Geographic Information Systems	3
GEOG-160	Introduction to Remote Sensing.....	3
GEOG-162	Map Design and Visualization.....	3

total minimum required units 27

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

Certificate of achievement Design for manufacturing (D4m)

Students completing this program will be able to...

- analyze markets, marketing strategy, the marketing environment, and the marketing mix variables of product, price, promotion, and distribution.
- work within a team of diverse industry professionals to establish and meet design criteria.
- develop detailed technical drawings of a product.
- determine the most efficient and responsible manufacturing method for products.
- manufacture an object from a given drawing using machine tools.
- prototype an object from a given technical drawing or three-dimensional CAD model.
- design and prototype mechanical parts under the supervision of engineers.
- use computer integrated manufacturing (CIM) and computer numerical control (CNC) software for automation of manufacturing.

Diablo Valley College's (DVC) industrial design program addresses the workforce needs of the design and manufacturing sector with the design for manufacturing (D4m) certificate of achievement. The program courses provide current digital fabrication skills, while providing a foundation of traditional manufacturing. Students will also learn the design process and rapid prototyping techniques required by the field of industrial design as well as business marketing skills.

Graduates of the design for manufacturing (D4m) program may be employed in jobs that include production occupations, engineering occupations, assemblers and fabricators, engineering technicians, computer-controlled machine operators, rapid prototyping for product design, and within research and development (R&D) fields. Students will gain the skills necessary to create 3D CAD models, program computer numerical control (CNC) manufacturing equipment, and operate traditional machinery such as lathes, mills, drill presses, and precision measuring devices. Students completing this program will also be candidates for a broad range of manufacturing and corporate jobs requiring a combination of technical knowledge and the skills needed to collaborate between marketing, design, engineering, and manufacturing.

The design for manufacturing (D4m) certificate of achievement program shares coursework with both the machining and mechanical engineering technology and industrial design certificate programs. To earn the certificate of achievement, students must complete each of the courses required for the major with a "C" grade or higher.

<i>required courses:</i>	<i>units</i>	
ENGTC-119	Introduction to Technical Drawing.....	3
ENGTC-128	Fusion 360 for Design and Prototyping.....	3
ENGTC-165	Machining and Manufacturing I	3
ENGTC-168	Introduction to Computer Numerical Control	3
ENGTC-268	CNC Programming and Machining.....	3
IDSGN-120	Introduction to Industrial and Product Design ...	3
IDSGN-121	Industrial and Product Design Foundations	3
IDSGN-137	Digital Fabrication and Prototyping	3

plus at least 2 units from:

IDSGN-105	Assembly and Fabrication Workshop.....	2
IDSGN-107	Furniture Design Studio.....	2

plus at least 3 units from:

BUSMK-256	Marketing	3
ENGTC-129	Product Design I Using SolidWorks.....	3

plus at least 3 units from:

IDSGN-220	Soft Goods Product Design Studio	4
IDSGN-221	Transportation Design Studio	4

total minimum required units 32

Certificate of achievement – Industrial automation and robotics

Students completing this program will be able to...

- program robots to perform or simulate industrial applications.
- identify, measure, and analyze series, parallel, and series-parallel circuits mathematically and experimentally.
- measure, analyze, and troubleshoot equipment problems.
- program the programmable logic controllers to control output devices based on sensor inputs
- solve series, parallel, and series-parallel AC circuits for voltage, current, impedance, and phase angle.
- describe the quality assurance procedure that might be used to verify the part is conforming to specification.
- demonstrate competence in principles and operation of basic hydraulic systems; use flow meters and pressure gauges to measure valves and make adjustments.
- diagnose and troubleshoot mechanical systems.
- use currently available basic personal protective equipment and be able to select appropriate equipment for a given environment.

This program prepares students for jobs in the robotic industry related to the diagnostics, repair, maintenance, and integration of complex equipment. Robotic jobs can be found within the fields of research and development (R&D), manufacturing, industrial production, distribution logistics, and the biomedical and medical industries. Disciplines of study include, programmable logic controllers (PLC), motors and controllers, direct and alternate current circuits, hydraulic and pneumatic systems, and industrial robotic applications.

Engineering technology

Today's advanced manufacturing industries, distribution centers, and medical research facilities are increasingly dependent on robotic systems to provide highly accurate and uninterrupted throughput. With this inherent dependence on highly complex equipment, specialized robotic technicians are highly sought after and are increasingly employed within these facilities. DVC's industrial automation and robotics graduates will provide highly qualified robotic technicians who can problem solve for a variety of technical diagnostic areas.

DVC's students will utilize state of the art equipment needed to integrate robotic equipment into advanced production and specialty systems. Courses will introduce the basic operations of robotic equipment and autonomous systems, with an emphasis on hydraulics and pneumatics, electronics, and programmable logic controllers (PLC). Students will also learn how to practice safety within high-tech facilities as they troubleshoot and repair electromechanical systems and components. An emphasis on quality control standards and production system efficiencies is inclusive.

Graduates of this program will gain skills and knowledge in areas that include industrial hydraulics and pneumatics, electricity and electronics, machine repair, shop and field maintenance, and operational robotic programing.

To earn a certificate of achievement, students must complete each of the required courses with a "C" grade or higher.

<i>required courses:</i>	<i>units</i>
ELECT-120 Direct Current Circuits	4
ELECT-130 Motors and Motor Controllers	4
ELECT-271 Programmable Logic Controllers.....	4
ELTRN-121 Alternating Current Circuits	4
ENGTC-160 Introduction to Industrial and Manufacturing	3
Engineering	3
ENGTC-175 Hydraulic and Pneumatic Systems and	3
Components.....	3
ENGTC-176 Mechanical Systems and Components.....	3
ENGTC-180 Applications for Industrial Robotics	3
ELTRN-107 Introduction to Robotics	2

<i>plus at least 2 units from:</i>	<i>units</i>
CONST-110 Occupational Safety	2
ENGTC-165 Machining and Manufacturing I.....	3

total minimum required units 32

Certificate of achievement Machining for mechanical engineering technology

Students completing the program will be able to...

- read the drawing for an object and visualize the geometry.
- choose the correct manufacturing method for the object.
- manufacture an object from a given drawing using machine tools.
- use algebra, spreadsheets and measurement data to produce QC statistics.
- verify that products meet the design criteria.
- design and prototype mechanical parts under the supervision of engineers.
- use computer integrated manufacturing (CIM) and computer numerical control (CNC) software for automation of manufacturing.

The certificate of achievement in machining for mechanical engineering technology is offered to prepare students with the required aptitude and skills to enter the workforce as entry-level machinists, tool and die makers, or mold makers. Students will be prepared for careers that are highly in demand for aerospace, medical, electronic, high tech, and automotive and transport industries. Graduates of this program will be well equipped to continue their career advancement as engineers, product developers, prototype/model builders, production machinist, or electro-mechanical maintenance and repair specialists.

Students completing this program will develop familiarity with lathes, mills, drill presses, and precision measuring. They will also be introduced to the concepts of computer numerical control (CNC) machines and 3D (additive) manufacturing processes, geometric dimension and tolerance (GD&T), and modern technical drawing (CAD) techniques.

Students must complete each of the courses required for the certificate with a "C" grade or higher. Students may not take a pass/no pass option for required courses.

<i>required courses:</i>	<i>units</i>
ENGTC-119 Introduction to Technical Drawing.....	3
ENGTC-126 Computer Aided Design and Drafting- AutoCAD.....	3
ENGTC-129 Product Design I Using Solidworks.....	3
ENGTC-160 Introduction to Industrial and Manufacturing Engineering.....	3
ENGTC-162 Geometric Dimensioning and Tolerancing	1
ENGTC-165 Machining and Manufacturing I	3
ENGTC-166 Machining and Manufacturing II	3
ENGTC-168 Introduction to Computer Numerical Control... 3	3

plus at least 3 units from:

ENGTC-111 Mathematics for Technicians.....	3
MATH-119 Beginning and Intermediate Algebra.....	4
MATH-121 Plane Trigonometry	3
MATH-191 Pre-Calculus.....	5
MATH-192 Analytic Geometry and Calculus I.....	5

total minimum required units 25

Certificate of achievement mTECH - Industrial maintenance machinist/ mechanic

Students completing the program will be able to...

- discuss the role of the industrial maintenance machinist/mechanic in shop and field maintenance safety.
- interpret blueprints and technical drawings for parts manufacturing and maintenance repair operations
- grind high speed steel tool bits for general purpose turning and threading.
- cut multiple lead and acme threads on a lathe.
- use the vertical milling machine to drill holes, index, bore hole to a specified diameter and depth, mill surfaces and edges, and use an indicator to reference work.
- replace a single mechanical seal in a centrifugal pump.
- align a pump shaft to a motor to a specified tolerance.

This program prepares students for jobs in the manufacturing industry including industrial machinery mechanics, maintenance specialists or technicians, and machinery maintenance workers in industries including chemical, refinery, and public works. These jobs involve repairing, installing, adjusting, or maintaining industrial production and processing machinery or refinery and pipeline distribution systems. The labor market for these high-wage occupations in the Bay Area is strong.

Graduates of this program will gain skills and knowledge in areas that include machining, industrial hydraulics and pneumatics, shop and field maintenance, basic electricity, technical drawing, basic drafting, and applied mathematics. Students are advised to meet with a counselor or program advisor to develop an educational plan that meets their needs.

Students must complete each course used to meet a program requirement with a "C" grade or higher. Students may not take a pass/no pass option for certificate courses.

<i>required courses:</i>	<i>units</i>
CONST-110 Occupational Safety	2
ELECT-110 Survey of Electricity	2
ENGTC-119 Introduction to Technical Drawing.....	3
ENGTC-165 Machining and Manufacturing I.....	3
ENGTC-166 Machining and Manufacturing II.....	3
ENGTC-175 Hydraulic and Pneumatic Systems and Components	3
ENGTC-176 Mechanical Systems and Components	3
 <i>plus 0-5 units from:</i>	
ENGTC-111 Mathematics for Technicians.....	3
MATH-119 Beginning and Intermediate Algebra.....	4
MATH-121 Plane Trigonometry	3
MATH-191 Pre-Calculus.....	5
MATH-192 Analytic Geometry and Calculus I	5
total minimum required units	19

**Certificate of accomplishment
Computer aided drafting and digital media
for architecture, industrial design and
engineering**

Students completing the program will be able to...

- A. create 2-dimensional and 3-dimensional computer aided drawings (CAD).
- B. interpret construction blueprints and architectural plans.
- C. calculate data collected from land surveying).
- D. interpret simple technical drawings.
- E. construct 3-Dimensional models using parametric software.

Drafters make drawings and plans to specify dimensions, materials and processes used in the making of a final product. These drawings are guidelines for the workers who will actually build or make whatever is being produced. Drafters also make drawings from blueprints, engineering sketches, photos and other sources which show how parts and other objects work, their relation to one another, and how they will be put together. 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, photos and other sources which show the interplay of components and 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.

<i>required courses:</i>	<i>units</i>
<i>complete 3 units from:</i>	
ARCHI-126 Computer Aided Design and Drafting - AutoCAD.....	3
ENGTC-126 Computer Aided Design and Drafting - AutoCAD.....	3
 <i>plus at least 3 units from:</i>	
ARCHI-226 Computer Aided Drafting Design, Advanced Concepts - AutoCAD	3
ENGTC-226 Computer Aided Drafting Design, Advanced Concepts - AutoCAD	3
 <i>plus at least 3 units from:</i>	
ARCHI-119 Introduction to Technical Drawing.....	3
ARCHI-120 Introduction to Architecture and Environmental Design	3
CONST-114 Print Reading.....	3
ENGTC-119 Introduction to Technical Drawing.....	3

 <i>plus at least 3 units from:</i>	
ARCHI-135 Digital Tools for Design	3
ARCHI-136 Digital Tools for Architecture	3
ARTDM-160 3D Modeling and Animation I.....	3
ENGTC-129 Product Design I Using SolidWorks	3
GEOG-125 Introduction to Geographic Information Systems (GIS).....	3
IDSGN-120 Introduction to Industrial and Product Design	3
total minimum required units	12

**Certificate of accomplishment
Pre-engineering technology**

Students completing the program will be able to...

- A. develop technical drawings with detailed dimensions using hand drafting line work and lettering.
- B. create 2-dimensional computer aided design (CAD) drawings and 3-dimensional computer models.
- C. safely operate hand and power tools.
- D. use measuring devices to calculate and verify tolerances for metal, wood, and plastics parts.
- E. apply prototyping techniques for engineering, product design, and manufacturing.

The certificate of accomplishment in pre-engineering technology provides students with the foundation of skills required to pursue a degree or certificate in mTECH (industrial machine maintenance), manufacturing, industrial design, or electro-mechanical. The courses provide students with skills in technical drawing, computer aided design (CAD), and traditional shop tools.

Students create detailed product specifications and gain knowledge required to safely operate shop tools. Concepts in technical drawing, computer-aided design, and hand drafting will be inclusive. In addition, students use a variety of measuring devices and safely operate traditional machinery including drills, saws and mechanical tools. Completion of the foundation courses and prepare students to transition into technical design, rapid prototyping, computer numerical control (CNC) machining and manufacturing.

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.

<i>required courses:</i>		<i>units</i>
ENGTC-119	Introduction to Technical Drawing.....	3
ENGTC-126	Computer Aided Design and Drafting-AutoCAD	3
IDSGN-105	Assembly and Fabrication Workshop.....	2
total minimum required units		8

**Certificate of accomplishment
Rapid prototyping and 3D printing**

Students completing the program will be able to...

- A. prototype and fabricate a variety of components in various materials.
- B. model components and parts in a 3D modeling and manufacturing software package.
- C. develop detailed technical drawings of a product.
- D. determine the most efficient and responsible manufacturing method for the product.
- E. prototype an object from a given technical drawing or three-dimensional CAD model.
- F. design and prototype mechanical parts under the supervision of engineers.
- G. use computer integrated manufacturing (CIM) and computer numerical control (CNC) software for automation of manufacturing.

The certificate of accomplishment provides foundation skills for 3D printing and operating computer numerical control (CNC) devices that are required for fabrication and prototyping. The Rapid Prototyping and 3D Printing courses provide students with the experience in the latest 3D CAD modeling and CAM programming software and hardware.

Students use Rapid Prototyping and 3D Printing techniques inherent to the field of industrial design and advanced manufacturing. Students completing this program will also be candidates for a broad range of jobs that require a combination of technical knowledge and the skills needed to collaborate between marketing, design, engineering, and manufacturing.

The Rapid Prototyping and 3D Printing certificate of accomplishment is not intended for transfer, rather, it has been developed to increase skills for employment and as a segue into DVC's D4m (Design for Manufacturing) certificate of achievement.

To earn a certificate of accomplishment, students must complete each course used to meet a certificate requirement with a "C" grade or higher.

<i>two units from:</i>	
IDSGN-105	Assembly and Fabrication Workshop.....2
IDSGN-107	Furniture Design Studio

<i>plus at least 3 units from:</i>	
ENGTC-128	Fusion 360 Modeling and Prototyping
ENGTC-129	Introduction to SolidWorks

<i>plus at least 3 units from:</i>	
ENGTC-168	Introduction to Computer Numerical Control.....3
IDSGN-137	Digital Fabrication and Prototyping.....3
total minimum required units	
8	

Certificate of accomplishment Robotics

Students completing the program will be able to...

- program robots to perform or simulate industrial applications.
- identify, measure, and analyze series, parallel, and series-parallel circuits mathematically and experimentally.
- diagnose and troubleshoot mechanical systems.
- demonstrate competence in principles and operation of basic hydraulic systems; use flow meters and pressure gauges to measure valves and make adjustments.

This certificate of accomplishment prepares students with foundational skills related to jobs in the robotic industry that include operating, diagnostics, and repair. Robotics jobs can be found within the fields of research and development (R&D), advanced manufacturing, industrial production, distribution logistics, and the biomedical industries. Disciplines of study may include programming, motors and controllers, direct current circuits, hydraulic and pneumatic systems, mechanical systems and components, and applications for industrial robotics. The labor market for these high-wage occupations in the Bay Area is strong.

Today's advanced manufacturing industries, distribution centers, and medical research facilities are increasingly dependent on robotic systems to provide highly accurate and uninterrupted throughput. With the dependence on highly complex equipment, specialized robotic operators and technicians are required within these facilities. This certificate of accomplishment will prepare graduates to problem solve for a variety of technical applications with an emphasis on industrial machinery, electronics, and programming. Students will also learn how to practice safety within high-tech facilities.

To earn a certificate of accomplishment, students must complete each course used to meet a certificate requirement with a "C" grade or higher.

two units from:

ELTRN-107	Introduction to Robotics	2
ENGTC-180	Applications for Industrial Robotics	3

plus at least 2 units from:

ELECT-110	Survey of Electricity	2
ELECT-120	Direct Current Circuits	4

plus at least 3 units from:

ENGTC-175	Hydraulic and Pneumatic Systems and Components.....	3
ENGTC-176	Mechanical Systems and Components.....	3

total minimum required units **7**

ENGTC-111 Mathematics for Technicians

3 units LR

- DVC GE: IC
- 54 hours lecture per term
- Prerequisite: Placement into MATH-121 or higher or MATH-085 or MATH-085SP or beginning algebra or equivalent

This course is a study of mathematical topics used for technical applications in the workplace. Topics include an introduction to units of measurement, mathematical operations with application to technical problems, algebraic operations and concepts in geometry and trigonometry. An introduction to coordinate spaces and systems and their application to technical problems in the field are also covered. The calculation of surface areas and volumes are presented in context with problems encountered in technical and design fields. CSU

ENGTC-119 Introduction to Technical Drawing

3 units SC

- 36 hours lecture/72 hours laboratory per term
- Note: Same as ARCHI-119. For students with no previous drafting experience. Credit by examination option available.

This course presents an introduction to technical drawing. Topics include technical lettering and line work, geometric constructions, sketching and shape description, orthographic projection, dimensioning, section views, and auxiliary views. Students will gain experience using computers to produce technical drawings, utilizing 3D modeling and orthographic computer aided design (CAD) drafting. An introduction to computer numerical control (CNC) prototyping and 3D printing is also covered. CSU, UC (credit limits may apply to UC - see counselor)

ENGTC-123 Principles of Civil Drafting

3 units LR

- 36 hours lecture/72 hours laboratory per term
- Advisory: ENGTC-111 (may be taken concurrently), ENGTC-119 and ENGTC-126 or equivalents

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

ENGTC-126 Computer Aided Design and Drafting - AutoCAD

3 units SC

- 36 hours lecture/72 hours laboratory per term
- Advisory: ENGTC-119 or ARCHI-119 or equivalent
- Note: Same as ARCHI-126. Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree. Credit by examination option available.

This introductory course covers the fundamentals of AutoCAD, and its application to the creation of technical drawings. Hands-on training utilizing a comprehensive overview of the software package and its applications to technical drafting is emphasized. CSU, UC (credit limits may apply to UC - see counselor)

ENGTC-128 Fusion 360 for Design and Prototyping

3 units SC

- 36 hours lecture/72 hours laboratory per term
- Advisory: ENGTC-119 or ARCHI-119 or equivalent
- Note: Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This course introduces Autodesk's Fusion 360 software as related to the product design process and rapid prototyping. The course covers a broad range of topics related to the software's features that include: 3D modeling, 2D documentation, rendering, animation, generative design, additive (3D Printing), and subtractive fabrication (CNC milling). Students will use the cloud-based software from step-by-step lessons and project-based instruction. Previous experience with Fusion 360 or 3D CAD modeling software is not required. CSU

ENGTC-129 Product Design I Using SolidWorks

3 units SC

- 36 hours lecture/72 hours laboratory per term
- Advisory: ARCHI-119 or ENGTC-119 or equivalent
- Note: Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree. Credit by examination option available.

This course introduces students to product design using SolidWorks. Students use the functions of SolidWorks and apply these functions within the product design process. CSU

ENGTC-160 Introduction to Industrial and Manufacturing Engineering

3 units LR

- 54 hours lecture per term

This course presents the methods and processes involved in the manufacturing of a variety of products in various materials. Topics include an introduction to various materials and their properties, types of machinery used in manufacturing, methods of casting and shaping materials along with other industrial and technical processes. An introductory overview of engineering drawing standards and quality assurance is also covered. CSU, UC

ENGTC-162 Geometric Dimensioning and Tolerancing

1 unit LR

- 9 hours lecture/27 hours laboratory per term
- Advisory: ENGTC-111 or equivalent

This course will present the principles of geometric dimensioning and tolerancing (GDT). Topics include GDT symbols, datum planes, material conditions, orientation, location, profile and runout tolerances. Laboratory assignments emphasize measurement using granite tables and pin and height gauges. CSU, UC

ENGTC-165 Machining and Manufacturing I

3 units LR

- 36 hours lecture/72 hours laboratory per term
- Advisory: ENGTC-119 or ARCHI-119 or equivalent

This course introduces practical and theoretical aspects of machine tool processes. Topics include basic blueprint interpretation, use of hand tools, measuring instruments and gauges, layout, inspection techniques and metals identification. Setup and operation of drill presses, band saw, grinders, lathes, milling, and computer-numerical control (CNC) machines will also be covered. CSU

ENGTC-166 Machining and Manufacturing II

3 units LR

- 36 hours lecture/72 hours laboratory per term
- Prerequisite: ENGTC-165 or equivalent

This course introduces practical and theoretical aspects of advanced machine tool processes, focusing on lathe and vertical milling machine operations. Topics include precision measuring and inspection practices, surface grinding, special work holding devices, and mechanical hardware. An introduction to Geometric Dimensioning and Tolerancing (GDT) and properties of materials associated with machinability, heat treating and hardness testing is provided. CSU

ENGTC-168 Introduction to Computer Numerical Control

3 units SC

- 36 hours lecture/72 hours laboratory per term
- Advisory: ENGIN-120 or equivalent
- Note: Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This course introduces students to Computer Numerical Control (CNC) machining. Students will learn the techniques of developing and programming cutting tool paths and movements using three-dimensional CAD models and working drawings. Instruction will cover the use of Computer Integrated Manufacturing package (CIM) software and visualization of cutting operations. Topics will also include setup and operation of CNC equipment for manufacturing. CSU

ENGTC-175 Hydraulic and Pneumatic Systems and Components

3 units SC

- 18 hours lecture/108 hours laboratory per term

This course covers the practical and theoretical aspects of hydraulic and pneumatic systems. Topics include concepts, theory and common systems, components and devices. The laboratory emphasizes hands-on exercises in operation, maintenance and mechanical skills. CSU

ENGTC-176 Mechanical Systems and Components

3 units SC

- 18 hours lecture/108 hours laboratory per term

This course covers mechanical systems with an emphasis on mechanical drives, flexible belt drives, lubrication, bearings, vibration, and rotating equipment. Topics include operation, maintenance and repair of mechanical systems, and components used in a variety of industrial occupations. CSU

ENGTC-180 Applications for Industrial Robotics

3 units SC

- 36 hours lecture/72 hours laboratory per term
- Prerequisite: ELTRN-107 or equivalent
- Note: Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This course introduces applied robotics and automation through the examination of principles of controller hardware, systems interface, and programming structure. Students will practice the skills needed to operate and control robotic devices. Students also develop autonomous systems and robotic operations within industrial applications that include research and development (R&D), advanced manufacturing, distribution logistics, and the biomedical and medical fields. CSU

ENGTC-226 Computer Aided Drafting Design, Advanced Concepts - AutoCAD

3 units SC

- 36 hours lecture/72 hours laboratory per term
- Advisory: ENGTC-126 or ARCHI-126 or equivalent
- Note: Same as ARCHI-226. Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This course covers the concepts and applications of constructing digital three-dimensional (3D) models and photo-realistic renderings for presentation using AutoCAD. Advanced techniques for surface, wireframe and solid modeling will be presented. Students will explore lighting, materials mapping, and rendering as they apply to architecture, engineering and industrial design. Other software may be presented. CSU, UC (credit limits may apply to UC - see counselor)

ENGTC-268 CNC Programming and Machining

3 units SC

- 36 hours lecture/72 hours laboratory per term
- Advisory: ENGTC-165 or equivalent and ENGTC-168 or equivalent
- Note: Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This course will provide students with advanced instruction on how to program and operate Computer Numerical Control (CNC) machines. Students in this class will build upon prior knowledge from foundational manual and CNC machining experience. Learners will prototype and manufacture parts on DVC's CNC mills, CNC lathes, and 5-axis tables. The course includes programming with CAD/CAM software, fixturing materials, operating CNC machines, and creating precision parts. Students within this program can be employed in a variety of manufacturing-related fields such as production machining, engineering, industrial design, prototyping, fabrication, and quality control. CSU

ENGLISH – ENGL

James Noel, Dean
English Division

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.

Associate in arts degree English

Students completing the program will be able to...

- demonstrate knowledge of and familiarity with the methods of interpreting literature across genres.
- assess, evaluate, and analyze ideas expressed in text or in spoken language.
- create (write or present) coherent arguments that evidence clear prose and synthesize diverse bodies of knowledge.
- conceptualize, write, workshop, present for feedback, revise and edit an original text.

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 GE). 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" grade or higher, maintain an overall GPA of 2.5 or higher in the coursework required for the major and complete general education requirements as listed in the catalog. Certain courses may satisfy both major and general education requirements; however, the units are only counted once.

major requirements:

units

Group 1: Core reading and composition courses

complete at least 6 units from:

ENGL-122*	First-Year College Writing and Reading.....	3
ENGL-123*	Critical Thinking: Writing about Literature.....	3
ENGL-126*	Critical Thinking: Writing about Non-Fiction.....	3

Group 2: Core genre

complete at least 3 units from:

ENGL-150	Introduction to Literature.....	3
ENGL-151	The Short Story.....	3
ENGL-153	Contemporary Poetry.....	3
ENGL-180	Drama and Performance as Literature.....	3

Group 3: Core survey

complete at least 6 units from:

ENGL-154	Shakespeare and His World.....	3
ENGL-252*	Survey of Early English Literature.....	3
ENGL-253*	Survey of Late English Literature.....	3
ENGL-262*	Survey of Early American Literature.....	3
ENGL-263*	Survey of Late American Literature.....	3
ENGL-272*	Survey of Early World Literature.....	3
ENGL-273*	Survey of Late World Literature.....	3

Group 4: electives - Specialized literature and writing

complete at least 6 units from:

ENGL-152	Film as Literature.....	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	Multiethnic Literatures of the United States.....	3
ENGL-170	World Mythology.....	3
ENGL-172	The Bible as Literature.....	3
ENGL-173	Queer Literature Across Cultures.....	3
ENGL-175	Science Fiction and Fantasy Literature.....	3
ENGL-176	The Graphic Novel as Literature.....	3
ENGL-177	Children's Literature.....	3
ENGL-178	Young Adult Literature.....	3
ENGL-190	Multicultural Literature by American Women.....	3
ENGL-222*	Multi-Genre Creative Writing.....	3
ENGL-223*	Short Story Writing.....	3
ENGL-224*	Poetry Writing.....	3
ENGL-225*	Creative Nonfiction Writing.....	3

total minimum units for the major

21

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

Associate in arts in English for transfer

Students completing the program will be able to...

- demonstrate knowledge of and familiarity with the methods of interpreting literature across genres.
- assess, evaluate, and analyze ideas expressed in text or in spoken language.
- create (write or present) coherent arguments that evidence clear prose and synthesize diverse bodies of knowledge.
- conceptualize, write, workshop, present for feedback, revise and edit an original text.

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.

The associate in arts in English for transfer is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major.

In order to earn the degree, students must:

- Complete 60 CSU-transferable units.
- Complete the California State University-General Education pattern (CSU GE); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern, including the Area 1C requirement for Oral Communication.
- Complete a minimum of 18 units in the major.
- Attain a minimum grade point average (GPA) of 2.0.
- Earn a grade of "C" or higher in all courses required for the major.

Students transferring to a CSU campus that accepts the degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system, or those students who do not intend to transfer.

Some courses in the major satisfy both major and CSU GE/IGETC general education requirements; however, the units are only counted once toward the 60 unit requirement for an associate degree. 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.

<i>major requirements:</i>		<i>units</i>
ENGL-123	Critical Thinking: Writing about Literature.....	3
ENGL-126	Critical Thinking: Writing about Non-Fiction.....	3

plus at least 6 units from:

ENGL-252	Survey of Early English Literature.....	3
ENGL-253	Survey of Late English Literature.....	3
ENGL-262	Survey of Early American Literature.....	3
ENGL-263	Survey of Late American Literature.....	3
ENGL-272	Survey of Early World Literature.....	3
ENGL-273	Survey of Late World Literature.....	3

plus at least 3 units from:

any course not used above, or:

ENGL-124	The Nature of Language: An Introduction to Linguistics.....	3
ENGL-150	Introduction to Literature.....	3
ENGL-154	Shakespeare and His World.....	3
ENGL-162	Language, Literature, and Culture.....	3
ENGL-163	Asian American Literature.....	3
ENGL-166	African American Literature.....	3
ENGL-167	Latin American Literature.....	3
ENGL-168	Multiethnic Literatures of the United States.....	3
ENGL-170	World Mythology.....	3
ENGL-175	Science Fiction and Fantasy Literature.....	3
ENGL-222	Multi-Genre Creative Writing.....	3
ENGL-223	Short Story Writing.....	3
ENGL-224	Poetry Writing.....	3
ENGL-225	Creative Nonfiction Writing.....	3

plus at least 3 units from:

any course not used in either group above, or:

ENGL-140	Tutor Training.....	3
ENGL-151	The Short Story.....	3
ENGL-152	Film as Literature.....	3
ENGL-153	Contemporary Poetry.....	3
ENGL-164	Native American Literatures.....	3
ENGL-172	The Bible as Literature.....	3
ENGL-173	Queer Literature Across Cultures.....	3
ENGL-176	The Graphic Novel as Literature.....	3
ENGL-177	Children's Literature.....	3
ENGL-178	Young Adult Literature.....	3
ENGL-180	Drama and Performance as Literature.....	3
ENGL-190	Multicultural Literature by American Women.....	3
JRNAL-120	Introduction to Newswriting and Reporting.....	3

total minimum units for the major 18

**Certificate of competency
Skills for college success**

Students completing this program will be able to...

- A. use reading strategies to read and comprehend college-level texts, analyzing them for the central idea and basic organizational structure.
- B. analyze college-level readings and integrate the ideas meaningfully into formal writing assignments.
- C. incorporate appropriate structure and organization in their own writing.
- D. structure well-organized essays that have a focused thesis and developed and well-supported paragraphs with appropriate transitional elements, and which are relatively free of sentence-level errors.
- E. incorporate college success techniques into their learning behaviors (e.g. utilizing campus resources, managing stress, developing note-taking and summarizing skills, reflecting on personal student-learning processes).
- F. perform arithmetic operations with real numbers and fractions.
- G. integrate vocabulary with mathematical notations and computations that relate to graphs.
- H. develop study habits that promote success in mathematics, such as the use of reading and metacognitive strategies to improve understanding and performance.
- I. solve problems and think critically.

This noncredit program is a concise and focused foundation for English and math basics, along with the “student-ing skills” necessary for college success. ENGL-091NC is designed for students to build successful academic habits and strengthen their reading and writing skills in preparation for taking transfer-level courses. The MATH-003NC course option provides a review of arithmetic operations with fractions, solving linear equations, graphing, functions, and factoring. The MATH-002NC course option provides a review of arithmetic operations with fractions, decimals, and percentages, reading and interpreting graphs, and introductory statistics skills. Additionally, the program emphasizes strategies for academic success and familiarizes students with campus resources and support.

<i>required courses:</i>	<i>units</i>
ENGL-091NC English Skills for Success - Noncredit.....	0
 <i>and at least one of the following courses:</i>	
MATH-002NC Fundamental Math Skills for the Statistics Pathway - Noncredit	0
MATH-003NC Fundamental Math Skills for Business and STEM Pathways - Noncredit.....	0
total minimum required units	0

ENGL-090 English in a Minute: Bridge to College English

- 2 units SC
 - *Non degree applicable*
 - *36 hours lecture per term*

This course is designed for students to build successful academic habits and strengthen their reading and writing skills in preparation for taking transfer-level courses. The course gives students the opportunity to practice the reading, writing, and critical-thinking skills that will serve as a foundation in transfer-level composition and reading classes. Additionally, the course emphasizes strategies for academic success and familiarizes students with campus resources and support.

ENGL-091NC English Skills for Success - Noncredit

- 0 units SC
 - *24 hours lecture per term*

This noncredit course is a concise and focused foundation for reading and writing in college, along with the “student-ing skills” necessary for college success. This course is designed for students to build successful academic habits and strengthen their English skills in preparation for taking transfer-level courses. Strategies for academic success along with campus resources and support services will be covered.

ENGL-093 Sentence Structure and Punctuation

- 1 unit P/NP
 - *Non degree applicable*
 - *9 hours lecture/27 hours laboratory per term*

This course focuses specifically on developing skills in sentence structure and punctuation and is especially appropriate for students enrolled in other basic skills English courses.

ENGL-095 Studies in Reading and Writing

- .5-5 units SC
 - *Non degree applicable*
 - *Variable hours*

A supplemental course in reading and writing to provide a study of current concepts and problems in reading, writing, and related substantive areas. Specific topics will be announced in the schedule of classes.

ENGL-096 Introduction to College Reading and Study Skills

3 units SC

- *Non degree applicable*
- *54 hours lecture/18 hours laboratory per term*
- *Note: ESL students are strongly encouraged to follow the ESL assessment process. ESL-096A is recommended for ESL students*

This course introduces students to academic culture and the common practices of academic reading, including reading strategies, annotation, summary, quoting, and response. Students will practice identifying themes and relationships between key ideas and distinguishing between main points and supporting details. A primary aim is to increase students' reading fluency and to develop their ability to comprehend, interpret, and write about what they read. Students will also build their vocabularies and become familiar with study skills and campus resources that foster academic success.

ENGL-097 Introduction to College Reading and Writing

5 units SC

- *Non degree applicable*
- *90 hours lecture per term*

This course provides an integrated approach to reading and writing, preparing students for college-level work and transfer-level English. Students will be introduced to academic culture and to the practices associated with both academic reading and writing. The course presents a variety of methods for interacting with, comprehending, and responding to texts, which serve as a foundation for the course. The course also emphasizes critical thinking, the development of writing skills, and the writing process. Vocabulary development, study skills and campus resources are also covered.

ENGL-098 Introduction to College Writing

3 units SC

- *Non degree applicable*
- *54 hours lecture/18 hours laboratory per term*
- *Note: ESL students are strongly encouraged to follow the ESL assessment process. ESL-098A is recommended for ESL students.*

This course introduces students to academic culture and the common practices of academic writing, including the writing process, essay structure, organization, and idea and paragraph development. Students will compose thesis-driven, coherent essays for an academic audience. A variety of college-level texts serve as the foundation for class discussion and student writing. Students will also study grammar in the context of their own writing.

ENGL-099 English Grammar and Usage

3 units SC

- *Non degree applicable*
- *54 hours lecture per term*

This course is designed for native speakers wishing to better understand the rules of written academic English. The course offers instruction on fundamental rules of grammar (including mechanics, syntax and usage), especially those rules most challenging to native speakers. The course also explores connections between grammar, meaning, and style. Students will practice not only identifying and correcting grammar related errors in the context of their own writing, but also making the stylistic choices that best express their ideas and the relationships between them.

ENGL-116 College Reading Development

3 units SC

- *54 hours lecture per term*
- *Advisory: ENGL-096 or reading/writing assessment process or equivalent*
- *Note: Only one of ENGL-116, 117, 118 or ESL-117A may be applied to the units required for the associate degree.*

This course presents strategies for reading college-level materials. Students will practice methods of interacting with what they read in order to increase appreciation and comprehension. Topics include text analysis, flexible approaches to reading, vocabulary development, and study skills.

ENGL-117 Integrated College Reading and Writing Development

5 units SC

- *90 hours lecture per term*
- *Advisory: ENGL-096 and ENGL-098 or equivalent*
- *Note: This course is equivalent to the completion of ENGL-116 and ENGL-118 or ESL-117A. Only one of ENGL-116, 117, 118 or ESL-117A may be applied to the units required for the associate degree.*

This course provides an integrated approach to reading and writing for those students who have been assessed into ENGL-117 or both ENGL-116 and 118. It provides the necessary preparation for ENGL-122, transfer-level English. Students will prepare for college-level work; practice critical reading, writing, and thinking skills; and improve their vocabulary and study skills. Students will actively engage with their peers, read and interact with a variety of texts, and complete both formal and informal writing assignments connected to these readings. The central focus throughout the course will be on the ways reading and writing inform each other.

ENGL-118 College Writing Development

3 units SC

- 54 hours lecture per term
- Advisory: ENGL-098 or reading/writing assessment process or equivalent
- Note: Only one of ENGL-116, 117, 118 or ESL-117A may be applied to the units required for the associate degree.

This course is designed to help students express their ideas in college-level expository essays. Through continual practice of the writing process, students will improve their fluency and ease developing ideas for composing, organizing, and revising essays. In addition, students will analyze a variety of texts, using them as a stimulus for class discussion and as models for their own writing. This course also covers grammar in the context of students' own writing.

ENGL-120 First-Year College Writing and Reading Support

2 units SC

- 36 hours lecture per term
- Co-requisite: ENGL-122 or equivalent

English 120 is a support course for students who place into English 122 with the requirement or recommendation of additional support. The course offers students opportunities to practice the college-level reading, writing, research, and critical-thinking skills introduced in English 122. Additionally, the course will emphasize study skills, reflection, and other practices that promote success in both English 122 and other college classes.

ENGL-120A First-Year College English Support for Multilingual Students

2 units SC

- Non-degree applicable
- 36 hours lecture per term
- Co-requisite: ENGL-122A or equivalent

This course is designed for multilingual students who do not speak English as their primary language. The course is designed to increase students' awareness of both American academic norms and the campus resources that foster student success. The course also gives students practice observing their own and others' writing, strengthening their linguistic monitors, and using editing strategies to develop accurate, meaningful, and appropriate usage of linguistic forms in written expression. Reading strategies and grammar concepts specific to the needs of advanced multilingual students will also be addressed.

ENGL-121 Year-Long First-Year College Writing and Reading, Part I

3 units LR

- 54 hours lecture per term
- Prerequisite: Placement into ENGL-122; or ENGL-122L; or ENGL-117; or ENGL-117A; or ENGL-116 and 118; or assessment process Or Equivalent
- Note: Successful completion of both courses is equivalent to taking and passing any of the following: ENGL-122, ENGL-122L, ENGL-122A, or ENGL-122AL. The successful completion of both ENGL-121 and ENGL-122X is required to meet the transfer-level English requirements satisfied by ENGL-122, ENGL-122L, ENGL-122A, or ENGL-122AL. Students who do not successfully complete both ENGL-121 and ENGL-122X will not get credit for transfer-level English.

ENGL-121 is the first part of a two-course series (followed by ENGL-122X) that covers the content of ENGL-122L (First-Year College Writing and Reading with Additional Support). The year-long sequence is designed for students who prefer to have more time to practice and master the reading and writing skills and academic habits required for success in First-Year College Composition and Reading. The first part of the sequence, ENGL-121, focuses on the practice of reading and writing at the college level, while also offering support, including effective reading, writing, and critical-thinking strategies. The course also encourages students to 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, and will employ varied rhetorical strategies used by accomplished writers. Students must pass ENGL-121 in order to move on to the second part of the sequence, ENGL-122X. ENGL-121 + ENGL-122X = C-ID ENGL 100. CSU

ENGL-122 First-Year College Writing and Reading

3 units LR

- IGETC: 1A; CSU GE: A2; DVC GE: IA
- 54 hours lecture per term
- Prerequisite: Placement into ENGL-122; or ENGL-117; or ESL-117A; or ENGL-116 and 118; or ENGL-120 (may be taken concurrently with ENGL-122); or assessment process. Or Equiv.

This course focuses on the reading and writing process, including strategies for analyzing college-level readings and composing college-level essays that are coherent, developed, free of serious error, as well as employ various rhetorical strategies and integrate outside sources. C-ID ENGL 100, CSU, UC (credit limits may apply to UC - see counselor)

ENGL-122A First-Year College English for Multilingual Students

3 units LR

- *IGETC: 1A; CSU GE: A2; DVC GE: 1A*
- *54 hours lecture per term*
- *Prerequisite: Placement into ENGL-122A; or ENGL-117; or ESL-117A; or ENGL-116 and 118; or ENGL-120A (may be taken concurrently with ENGL-122A); or assessment process, or equivalent*

This course is designed for multilingual students who do not speak English as their primary language. This course engages multilingual students regularly in the writing and reading process with a substantial amount of college-level reading. Multilingual 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, multilingual students will use a variety of types of support including primary and secondary research. Multilingual students will employ varied rhetorical strategies used by accomplished writers. C-ID ENGL 100, CSU, UC (credit limits may apply to UC - see counselor)

ENGL-122AL First-Year College English Intensive For Multilingual Students

5 units LR

- *90 hours lecture per term*
- *Prerequisite: Placement into ENGL-122AL; or placement into ENGL-122; or ESL-117A; or ENGL-117; or ENGL-116 and 118; or assessment process or equivalent.*

This course is designed for multilingual students who do not speak English as their primary language. The course is for those who are ready for transfer-level reading, writing, and speaking. The course focuses on the analysis of college-level readings and composition of college-level essays that are coherent, detailed, and free from serious error. Rhetorical strategies, research, strengthening linguistic monitors, and the reading and grammar concepts specific to the needs of multilingual students at this level are emphasized. This course also covers American academic norms and resources that foster student success. C-ID ENGL 100, CSU, UC (credit limits may apply to UC and CSU - see counselor)

ENGL-122AM First-Year College English with Support for Multilingual Students

4 units LR

- *IGETC: 1A; CSU GE: A2; DVC GE: 1A*
- *72 hours lecture per term*
- *Prerequisite: Placement into ENGL-122A; or placement into ENGL-122; or ESL-117A; or ENGL-117; or ENGL-116 and 118; or assessment process or equivalent.*

This course is designed for multilingual students who do not speak English as their primary language. The course is for those who are ready for transfer-level reading, writing, and speaking. The course focuses on the analysis of college-level readings and composition of college-level essays that are coherent, detailed, and free from serious error. Rhetorical strategies, research, strengthening linguistic monitors, American academic norms, and the reading and grammar concepts specific to the needs of multilingual students at this level are emphasized. C-ID ENGL 100, CSU, UC (credit limits may apply to UC and CSU - see counselor)

ENGL-122L First-Year College Writing and Reading with Additional Support

5 units LR

- *IGETC: 1A; CSU GE: A2; DVC GE: 1A*
- *90 hours lecture per term*
- *Prerequisite: Placement into ENGL-122; or ENGL-122L; or ENGL-117; or ENGL-117A; or ENGL-116 and 118; or assessment process or equivalent*

This course is designed for students who place into ENGL-122 with the requirement or recommendation of additional support. The course focuses on the practice of reading and writing at the college-level, while also offering support in effective reading, writing, and critical-thinking strategies, as well as other academic best practices. This course also encourages students to 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 and employ varied rhetorical strategies used by accomplished writers. C-ID ENGL 100, CSU, UC (credit limits may apply to UC and CSU - see counselor)

ENGL-122M First-Year College Writing and Reading with Support

4 units LR

- IGETC: 1A; CSU GE: A2; DVC GE: 1A
- 72 hours lecture per term
- Prerequisite: Placement into ENGL-122; or ENGL-122M; or ENGL-117; or ENGL-117A; or ENGL-116 and 118; or assessment process Or equivalent

This course is designed for students who place into ENGL-122 with the requirement or recommendation of support. The course focuses on the practice of reading and writing at the college level, while also offering support in effective reading, writing, and critical-thinking strategies. The course also encourages students to 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 and employ varied rhetorical strategies used by accomplished writers. C-ID ENGL 100, CSU, UC (credit limits may apply to UC and CSU - see counselor)

ENGL-122X Year-Long First-Year College Writing and Reading, Part II

3 units SC

- IGETC: 1A; CSU GE: A2; DVC GE: 1A
- 54 hours lecture per term
- Prerequisite: ENGL-121 or equivalent
- Note: Successful completion of both ENGL-121 and ENGL-122X is equivalent to taking and passing any of the following: ENGL-122, ENGL-122L, ENGL-122A, or ENGL-122AL. The successful completion of both ENGL-121 and ENGL-122X is required to meet the transfer-level English requirements satisfied by ENGL-122, ENGL-122L, ENGL-122A, or ENGL-122AL. Students who do not successfully complete both ENGL-121 and ENGL-122X will not get credit for transfer-level English.

ENGL-121X is the second part of a two-course series that covers the content of ENGL-122L (First-Year College Writing and Reading with Additional Support). Students must have successfully completed ENGL-121 in order to be eligible for ENGL-122X. ENGL-122X builds on the skills of ENGL-121, continuing to focus on the practice of reading and writing at the college level, the habit of applying disciplined thought to language in order to comprehend and analyze college-level readings, and the composition of 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, and will employ varied rhetorical strategies used by accomplished writers. ENGL-122X continues to offer support, including effective reading, writing, and critical-thinking strategies. ENGL-121 + ENGL-122X = C-ID ENGL 100, CSU, UC (credit limits may apply to UC - see counselor)

ENGL-123 Critical Thinking: Writing about Literature

3 units LR

- IGETC: 1B; CSU GE: A3; DVC GE: 1B
- 54 hours lecture per term
- Prerequisite: ENGL-122 or equivalent

This course in advanced composition focuses on the analysis of literary texts, the development of logical reasoning and the improvement of argumentative writing skills. It is designed to develop critical thinking, reading, and writing skills beyond the level expected in ENGL-122 through the study of various critical approaches and diverse literary genres. C-ID ENGL 120, CSU, UC

ENGL-124 The Nature of Language: An Introduction to Linguistics

3 units SC

- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This course examines format, psychological, and socio/cultural properties of language. This examination will focus on the analysis, description, and functions of language in relation to culture, society, and personality. CSU, UC

ENGL-126 Critical Thinking: Writing about Non-Fiction

3 units LR

- IGETC: 1B; CSU GE: A3; DVC GE: 1B
- 54 hours lecture per term
- Prerequisite: ENGL-122 or equivalent

This course focuses on the development of logical reasoning, analysis of expository and persuasive texts, and analytical and argumentative writing skills. It is designed to develop critical thinking, reading, and writing skills beyond the level expected in ENGL-122 through the analysis, evaluation and synthesis of arguments in diverse expository texts. C-ID ENGL 105, CSU, UC

ENGL-140 Tutor Training

3 units SC

- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This course introduces students to the basic principles and methods of tutoring for the English discipline. Students will receive instruction on how to work with tutees on reading, writing, and study skills, with the intent of helping these tutees become independent learners. CSU

ENGL-150 Introduction to Literature

3 units SC

- *IGETC: 3B; CSU GE: C2; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: ENGL-122 or equivalent*

This course offers a survey of the literary genres by introducing students to the academic study of literature through representative works reflecting a variety of cultures and experiences. Critical approaches to analyze how historical, social, economic, psychological, philosophical, and aesthetic lenses shape the genres are emphasized. The distinguishing elements of different literary genres and methods used to analyze literature of any genre will also be covered. CSU, UC

ENGL-151 The Short Story

3 units SC

- *IGETC: 3B; CSU GE: C2; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: ENGL-122 or equivalent*

This course introduces the study of the short story through representative works reflecting a variety of cultures and experiences. This course covers the distinguishing elements of the short story and the art and practice of literary analysis, and the historical, philosophical, social, political, and/or aesthetic contexts relevant to selected texts. CSU, UC

ENGL-152 Film as Literature

3 units SC

- *IGETC: 3B; CSU GE: C1, C2; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: ENGL-122 or equivalent*

This survey course covers 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

ENGL-153 Contemporary Poetry

3 units SC

- *IGETC: 3B; CSU GE: C2; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course explores contemporary poetry from a variety of cultural and poetic traditions. Through reading, analysis, and discussion, the course connects contemporary poetry to its historical, social, cultural, and aesthetic contexts while exploring the use of poetic forms and techniques. CSU, UC

ENGL-154 Shakespeare and His World

3 units SC

- *IGETC: 3B; CSU GE: C2; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: ENGL-122 or equivalent*

This course will focus on the language, structure, characterization, and philosophy of a representative selection of Shakespeare's plays and sonnets within the framework of the historical, social, and artistic forces of the Elizabethan and Jacobean ages. The course will also examine Shakespeare's work not only as literature, but also as performance art in various media. Students will also practice the skills needed for analyzing and writing about literature. CSU, UC

ENGL-155 Topics in English

.3-4 units SC

- *Variable hours*

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

ENGL-162 Language, Literature, and Culture

3 units SC

- *IGETC: 3B; CSU GE: C2; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course examines language, literature and other aspects of culture using texts that reflect a broad variety of cultural perspectives. These texts will serve as a springboard to discuss and analyze cultural traditions and trends and their dynamic nature, which shift in response to various factors such as time or geography. The course will also explore the challenges of cross-cultural communication. Students will be introduced to the distinguishing elements of different literary genres and cultures as well as methods used to analyze literature of any genre. CSU, UC

ENGL-163 Asian American Literature

3 units SC

- *IGETC: 3B; CSU GE: C2; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: ENGL-122 or equivalent*

This course presents a variety of literary works that illuminate Asian American experiences, culture identities, and languages. Readings are chosen for their literary, historical, cultural, philosophical, and psychological importance within the context of Asian American communities. The course focuses on the relation between texts and broader historical, political, aesthetic, and cultural themes and conditions. This course also exposes students to distinguishing elements of selected literary forms and to the art and practice of analyzing and writing about literature. CSU, UC

ENGL-164 Native American Literatures

3 units SC

- *IGETC: 3B; CSU GE: C2; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: ENGL-122 or equivalent*

This course presents the literary traditions and cultures of various Native American nations through the study of oral and written literary works (such as songs, myths, folktales, oratories, autobiographies, films, plays, poetry and prose). Through reading, analysis and discussion, the course will connect Native American literatures to historical, social, cultural, and aesthetic contexts and examine issues central to Native peoples, such as cultural identity, language, and self-determination. CSU, UC

ENGL-166 African American Literature

3 units SC

- *IGETC: 3B; CSU GE: C2; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: ENGL-122 or equivalent*

This course presents a variety of literary works that illuminate African American experiences, history and culture. Readings are chosen for their literary, historical, cultural, philosophical, and psychological importance within the context of African American communities. The course focuses on the relation between texts and broader historical, political, aesthetic, and cultural themes and conditions. This course also exposes students to distinguishing elements of selected literary forms and to the art and practice of analyzing and writing about literature. CSU, UC

ENGL-167 Latin American Literature

3 units SC

- *IGETC: 3B; CSU GE: C2; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: ENGL-122 or equivalent*

The course presents a variety of literary works that illuminate Latin American experiences, cultural identities, and history. The course focuses on the relation between texts and broader historical, political, aesthetic, and cultural themes and conditions of Latin America. This course also exposes students to distinguishing elements of selected literary forms and to the art and practice of analyzing and writing about literature. CSU, UC

ENGL-168 Multiethnic Literatures of the United States

3 units SC

- *IGETC: 3B; CSU GE: C2; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: ENGL-122 or equivalent*

This course examines literary works of authors from under-represented groups including African American, Asian American, Latinx American, and Native American. Selected contributions will be studied from novels, plays, short stories, nonfiction, and poetry to explore the influences that shape the literatures of the United States. Through reading, analysis, and discussion, the course will connect these literatures to historical, social, cultural, economic, and aesthetic context and examine issues central to underrepresented peoples, such as cultural identity, language, and self-determination. The distinguishing elements of different literary genres and methods used to analyze literature of any genre will also be covered CSU, UC

ENGL-170 World Mythology

3 units SC

- *IGETC: 3B; CSU GE: C2; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: ENGL-122 or equivalent*

This course presents a variety of world myths that are meant to illuminate the human experience. The course examines the literary elements of mythology, including creation stories, archetypes, the hero's journey, and more. Texts may represent myths from the Middle East, Asia, Europe, Africa, indigenous peoples of the Americas, among others, and expose students to relevant historical, philosophical, social, political, and aesthetic contexts. The course also exposes students to distinguishing elements of selected mythic forms, and to the art and practice of analyzing and writing about literature. CSU, UC

ENGL-172 The Bible As Literature

3 units SC

- *IGETC: 3B; CSU GE: C2; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: ENGL-122 or equivalent*

This course presents the Hebrew Scriptures (Old Testament) and the New Testament as literature, including 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 Biblical canon. Literary genres such as poetry, essays, letters, and epics in scripture are compared with those genres found in other world literatures. Distinguishing elements of literary forms and methods to analyze literature of any genre will also be covered. CSU, UC

ENGL-173 Queer Literature Across Cultures

3 units SC

- *IGETC: 3B; CSU GE: C2; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: ENGL-122 or equivalent*

This course is a survey of queer literature in a variety of literary genres. The wide-range of Lesbian, Gay, Bisexual, Transgender, Queer (LGBTQ) experience is examined from various cultural points of reference and literary devices that characterize this genre. Students will read selections from a variety of cultures. Additionally, students will analyze the ways historical, social, economic, and psychological forces shape LGBTQ cultures and the literatures they produce. The course also exposes students to distinguishing elements of literary forms and to analyzing literature of any genre. CSU, UC

ENGL-175 Science Fiction and Fantasy Literature

3 units SC

- *IGETC: 3B; CSU GE: C2; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: ENGL-122 or equivalent*

This course offers a survey of speculative fiction as a literary form. Covering a range of literary genres and a variety of texts from diverse cultures, the course considers major authors, developments in the genre over time and important themes. This course uses critical approaches to analyze the ways historical, social, economic, psychological, philosophical, and aesthetic forces shape science fiction and fantasy. The distinguishing elements of different literary genres and methods used to analyze literature of any genre will also be covered. CSU, UC

ENGL-176 The Graphic Novel as Literature

3 units SC

- *IGETC: 3B; CSU GE: C2; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course is a survey of the graphic literature as literary and artistic form. The course will examine the genre's variety of forms and explore the genre from various cultural points of reference. The course will also review the literary and artistic techniques used in composing graphic literature, the origins of the form, and its significance in contemporary literature and culture. Additionally, this course will use formal analysis and critical approaches to analyze the ways historical, social, economic, psychological, and aesthetic forces shape graphic literature. The distinguishing elements of different literary genres and methods used to analyze literature of any genre will also be covered. CSU, UC

ENGL-177 Children's Literature

3 units SC

- *IGETC: 3B; CSU GE: C2; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course is a survey of children's literature of different literary genres. It places children's literature in an historical context, tracing its development from earliest oral origins to the present. The course examines children's literature from various time periods and geographical and cultural points of reference. Additionally, this course will analyze the ways historical, social, psychological, philosophical, and aesthetic forces shape children's literature. The distinguishing elements of different literary genres and methods used to analyze literature of any genre will also be covered. CSU, UC

ENGL-178 Young Adult Literature

3 units SC

- *IGETC: 3B; CSU GE: C2; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course is a survey of young adult literature of different literary genres and from different cultures. The course examines young adult literature from various time periods and geographical and cultural points of reference. Additionally, this course analyzes the ways historical, social, psychological, philosophical, and aesthetic forces shape young adult literature. The distinguishing elements of different literary genres and methods used to analyze literature of any genre will also be covered. CSU, UC

ENGL-180 Drama and Performance as Literature

3 units SC

- *IGETC: 3B; CSU GE: C2; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: ENGL-122 or equivalent*
- *Note: Attendance at one or more live performances is required.*

This course presents reading, critical study, and discussion of dramatic literature as a literary form by authors from diverse time periods and cultures. Dramatic structure, elements of performance (dramatic expression, stage direction, rhythm, etc.), and literary devices that characterize this literary genre are emphasized. Students will analyze the ways dramatic literature reflects and captures historical, social, cultural, and economic forces, and can serve as a unique literary artifact. CSU, UC

ENGL-190 Multicultural Literature by American Women

- 3 units SC
- *IGETC: 3B; CSU GE: C2; DVC GE: III*
 - *54 hours lecture per term*
 - *Advisory: ENGL-122 or equivalent*

This course presents literature by and about women from at least three of the following cultural, ethnic, or racial groups: African American, Native American, European American, Asian American, and Latinx American. The course will analyze women's prescribed role in society, their literary voices in resistance to those roles, as well as the language, ideology, content, and form of the literature. Through reading, analysis, and discussion, the course will connect these literatures to historical, social, cultural, and aesthetic contexts and examine issues central to women's lives. The distinguishing elements of different literary genres and methods used to analyze literature of any genre will also be covered. CSU, UC

ENGL-222 Multi-Genre Creative Writing

- 3 units SC
- *CSU GE: C2*
 - *54 hours lecture per term*
 - *Prerequisite: ENGL-122 or equivalent*

In this course, students will compose different pieces representing a variety of literary genres. Students will read in different genres in order to learn various writing techniques, styles, and conventions. The readings represent the diverse perspectives of African American, Native American, European American, Asian American, and Latinx American writers. Students then employ the identified literary techniques and craft elements to plan and compose their own creative works. Students will workshop their pieces in class, focusing on the revision and editing processes. C-ID ENGL 200, CSU, UC

ENGL-223 Short Story Writing

- 3 units SC
- *CSU GE: C2*
 - *54 hours lecture per term*
 - *Prerequisite: ENGL-122 or equivalent*

This course provides an in-depth study of the elements of the short story. The elements of the short story form will be examined through reading and writing; students will write to prompts and complete original full-length short stories. Students' short stories will be critiqued by both the full class and the instructor in both one-on-one and workshop settings. CSU, UC

ENGL-224 Poetry Writing

- 3 units SC
- *CSU GE: C2*
 - *54 hours lecture per term*
 - *Prerequisite: ENGL-122 or equivalent*

This course is an in-depth study of the elements of poetry. Students write original poems for discussion and criticism by both class and instructor. CSU, UC

ENGL-225 Creative Nonfiction Writing

- 3 units SC
- *CSU GE: C2*
 - *54 hours lecture per term*
 - *Prerequisite: ENGL-122 or equivalent*

In this course, students analyze classic and contemporary narrative nonfiction writing, to identify the aspects and strategies of successful creative nonfiction works. The readings represent the diverse perspectives of African American, Native American, European American, Asian American, and Latinx American writers. Students then employ the craft elements to plan and compose creative nonfiction essays with an emphasis on the strategies necessary to develop an authentic narrative voice. Students will workshop their pieces in class, focusing on the revision and editing processes. CSU, UC

ENGL-252 Survey of Early English Literature

- 3 units SC
- *IGETC: 3B; CSU GE: C2; DVC GE: III*
 - *54 hours lecture per term*
 - *Prerequisite: ENGL-122 or equivalent*

This course presents Early English Literature from the time period of roughly 750-1790, a thousand years of poetry and prose that reflects the diverse history of the English-speaking peoples who populated the British Isles (England, Ireland, Scotland and Wales). The course examines the evolution of style and language in selected texts and the influence of cultural heritage on ideas, institutions, literature and other art forms. The course also exposes students to distinguishing elements of selected literary forms and to the art and practice of analyzing and writing about literature. C-ID ENGL 160, CSU, UC

ENGL-253 Survey of Late English Literature

- 3 units SC
- *IGETC: 3B; CSU GE: C2; DVC GE: III*
 - *54 hours lecture per term*
 - *Prerequisite: ENGL-122 or equivalent*

This course provides a survey of late English literature (nineteenth and twentieth centuries) through representative works such as poems, fiction, drama and non-fiction from major movements of this period. The course focuses on the development of literary forms and the relation between texts and broader historical, political, aesthetic and cultural themes and conditions. The course also exposes students to distinguishing elements or selected literary forms and to the art and practice of analyzing and writing about literature. C-ID ENGL 165, CSU, UC

ENGL-262 Survey of Early American Literature

3 units SC

- *IGETC: 3B; CSU GE: C2; DVC GE: III*
- *54 hours lecture per term*
- *Prerequisite: ENGL-122 or equivalent*

This course provides a survey of early American literature from before first contact through the Civil War, a body of work comprising diverse cultures, traditions, and genres. The course focuses on the development of literary forms and the relation between texts and the broader historical, political, aesthetic and cultural themes and conditions. The course also exposes students to distinguishing elements of selected literary forms and to the art and practice of analyzing and writing about literature. C-ID ENGL 130, CSU, UC

ENGL-263 Survey of Late American Literature

3 units SC

- *IGETC: 3B; CSU GE: C2; DVC GE: III*
- *54 hours lecture per term*
- *Prerequisite: ENGL-122 or equivalent*

This course provides a survey of late American literature from the Civil War through the present day, a body of work comprising diverse traditions, genres, and cultures. The course focuses on the development of late American literary forms and the relation between texts and broader historical, political, aesthetic and cultural themes and conditions. The course also exposes students to distinguishing elements of selected literary forms and to the art and practice of analyzing and writing about literature. C-ID ENGL 135, CSU, UC

ENGL-272 Survey of Early World Literature

3 units SC

- *IGETC: 3B; CSU GE: C2; DVC GE: III*
- *54 hours lecture per term*
- *Prerequisite: ENGL-122 or equivalent*

This course provides a survey of early world literature from antiquity to mid-late seventeenth century from cultures around the world, including significant literary movements of the timeframe: ancient times, the middle ages, and both the English and Italian Renaissance. The course focuses on the development of early world literary forms and the relation between texts and broader historical, political, aesthetic and cultural themes and conditions. The course also exposes students to distinguishing elements of selected literary forms and to the art and practice of analyzing and writing about literature. C-ID ENGL 140, CSU, UC

ENGL-273 Survey of Late World Literature

3 units SC

- *IGETC: 3B; CSU GE: C2; DVC GE: III*
- *54 hours lecture per term*
- *Prerequisite: ENGL-122 or equivalent*

This course provides a survey of late world literature from the seventeenth century to modern times from cultures around the world, including significant literary movements of this timeframe: romanticism, realism, modernism, post-colonial, and contemporary literature. The course focuses on the development of late world literary forms and the relation between texts and broader historical, political, aesthetic and cultural themes and conditions. The course also exposes students to distinguishing elements of selected literary forms and to the art and practice of analyzing and writing about literature. C-ID ENGL 145, CSU, UC

ENGL-298 Independent Study

.5-3 units SC

- *Variable hours*
- *Note: Submission of acceptable educational contract to department and Instruction Office is required.*

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. CSU

ENGLISH AS A SECOND LANGUAGE – ESL

James Noel, Dean
English Division

The English as a Second Language (ESL) program offers a broad range of courses in reading, writing, grammar, and oral skills communication that are organized into increasing levels of skill development. The low-intermediate level consists of a single course that combines reading, writing, and speaking skills development. The intermediate, high-intermediate, and advanced levels consist of separate courses in reading, writing, grammar, and oral skills. For students at the high-advanced ESL level, an integrated reading and writing course, English 117A, is offered. Completion of English 117A provides English language learners with an entry point to college-level coursework.

Students may begin at any ESL level and complete courses individually or in sequence. The courses are organized into certificates of accomplishment in ESL:

- ESL conversation
- Intermediate ESL reading and writing
- Advanced ESL reading and writing
- Transition to college-level English

To earn a certificate, students must complete each of the required courses with a grade of “C” grade or higher.

Certificate of accomplishment ESL conversation

Students completing the program will be able to...

- A. demonstrate confidence and skills in English pronunciation.
- B. demonstrate confidence and skills in listening to and understanding English.
- C. demonstrate skills in English conversation, including a mock job interview.

<i>required courses:</i>	<i>units</i>
ESL-075 Intermediate Oral Communication Skills	2
ESL-085 High-Intermediate Oral Communication Skills	2
ESL-095 Advanced Oral Communication Skills	2
total minimum required units	6

Certificate of accomplishment Intermediate ESL reading and writing

Students completing the program will be able to...

- A. demonstrate college-essay writing skills.
- B. demonstrate college-level critical reading skills.
- C. demonstrate critical thinking skills and prepare them for more advanced college-level courses.

<i>required courses:</i>	<i>units</i>
ESL-076 Intermediate Academic Reading Skills	3
ESL-078 Intermediate Academic Writing Skills	3
ESL-086 High-Intermediate Academic Reading Skills	3
ESL-088 High-Intermediate Academic Writing Skills	3
total minimum required units	12

Certificate of accomplishment Advanced ESL reading and writing

Students completing the program will be able to...

- A. demonstrate advanced-level essay writing skills.
- B. demonstrate advanced-level critical reading skills.
- C. demonstrate advanced-level critical thinking skills.
- D. demonstrate language control and sentence clarity in writing by focusing on the grammar in the context of their writing.
- E. demonstrate improved conversation skills, as well as career/major exploration.

<i>required courses:</i>	<i>units</i>
CARER-130 Career and Major Exploration	1
ESL-090 Advanced Grammar for Multilingual Students	3

<i>plus at least 5 units from:</i>	<i>units</i>
ESL-096A Advanced Academic Reading Skills	3
and ESL-098A Advanced Academic Writing Skills	3
or ESL-097A Advanced Integrated Reading, Writing, and Study Skills	5

<i>plus at least 3 units from:</i>	<i>units</i>
ESL-080 High-Intermediate Grammar for Multilingual Students	3
ESL-086 High-Intermediate Academic Reading Skills	3
ESL-088 High-Intermediate Academic Writing Skills	3
total minimum required units	12

Certificate of accomplishment ESL: Transition to college-level English

Students completing the program will be able to...

- transition into college and transfer-level English and Counseling courses.
- improve college-level essay writing skills.
- improve college-level critical reading skills.
- improve college-level critical thinking skills.
- improve language control and sentence clarity in writing by focusing on grammar in the context of their writing.
- improve success, including possible transfer plans.

<i>required courses:</i>	<i>units</i>
ENGL-122 First-Year College Writing and Reading.....	3
or	
ENGL-122A First-Year College English for Multilingual Students	3
COUNS-120 Student Success.....	3

plus at least 5 units from:

ENGL-116 College Reading Development	3
ENGL-117 Integrated College Reading and Writing Development.....	5
ENGL-118 College Writing Development	3
ESL-096A Advanced Academic Reading Skills.....	3
ESL-098A Advanced Academic Writing Skills.....	3
ESL-117A Integrated Reading and Writing: Advanced English Language Learners.....	5

plus at least 2 units from:

ESL-090 Advanced Grammar for Multilingual Students	3
ESL-095 Advanced Oral Communication Skills.....	2

total minimum required units 13

Noncredit - certificate of completion Beginning ESL for career success

Students completing this program will be able to...

- demonstrate basic computer technology-related skills (e.g. computer applications, emails, files, etc.)
- demonstrate employment readiness skills (e.g. job searches, resumes, interviewing, etc)
- demonstrate critical-thinking skills.
- demonstrate foundational listening and speaking skills.

The beginning ESL for career success certificate is for non-native English speakers at the beginning-to-intermediate level. This certificate demonstrates that students have acquired foundational English skills needed for career success, personal growth, and more. This certificate also prepares students for the rest of the ESL program.

<i>required courses:</i>	<i>units</i>
ESL-030NC Beginning English and Technology Skills - Noncredit.....	0
ESL-031NC Beginning English for Employment.....	0

total minimum required units 0

Noncredit - certificate of competency Beginning ESL success

Students completing this program will be able to...

- demonstrate academic paragraph and sentence-level skills.
- demonstrate foundational reading and vocabulary skills.
- demonstrate critical-thinking skills and preparation for the rest of the ESL program.
- demonstrate foundational listening and speaking skills.

The Beginning ESL Success noncredit certificate is for non-native English speakers at the beginning to high-beginning level. This certificate demonstrates completion and acquisition of foundational English skills needed for college success and career and personal growth. This certificate also prepares students for the rest of the ESL program.

<i>required courses:</i>	<i>units</i>
ESL-065NC Beginning Oral Communication Skills.....	0
ESL-067NC Beginning Integrated Academic Reading, Writing, and Study Skills	0
total minimum required units	0

Noncredit - certificate of competency Intermediate ESL success

Students completing this program will be able to...

- demonstrate ability to self-edit sentences and paragraphs.
- demonstrate academic paragraph and short essays skills.
- demonstrate intermediate reading and vocabulary skills.
- demonstrate critical-thinking skills.
- demonstrate intermediate listening, and speaking skills.

The Intermediate ESL success certificate is for non-native English speakers at the intermediate level. This certificate demonstrates that students have acquired intermediate-level English skills needed for college success, career, personal growth, and more. This certificate also prepares students for higher-level classes within the ESL program.

<i>required courses:</i>	<i>units</i>
ESL-077NC Intermediate Integrated Reading, Writing, and Study Skills – Noncredit.....	0

plus at least one of the courses listed below:

ESL-070NC Intermediate Grammar for Multilingual Students – Noncredit.....	0
ESL-075NC Intermediate Oral Communication Skills – Noncredit.....	0

total minimum required units 0

ESL-030NC Beginning English and Technology Skills-Noncredit

0 units SC
• 36 hours lecture per term

This noncredit course is designed for English Language Learners at the high-beginning to low-intermediate level who want to improve their vocabulary, reading, writing, and oral communication related to current technology and who wish to improve their basic technology skills, especially those commonly needed in a classroom setting.

ESL-031NC Beginning English for Employment-Noncredit

0 units SC
• 36 hours lecture per term

This noncredit course is designed for English Language Learners at the high-beginning to low-intermediate level to develop English skills for all steps of the employment search process in a variety of career fields. This course is designed to help students with their written and oral communication skills and to familiarize them with employment search strategies and application conventions and etiquette.

ESL-060 Beginning English Grammar for Multilingual Students

2 units SC
• 36 hours lecture per term

This course is designed for multilingual students at the beginner level and provides grammar support for beginner ESL reading, writing, and oral skills courses. Students will practice basic grammar skills and editing strategies. The course emphasizes the fundamentals of English grammar and grammar terminology.

ESL-060NC Beginning English Grammar for Multilingual Students - Noncredit

0 units SC
• 36 hours lecture per term

This course is designed for multilingual students at the beginner level and provides grammar support for beginner ESL reading, writing, and oral skills courses. Students will practice basic grammar skills and editing strategies. The course emphasizes the fundamentals of English grammar and grammar terminology.

ESL-065 Beginning Oral Communication Skills

2 units SC
• 18 hours lecture/54 hours laboratory per term

This oral communication course focuses on the needs of multilingual students at the beginning to high-beginning levels. This course focuses on helping students to learn and understand essential language for academic and everyday communication. This course will also introduce students to essential English sounds and intonation patterns. Students will learn strategies for developing a self-awareness of strengths and challenges of communicating in English.

ESL-065NC Beginning Oral Communication Skills

0 units SC
• 18 hours lecture/54 hours laboratory

This non-credit oral communication course focuses on the needs of multilingual students at the beginning to high-beginning levels. This course focuses on helping students to learn and understand essential language for academic and everyday communication. This course will also introduce students to essential English sounds and intonation patterns. Students will learn strategies for developing a self-awareness of strengths and challenges of communicating in English.

ESL-067 Beginning Integrated Academic Reading, Writing, and Study Skills

5 units SC
• Non degree applicable
• 90 hours lecture/18 hours laboratory per term

This course is designed for multilingual students at the beginning to high-beginning level. The course introduces the foundations of academic English reading skills to help students understand ideas of beginning to high-beginning adapted readings while expanding their vocabulary. Students will develop their vocabulary skills and will learn to identify parts of speech and use English-English dictionaries. Students will also learn the basics of academic writing, starting with sentence-level grammar--including the formation of simple and compound sentences--and moving to the composition of paragraphs. The course will also emphasize study skills, use of campus resources, and the norms of the American college classroom.

ESL-067NC Beginning Integrated Academic Reading, Writing, and Study Skills

0 units SC
• Non degree applicable
• 90 hours lecture/18 hours laboratory per term

This non-credit course is designed for multilingual students at the beginning to high-beginning level. The course introduces the foundations of academic English reading skills to help students understand ideas of beginning to high-beginning adapted readings while expanding their vocabulary. Students will develop their vocabulary skills and will learn to identify parts of speech and use English-English dictionaries. Students will also learn the basics of academic writing, starting with sentence-level grammar--including the formation of simple and compound sentences--and moving to the composition of paragraphs. The course will also emphasize study skills, use of campus resources, and the norms of the American college classroom.

ESL-070 Intermediate Grammar for Multilingual Students

- 3 units SC
- 54 hours lecture
 - Advisory: ESL-067 or equivalent

This course is designed for multilingual students at the intermediate level and provides grammar support for intermediate ESL reading, writing, and oral skills courses. Students will practice basic grammar skills and editing strategies. The course emphasizes grammar in the context of students' own reading and writing tasks as well as a variety of texts.

ESL-070NC Intermediate Grammar for Multilingual Students-Noncredit

- 0 units SC
- 54 hours lecture per term

This noncredit course is designed for Multilingual students at the Intermediate level and provides grammar support for intermediate ESL reading, writing, and oral skills courses. Students will practice basic grammar skills and editing strategies. The course emphasizes grammar in the context of students' own reading and writing tasks as well as a variety of texts.

ESL-075 Intermediate Oral Communication Skills

- 2 units SC
- Non degree applicable
 - 18 hours lecture/54 hours laboratory per term
 - Advisory: ESL-067 or equivalent

This intermediate ESL course is designed for non-native speakers of English at the intermediate level. The course offers strategies for both understanding and being understood in real-life situations. Students will explore a range of topics through a variety of activities. Students may wish to take ESL-075 with the ESL reading and writing course (ESL-077) at the same level.

ESL-075NC Intermediate Oral Communication Skills-Noncredit

- 0 units SC
- 18 hours lecture/54 hours laboratory per term

This noncredit intermediate course complements the ESL reading and writing courses, ESL-076 and ESL-078 and is designed for non-native speakers of English at the intermediate level. The focus is on oral comprehension and increased fluency and accuracy in spoken English. The course will also present strategies for developing a self-awareness of strengths and challenges of communicating in English. Students will explore a range of topics through a variety of activities.

ESL-076 Intermediate Academic Reading Skills

- 3 units SC
- Non degree applicable
 - 54 hours lecture/18 hours laboratory per term
 - Advisory: ESL-067 or placement through the ESL assessment process or equivalent

This course focuses on the needs of ESL students at the intermediate level as they develop their academic reading skills. Students will practice strategies for reading, comprehending, and responding to academic texts at the intermediate level. The course will also present grammar, high-frequency vocabulary, study skills, campus resources, and the norms of American college.

ESL-077 Intermediate Integrated Reading, Writing, and Study Skills

- 5 units SC
- 90 hours lecture/18 hours laboratory
 - Advisory: ESL-067 or placement through the ESL assessment process or equivalent

This course focuses on the needs of multilingual students at the intermediate level to help them develop reading, writing, and study skills needed in academic settings. The course introduces students to academic reading skills that enable them to grasp ideas, details, and themes of college texts. Students will develop their command of English vocabulary by using context clues, analyzing work parts, and using acquired vocabulary in writing. Following the steps of the writing process, students will compose paragraphs and short essays in response to ideas from readings and topics introduced in class. Language instruction focuses on sentence-level grammar topics essential to students' writing, individual proofreading, and editing. The course will also emphasize study skills, use of campus resources, and the norms of the American college classroom.

ESL-077NC Intermediate Integrated Reading, Writing, and Study Skills-Noncredit

- 0 units SC
- 90 hours lecture/18 hours laboratory per term

This noncredit course focuses on the needs of multilingual students at the intermediate level to help them develop reading, writing, and study skills needed in academic settings. The course introduces students to academic reading skills that enable them to grasp ideas, details, and themes of college texts. Students will develop their command of English vocabulary by using context clues, analyzing word parts, and using acquired vocabulary in writing. Following the steps of the writing process, students will compose paragraphs and short essays in response to ideas from readings and topics introduced in class. Language instruction focuses on sentence-level grammar topics essential to students' writing, individual proofreading, and editing. The course will also emphasize study skills, use of campus resources, and the norms of the American college classroom.

ESL-078 Intermediate Academic Writing Skills

3 units SC

- *Non degree applicable*
- *54 hours lecture/18 hours laboratory per term*
- *Advisory: ESL-067 or placement through the ESL assessment process or equivalent*

This course focuses on the needs of ESL students at the intermediate level, and aims to help them increase confidence, fluency, and accuracy as they write for academic purposes. Students will practice the skills needed to write, revise, and edit academic sentences and paragraphs. Emphasis mechanics and usage. Norms of the American college classroom will also be presented.

ESL-080 High-Intermediate Grammar for Multilingual Students

3 units SC

- *Non degree applicable*
- *54 hours lecture per term*
- *Advisory: ESL-078 or equivalent*

This course is intended to address the grammar needs of multilingual students at the high-intermediate level. Students will have opportunities to review basic English-grammar concepts and will be introduced to new, increasingly complex concepts as well. The course emphasizes grammar in the context of students' own reading and writing tasks as well as a variety of social circumstances.

ESL-085 High-Intermediate Oral Communication Skills

2 units SC

- *Non degree applicable*
- *18 hours lecture/54 hours laboratory per term*
- *Advisory: ESL-075 or equivalent*

This oral communication course focuses on the needs of multilingual students at the high-intermediate level. Building on ESL-075, the course offers strategies for both understanding and being understood in real-life, academic situations. Exploring a variety of topics, students will work on oral comprehension of lectures and presentations, note-taking, and academic discussion. Students will also practice the norms of the American college classroom. The course will also present strategies for developing an awareness of their own strengths and challenges of communicating in English. Students may wish to take ESL-085 with the ESL reading and writing course ESL-087, at the same level.

ESL-086 High Intermediate Academic Reading Skills

3 units SC

- *Non degree applicable*
- *54 hours lecture/18 hours laboratory per term*
- *Advisory: ESL-076 or placement through the ESL assessment process or equivalent*

This course focuses on the needs of ESL students at the high-intermediate level as they develop their academic reading skills. Students will practice strategies for reading, comprehending, analyzing, and responding to academic texts at the high-intermediate level. The course will also present reading-related writing skills, methods for vocabulary development, and high-intermediate grammar concepts. Study strategies, campus resources, and the norms of the American college classroom will also be presented.

ESL-087 High-Intermediate Integrated Academic Reading, Writing, and Study Skills

5 units SC

- *Non degree applicable*
- *90 hours lecture/18 hours laboratory per term*
- *Advisory: ESL-076 or ESL-078 or ESL-077 or placement through the ESL assessment process or equivalent*

This course focuses on the needs of multilingual students at the high-intermediate level to help them strengthen their academic reading, writing, and study skills. The course emphasizes vocabulary expansion and context clues, strategies for reading, comprehending, summarizing, and responding to college-level texts. Following the steps of the writing process, students will also continue to refine their knowledge of paragraph writing and work towards composing thesis-driven essays in response to ideas from readings, topics covered in class, and personal experience. Language instruction focuses on strengthening understanding of grammar and on individual proofreading and editing skills. While this course emphasizes the combination of reading and writing, the course also emphasizes study skills, campus resources, and the norms of the American college classroom.

ESL-088 High-Intermediate Academic Writing Skills

3 units SC

- *Non degree applicable*
- *54 hours lecture/18 hours laboratory per term*
- *Advisory: ESL-078 or placement through the ESL assessment process or equivalent*

This course focuses on the needs of ESL students at the high-intermediate level, with the aim of helping them increase confidence, fluency, and accuracy as they write coherent paragraphs and thesis-driven essays. Following the steps of the writing process, students will compose paragraphs and essays for an audience of their peers. They will also practice editing strategies to identify and correct sentence-level errors common to high-intermediate ESL learners, including errors in mechanics and usage. Norms of the American college classroom will also be covered.

ESL-090 Advanced Grammar for Multilingual Students

3 units SC

- *Non degree applicable*
- *54 hours lecture per term*
- *Advisory: ESL-080 and 088 or equivalents*

This course is intended to address the grammar needs of multilingual students at the advanced-level. Students will have opportunities to review English-grammar concepts covered in earlier course work, and will be introduced to new, increasingly complex concepts as well. The course emphasizes grammar in the context of students' own reading and writing tasks as well as a variety of social circumstances.

ESL-091 Topics in Vocational English Skills

.3-4 units SC

- *Non degree applicable*
- *Variable hours*

This course is designed for advanced multilingual students. The focus of this course will change depending on the student population that it serves. It will teach reading, writing, listening and oral communication, and study skills as well as vocabulary-building strategies.

ESL-095 Advanced Oral Communication Skills

2 units SC

- *Non degree applicable*
- *18 hours lecture/54 hours laboratory per term*
- *Advisory: ESL-085 or equivalent*

This oral communication course focuses on the needs of multilingual students at the advanced level. Building on ESL-085, the course offers strategies for academic engagement. Exploring a variety of conceptually and linguistically complex topics, students will work on oral comprehension of lectures and presentations, strategies for note-taking, and academic discussions. Students will also practice the norms of the American college classroom. The course will also present strategies for developing an awareness of their own strengths and challenges of communicating in English. Students may wish to take ESL-095 with the ESL reading and writing course, ESL-097A, at the same level.

ESL-096A Advanced Academic Reading Skills

3 units SC

- *Non degree applicable*
- *54 hours lecture/18 hours laboratory per term*
- *Advisory: ESL-086 and ESL-088 or placement through the ESL assessment process or equivalents*

This course focuses on the needs of ESL students at the advanced level as they develop critical reading and academic skills. Working with college-level texts, students will practice identifying themes, main and supporting points, and methods of organization. Students will practice strategies for reading, comprehending, analyzing, and responding to academic texts at the advanced level. This course will also emphasize reading-related writing skills, and vocabulary development. Effective study skills, campus resources, and the norms of the American college classroom will also be presented.

ESL-097A Advanced Integrated Reading, Writing, and Study Skills

5 units SC

- *90 hours lecture/18 hours laboratory per term*
- *Advisory: ESL-086 or ESL-088 or equivalent*

This course focuses on the needs of multilingual students at the advanced level to help them increase their confidence, fluency, and accuracy as they develop critical reading, writing, and academic skills. Students will practice strategies for reading, comprehending, analyzing, and responding to college-level texts. Following the steps of the writing process, they will compose thesis-driven essays for an academic audience, with coherent paragraphs and a variety of sentence structures. They will also practice editing strategies to identify and correct sentence-level errors common to advanced English-language learners, as well as errors in mechanics and usage. Although the central focus of the course is on the connections between reading and writing, it also emphasizes study skills, campus resources, and the norms of the American college classroom.

ESL-098A Advanced Academic Writing Skills

3 units SC

- *Non degree applicable*
- *54 hours lecture/18 hours laboratory per term*
- *Advisory: ESL-086 and ESL-088 or placement through the ESL assessment process or equivalents*

This course focuses on the needs of ESL students at the advanced level, with the aim of helping them increase confidence, fluency, and accuracy as they write college-level essays. Following the steps of the writing process, students will compose thesis-driven essays for an academic audience. The course will focus on the generation of coherent paragraphs with a variety of sentence structures. To complement and inspire their writing, students will read, analyze, and write about a variety of college-level texts. They will also practice editing strategies to identify and correct sentence-level errors common to advanced ESL learners, as well as errors in mechanics and usage. Norms of the American college classroom will also be presented.

ESL-100 College Grammar and Editing for Multilingual Students

2 units SC

- 36 hours lecture per term
- Advisory: ESL-090 or equivalent

This is a grammar and editing course for high-advance non-native English speakers at the college level. Students will review advance English-grammar concepts and will be introduced to more advanced grammar concepts needed for college success. Students will also review editing strategies and learn ways to identify and correct errors in their own writing.

ESL-110 Reading and Writing Skills for ECE-124

3 units SC

- 54 hours lecture per term
- Co-requisite: ECE-124 or Equivalent
- Advisory: ESL-088 or Equivalent

This course is designed for English as a Second Language students concurrently enrolled in ECE-124. It is intended for advanced ESL students to develop college-level reading, writing, listening, speaking, and study skills at the same time as they are learning the content in ECE-124. This course will use the ECE-124 textbook as the subject matter on which to practice and build students' English-language skills. CSU

ESL-111 Reading and Writing Skills for ECE-123

3 units SC

- 54 hours lecture per term
- Co-requisite: ECE-123 or Equivalent
- Advisory: ESL-088 or Equivalent

This course is designed for English as a Second Language students concurrently enrolled in ECE-123. It is intended for advanced ESL students to develop college-level reading, writing, listening, speaking, and study skills at the same time as they are learning the content in ECE-123. This course will use the ECE-123 textbook as the subject matter on which to practice and build students' English-language skills. CSU

ESL-112 Reading and Writing Skills for ECE-125

3 units SC

- 54 hours lecture per term
- Co-requisite: ECE-125 or equivalent
- Advisory: ESL-088 or equivalent

This course is designed for English as a Second Language students concurrently enrolled in ECE-125. It is intended for advanced ESL students to develop college-level reading, writing, listening, speaking, and study skills at the same time as they are learning the content in ECE-125. This course will use the ECE-125 textbook as the subject matter on which to practice and build students' English-language skills. CSU

ESL-113 Reading and Writing Skills for ECE-130

3 units SC

- 54 hours lecture per term
- Co-requisite: ECE-130 or equivalent
- Advisory: ESL-088 or equivalent

This course is designed for English as a Second Language students concurrently enrolled in ECE-130. It is intended for advanced ESL students to develop college level reading, writing, listening, speaking, and study skills at the same time as they are learning the content in ECE 130. This course will use the ECE-130 textbook as the subject matter on which to practice and build students' English language skills. CSU

ESL-115 College Oral Communication Skills

2 units SC

- 36 hours lecture per term
- Advisory: ESL-095 or equivalent

This course focuses on highly advanced listening and speaking skills appropriate at the college-level. Designed for non-native English speakers, students will work on oral comprehension and production on a variety of college-level and socially relevant topics. This course will also present strategies for developing a self-awareness of strengths and challenges of communicating in English.

ESL-117A Integrated Reading and Writing: Advanced English Language Learners

5 units SC

- 90 hours lecture per term
- Advisory: ESL-096A and ESL-098A or equivalents
- Note: This course is equivalent to the completion of ENGL-116 and ENGL-118 or ENGL-117. Only one of ENGL-116, 117, 118 or ESL-117A may be applied to the units required for the associate degree.

This course provides an integrated approach to reading and writing for highly advanced English-language learners to prepare them for ENGL-122, transfer-level English. Students will prepare for college-level work; practice critical reading, writing, and thinking skills; and improve their vocabulary and study skills. Students will also actively engage with their peers, read and interact with a variety of college-level texts, and complete both formal and informal writing assignments connected to these readings. The central focus throughout the course will be on the ways reading and writing inform each other. The course will also cover grammar concepts and revision and editing methods specific to English-language learners. CSU, UC

ENVIRONMENTAL SCIENCE - ENVSC

Charles Ramos, Dean

Sciences Division

Physical Sciences Building, Room 263

Possible career opportunities

Career opportunities in the field of environmental studies have grown with the increase of human population and the need to document and study the relationship between humans and nature. Environmental scientists are needed to monitor, interpret, analyze and enforce the guidelines of governmental policies. Careers include working for the government at all levels, working for companies in science and technology, as well as working in companies in energy fields. Such specialties include pollution prevention, resource conservation and environmental restoration, environmental stewardship, and newly emerging fields such as energy management technology, geospatial technology, and biodiversity preservation. Individuals studying in this field are trained to provide both public and private environmental services in a variety of settings: private business, consulting services and government agencies.

Associate in science degree Environmental science

Students completing the program will be able to...

- differentiate between different biotic and abiotic components of the environment.
- explain and analyze man-made impacts on the environment
- apply the scientific method for environmental analysis.
- explain, illustrate and analyze chemical bonds and reactions.
- apply environmental science concepts and analytical procedures in various fields

The associate in science degree in environmental science offers a distinctive program of interdisciplinary study. It is a field of inquiry exploring energy and climate systems and their complex relationships with the world's diverse human cultures. To achieve this goal, students and faculty work together across disciplines to develop an understanding of environmental sustainability in all its dimensions. The program focuses on current environmental concerns that have far-reaching implications for the fate of human society, ecological systems, and energy diversity. This involves an integration of knowledge from a variety of disciplines to understand the function of the ecological system and human impact upon these systems at a local, regional, and global scale.

Students are advised that there are a wide range of environmental science areas of emphasis offered at the university level. Therefore, while choosing electives, students are advised to consult with a counselor or faculty advisor to select courses that will meet the requirements of an area of emphasis at their selected transfer institution. DVC environmental science 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 GE). General Education Option 1 (DVC General Education) is appropriate for students who do not intend to transfer.

To earn an associate in science degree, students must complete each required course with a "C" grade or higher and complete general education requirements as listed in the catalog. Degree requirements can be completed by attending classes in the day, evening, online, or a combination of those. Certain classes may satisfy both major and other general education requirements; however, the units are only counted once.

<i>major requirements:</i>		<i>units</i>
BIOSC-170	Environmental Science	3
GEOG-140	Introduction to Weather	3
GEOL-120	Physical Geology.....	3

<i>plus at least 4 units from:</i>		
CHEM-108	Introductory Chemistry	4
CHEM-120	General College Chemistry I.....	5

<i>plus at least 4 units from:</i>		
MATH-142	Elementary Statistics with Probability.....	4
MATH-192	Analytic Geometry and Calculus I.....	5

<i>plus at least 9 units from:</i>		
ARCHI-207	Environmental Control Systems	3
BIOSC-126	Ecology and Field Biology	4
ENGIN-130	Energy, Society, and the Environment.....	3
ENSY-120	Introduction to Energy Systems	3
ENSY-125	Building Envelope and Systems	3
GEOG-124	Thinking and Communicating Geospatially.....	3
GEOG-125	Introduction to Geographic Information Systems (GIS).....	3
GEOG-129	Field Data Acquisition and Management	3
GEOG-160	Introduction to Remote Sensing	4
PHYS-120	General College Physics I	4
PHYS-121	General College Physics II	4
PHYS-130	Physics for Engineers and Scientists A: Mechanics and Wave Motion.....	4
PHYS-230	Physics for Engineers and Scientists B: Heat and Electro-Magnetism.....	4
total minimum units for the major		26

Associate in science in environmental science for transfer

Students completing the program will be able to...

- A. recognize and understand chemical components in physical and biological aspects of ecosystems.
- B. apply the scientific method to collect data on environmental problems, and use data to analyze and solve quantitative and qualitative problems.
- C. evaluate the relationship of organisms to each other and to their changing chemical and physical environment.
- D. integrate environmental and economic issues.
- E. demonstrate the proper use of common laboratory equipment and use proper laboratory techniques in running experiments.

The associate in science in environmental science for transfer degree is designed as a two-year program that offers an introduction to the basic principles of environmental science, which includes an integration of knowledge from a variety of disciplines to understand ecological systems and human impacts on these systems.

In order to earn the degree, students must:

- Complete 60 CSU-transferable units.
- Complete the California State University-General Education pattern (CSU GE); or the Intersegmental General Education Transfer Curriculum (IGETC) pattern, including the Area 1C requirement for Oral Communication.
- Complete a minimum of 18 units in the major.
- Attain a minimum grade point average (GPA) of 2.0.
- Earn a grade of "C" or higher in all courses required for the major.

Students transferring to a CSU campus that accepts the degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to university or college that is not part of the CSU system, or those students who do not intend to transfer.

Some courses in the major satisfy both major and CSUGE/IGETC general education requirements; however, the units are only counted once toward the 60-unit requirement for an associate's degree. Students are advised for this major, they may use the IGETC for STEM (Science, Technology, Engineering and Mathematics) pattern. This pattern allows students to complete one course in area 3A; one course in Area 3B; and two courses in Area 4 from two different disciplines. 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.

<i>major requirements</i>		<i>units</i>
BIOSC-170	Environmental Science	3
ECON-221	Principles of Microeconomics	3
MATH-142	Elementary Statistics with Probability	4
MATH-192	Analytic Geometry and Calculus I	5

select 1 of 2 options:

Option 1: Biology sequence		
BIOSC-130	Principles of Cellular and Molecular Biology.....	5
BIOSC-131	Principles of Ecology, Evolution and Organismal Biology.....	5
CHEM-120	General College Chemistry I.....	5

or

Option 2: Chemistry sequence		
BIOSC-130	Principles of Cellular and Molecular Biology.....	5
CHEM-120	General College Chemistry I.....	5
CHEM-121	General College Chemistry II.....	5

plus 4 units from:

GEOL-120	Physical Geology.....	3
and		
GEOL-122	Physical Geology Laboratory.....	1
or		
GEOG-120	Physical Geography	3
and		
GEOG-121	Physical Geography Laboratory	1

plus 8 units from:

PHYS-120	General College Physics I.....	4
and		
PHYS-121	General College Physics II.....	4
or		
PHYS-130	Physics for Engineers and Scientists A: Mechanics and Wave Motion.....	4
and		
PHYS-230	Physics for Engineers and Scientists B: Heat and Electro-Magnetism.....	4

total minimum units for the major 42

ENVSC-100 Exploring Environmental Science and Engineering

1 unit P/NP

- 5 hours lecture/35 hours laboratory per term

This course introduces students to current issues and careers in environmental science and engineering. Topics include climate change, wetland ecology and water quality in the Sacramento-San Joaquin River Delta. Students gain hands-on experience both in the laboratory and during field trips as well as explore careers and work readiness skills related to the fields of environmental science and engineering. CSU

ETHNIC STUDIES - ETHN

Obed Vazquez, Dean
 Social Sciences Division
 Faculty Office Building, Room 136

ETHN-101 Introduction to Ethnic Studies

- 3 units SC
- IGETC: 4; CSU GE: D,F; DVC GE: IV
 - 54 hours lecture per term
 - Advisory: College-level reading and writing are expected

This course provides a survey of the experiences, history, culture, politics, and knowledge of and from African Americans, Asian/Pacific Islander Americans, Chicana/Latina, and Native Americans. Focus is placed on the contributions of these populations in the making of the United States. Topics include settler-colonialism, conquest, slavery, imperialism, and immigration. The course highlights the subjectivities of these populations, as well as resistance and liberation movements that seek to eliminate injustice and oppression along the intersections of race, class, gender, sexuality and ableness. CSU, UC

FILM, TELEVISION, AND ELECTRONIC MEDIA – FTVE

Janette Funaro, Dean
 Arts and Communication Division

Possible career opportunities

Students majoring in FTVE enter broadcasting, cable, online media, and related industries. They can pursue graduate degrees in the field of mass or electronic communication for work in audio and video production, web development, radio and television, cable television, and media departments of agencies, institutions, and businesses.

Associate in arts degree

Television arts

Students completing the program will be able to...

- produce for broadcast and digital distribution utilizing three-camera studio format principles.
- operate cameras and professional sound equipment.
- perform digital nonlinear editing.
- produce for broadcast and digital distribution utilizing field production principles.
- direct projects for various production formats.
- qualify for entry-level employment in broadcasting.
- apply their planning skills for project management.
- identify major trends in the history of broadcasting.

The associate degree program in television arts is designed as a two year curricular pathway that offers a broad general education while preparing students for entry-level positions 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. Certain courses may satisfy both major and general education 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.

<i>major requirements:</i>		<i>units</i>
ARTDM-105	Introduction to Digital Imaging	3
FTVE-120	Introduction to TV Studio Production.....	3
FTVE-130	Intermediate TV Studio Production	3
FTVE-165	Digital Editing	3
FTVE-240	Survey of Broadcasting and Electronic Media	3

<i>plus at least 6 units from:</i>	
FTVE-132	Advanced TV Studio Production
FTVE-140	Introduction to Film and Media Scriptwriting
FTVE -160	Introduction to Film Production
MUSX-100	Audio and Visual Technology.....
MUSX-120	Live Sound.....
MUSX-174	Introduction to Music Technology and Pro Tools.....
MUSX-178	Music and Sound for Film, Games, and Digital Media

<i>plus at least 3 units from:</i>	
ARTDM-190	Digital Media Projects.....
FTVE-295	Occupational Work Experience Education in FTVE
FTVE-296	Internship in Occupational Work Experience Education in FTVE.....

total minimum units for the major 24

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

Associate in science degree in film, television, and electronic media for transfer

Students completing the program will be able to...

- A. seamlessly transfer to a CSU
- B. demonstrate a working knowledge of the operation of basic production equipment including cameras, sound recording equipment, lights, microphones and grip equipment.
- C. demonstrate a working knowledge of the operation of basic post production equipment and software for the purposes of producing various types of programming.
- D. demonstrate a working knowledge of the theory and practice of recording sound and visuals in professional formats.
- E. demonstrate a working knowledge of the theory and practice of editing original material with the goal of producing finished programs according to professional standards.
- F. demonstrate a working knowledge of the theory and practice of producing scripts in a variety of formats for visual presentation.
- G. identify the major trends in world cinema and television history.
- H. utilize critical thinking skills to analyze and evaluate various approaches to applying visual concepts to a variety of storytelling formats.

The associate in science in film, television, and electronic media (FTVE) for transfer will prepare students for transfer into bachelor's degree programs in broadcast, film, TV, and similar majors. Career opportunities include TV and video producing, directing, camera operation, video editing, scriptwriting, audio recording and mixing, and radio programming.

The associate in science in film, television, and electronic media for transfer degree is primarily intended for students who plan to complete a bachelor's degree at a California State University (CSU) in areas of study such radio-television-film, television-film, video, film, and electronic arts. Students completing this degree are guaranteed admission to the CSU system, but not necessarily to a particular major or campus.

In order to earn the degree, students must:

- Complete 60 CSU-transferable units.
- Complete the California State University-General Education pattern (CSU GE); or the Intersegmental General Education Transfer Curriculum (IGETC) pattern, including the Area 1C requirement for Oral Communication.
- Complete a minimum of 18 units in the major.
- Attain a minimum grade point average (GPA) of 2.0.
- Earn a grade of "C" or higher in all courses required for the major.

Students transferring to a CSU campus that accepts the degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to university or college that is not part of the CSU system, or those students who do not intend to transfer.

Students must complete each course used to meet a major requirement with a "C" grade or higher. Some courses in the major satisfy both major and CSUGE/IGETC general education requirements; however, the units are only counted once toward the 60 unit requirement for an associate degree. 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.

<i>major requirements:</i>		<i>units</i>
ARTDM-130	Introduction to Digital Audio	3
FTVE-140	Introduction to Film and Media Scriptwriting	3
FTVE-205	Introduction to Film and Media Arts	3

<i>plus at least 3 units from:</i>		
FTVE-240	Survey of Broadcasting and Electronic Media	3
JRNAL-110	Mass Media of Communication	3

<i>plus at least 3 units from:</i>		
FTVE-120	Introduction to TV Studio Production	3
FTVE-160	Introduction to Film Production	3

<i>plus at least 3 units from:</i>		
<i>any course not used above or:</i>		
FTVE-161	Intermediate Film Production	3
FTVE-280	American Cinema 1900-1950	3
FTVE-281	World Cinema 1900-1960	3
FTVE-283	World Cinema 1960 to the Present	3

<i>plus at least 3 units from:</i>		
<i>any course not used above or:</i>		
ARTDM-140	Motion Graphics	3
FTVE-130	Intermediate TV Studio Production	3
FTVE-132	Advanced TV Studio Production	3
FTVE-141	Intermediate Film and Media Scriptwriting	3
FTVE-142	Advanced Film and Media Scriptwriting	3
FTVE-165	Digital Editing	3
FTVE-166	Intermediate Digital Editing	3
FTVE-200	American Cinema/American Culture	3
FTVE-210	American Ethnic Cultures in Film	3
FTVE-260	Ethnic Images in United States (U.S.) Television	3
FTVE-282	American Cinema 1950 to the Present	3
FTVE-296	Internship in Occupational Work Experience Education in FTVE	2-4

total minimum units for the major 21

**Certificate of achievement
Film post-production**

Students completing this program will be able to...

- A. use industry-standard graphics, video and audio editing software.
- B. create motion graphics projects.
- C. create samples for an online portfolio.
- D. qualify for entry-level employment in the film and television post-production industries.

This certificate of achievement in film post-production prepares students for a career in film, television, and media industries. Students develop skills in three of the core aspects of post-production: video editing, sound design and editing, and motion graphics. Students will participate in a collaborative team-oriented learning experience that mirrors the post-production process. The program goal is to provide relevant, industry-standard skills necessary to enter this dynamic and creative field.

Some examples where students might find employment using their post-production skills are working at a film or television post-production company as an assistant video editor, assistant sound designer or sound mixer, working at a visual effects studio, working in the video game industry, or at an advertising agency.

To earn the certificate of achievement students must complete the required courses with a minimum of grade of "C" or higher. Some courses are available in both online and traditional formats. The certificate can be completed in one year of full-time or two years of part-time study.

<i>required courses:</i>	<i>units</i>
ARTDM-105 Introduction to Digital Imaging.....	3
ARTDM-140 Motion Graphics	3
FTVE-165 Digital Editing.....	3
FTVE-166 Intermediate Digital Editing	3
MUSX-178 Music and Sound for Film, Games, and Digital Media.....	3

<i>plus at least 3 units from:</i>	
ARTDM-130 Introduction to Digital Audio	3
MUSX-174 Introduction to Music Technology and Pro Tools.....	3

<i>plus at least 3 units from:</i>	
ARTDM-149 Fundamentals of Digital Video.....	3
ARTDM-160 3D Modelling and Animation I.....	3
ARTDM-165 Drawing for Digital Animation	3
ARTDM-180 Game Design I.....	3
FTVE-150 Topics in Film, Television, and Electronic Media.....	0.3-4
FTVE-160 Introduction to Film Production	3
FTVE-295 Occupational Work Experience Education in FTVE	2-4
FTVE-296 Internship in Occupational Work Experience Education in FTVE	2-4
total minimum required units	21

Certificate of achievement – Film production

Students completing this program will be able to...

- A. demonstrate knowledge of the basic technical aspects of digital film production.
- B. create short films, taking an idea through all stages of film production.
- C. use industry-standard video and audio editing software.
- D. demonstrate the successful teamwork necessary to work on a crew in television, film, or other media employment.
- E. build foundation knowledge in film language and visual storytelling.
- F. qualify for entry-level employment in the film and television industry.
- G. create film samples for an online portfolio.

This certificate of achievement in film production prepares students for a career in the film, television, and media industries. Students develop creativity and production skills and experience the film production process from pitching ideas through editing the final film. Students will participate in a collaborative, team-oriented learning experience that mirrors the film industry production process. The program goal is to provide the skills necessary to enter this dynamic and creative industry.

Some examples where students can find employment using their film production skills are working on film crews, joining a film or television production company, assisting at a talent agency, creating corporate videos, assisting the production of business training or real estate videos, and assisting in an advertising or marketing agency.

To earn the certificate of achievement students must complete the required courses with a minimum of grade of "C" or higher. Some courses are available in both online and traditional formats. The certificate can be completed in one year of full-time or two years of part-time study.

<i>required courses:</i>	<i>units</i>
FTVE-140 Introduction to Film and Media Scriptwriting	3
FTVE-160 Introduction to Film Production.....	3
FTVE-161 Intermediate Film Production.....	3
FTVE-165 Digital Editing.....	3
FTVE-205 Introduction to Film and Media Arts	3

<i>plus at least 3 units from:</i>	
ARTDM-130 Introduction to Digital Audio	3
MUSX-178 Music and Sound for Film, Games, and Digital Media	3

<i>plus at least 3 units from:</i>	
ARTDM-140 Motion Graphics.....	3
ARTDM-180 Game Design I.....	3
DRAMA-122 Basic Principles of Acting	3
FTVE-120 Introduction to TV Studio Production.....	3
FTVE-150 Topics in Film, Television, and Electronic Media	0.3-4
FTVE-166 Intermediate Digital Editing.....	3
FTVE-295 Occupational Work Experience Education in FTVE.....	2-4
FTVE-296 Internship in Occupational Work Experience Education in FTVE	2-4
JRNAL-130 Multimedia Reporting.....	3

total minimum required units 21

Certificate of achievement

Television arts

Students completing the program will be able to...

- A. produce for broadcast and digital distribution utilizing three-camera studio format principles.
- B. operate cameras and professional sound equipment.
- C. perform digital nonlinear editing.
- D. produce for broadcast and digital distribution utilizing field production principles.
- E. write scripts for various production formats.
- F. direct projects for various production formats.
- G. qualify for entry-level employment in broadcasting.
- H. apply their planning skills for project management.
- I. identify major trends in the history of broadcasting.

This program prepares students for entry-level positions such as: associate producer, assistant director, on-camera talent, camera operator, sound technician, video switcher, floor director, videotape editor, production assistant, radio board operator, radio producer, radio production engineer, and radio on-air talent.

Selected courses in the program may meet some lower division requirements for the bachelor of arts program at certain California State University campuses. Consult with department faculty or a college counselor for more information.

To earn a certificate of achievement, students must complete each of the required courses with a "C" grade or higher. Required courses can only be completed by attending a combination of day and evening classes.

<i>required courses:</i>	<i>units</i>
ARTDM-105 Introduction to Digital Imaging	3
FTVE-120 Introduction to TV Studio Production.....	3
FTVE-130 Intermediate TV Studio Production	3
FTVE-165 Digital Editing	3
FTVE-240 Survey of Broadcasting and Electronic Media.....	3

<i>plus at least 6 units from:</i>	
FTVE-132 Advanced TV Studio Production	3
FTVE-140 Introduction to Film and Media Scriptwriting	3
FTVE-160 Introduction to Film Production	3
MUSX-100 Audio and Visual Technology.....	3
MUSX-120 Live Sound.....	3
MUSX-174 Introduction to Music Technology and Pro Tools.....	3
MUSX-178 Music and Sound for Film, Games, and Digital Media	3

<i>plus at least 3 units from*:</i>	
ARTDM-190 Digital Media Projects	3
FTVE-295 Occupational Work Experience Education in FTVE.....	2-4
FTVE-296 Internship in Occupational Work Experience Education in FTVE	2-4
total minimum required units	24

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

Certificate of accomplishment

Television arts -

Film production

Students completing the program will be able to...

- A. operate cameras and professional sound equipment.
- B. perform digital nonlinear editing.
- C. produce for broadcast and digital distribution utilizing field production principles.
- D. write scripts for various production formats.
- E. direct projects for various production formats.
- F. apply their planning skills for project management.

The television arts program prepares students for entry level positions in one of four specialty areas: studio production, film 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.

<i>required courses:</i>	<i>units</i>
FTVE-160 Introduction to Film Production	3
FTVE-161 Intermediate Film Production.....	3
FTVE-165 Digital Editing	3
total minimum required units	9

Certificate of accomplishment

Television arts -

Studio production

Students completing the program will be able to...

- A. produce for broadcast and digital distribution utilizing three-camera studio format principles.
- B. operate cameras and professional sound equipment.
- C. produce still and motion graphics.
- D. write scripts for various production formats.
- E. direct projects for various production formats.
- F. apply their planning skills for project management.

The television arts program prepares students for entry level positions in one of four specialty areas: 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.

<i>required courses:</i>	<i>units</i>
FTVE-120 Introduction to TV Studio Production.....	3
FTVE-130 Intermediate TV Studio Production	3
<i>plus at least 3 units from:</i>	
FTVE-132 Advanced TV Studio Production	3
FTVE-160 Introduction to Film Production	3
total minimum required units	9

Certificate of accomplishment

Television arts -

Basic writing for digital medium

Students completing the program will be able to...

- A. write scripts for various production formats.
- B. direct projects for various production formats.
- C. qualify for entry-level employment in broadcasting.
- D. apply their planning skills for project management.
- E. identify major trends in the history of broadcasting.

The television arts program prepares students for entry level positions in one of four specialty areas: 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.

<i>required courses:</i>	<i>units</i>
FTVE-140 Introduction to Film and Media Scriptwriting.....	3
FTVE-141 Intermediate Film and Media Scriptwriting.....	3
FTVE-142 Advanced Film and Media Scriptwriting.....	3
FTVE-240 Survey of Broadcasting and Electronic Media	3

<i>plus at least 3 units from:</i>	
COMM-148 Performance of Literature	3
ENGL-151 The Short Story	3
FTVE-150 Topics in Film, Television, and Electronic Media	0.3-4
FTVE-295 Occupational Work Experience Education in FTVE.....	2-4
FTVE-296 Internship in Occupational Work Experience Education in FTVE	2-4
FTVE-298 Independent Study.....	0.5-3
JRNL-110 Mass Media Communication	3
total minimum required units	15

FTVE-120 Introduction to TV Studio Production

- 3 units SC
- 36 hours lecture/54 hours laboratory per term
- *Advisory: College-level reading and writing are expected.*

This course introduces theory, terminology and operation of a multi-camera television studio and control room. Topics include studio signal flow, directing, theory and operation of camera and audio equipment, switcher operation, fundamentals of lighting, graphics, video control and video recording and real-time video production. CSU

FTVE-130 Intermediate TV Studio Production

- 3 units SC
- 36 hours lecture/54 hours laboratory per term
- *Prerequisite: FTVE-120 or equivalent*
- *Advisory: College-level reading and writing are expected.*

This is an intermediate class designed to advance the student's skills in producing and directing TV programs and operating television equipment. Students will produce and direct programs and prepare for positions in broadcast and cable TV as well as industrial television production facilities. CSU

FTVE-132 Advanced TV Studio Production

- 3 units SC
- 36 hours lecture/54 hours laboratory per term
- *Prerequisite: FTVE-130 or equivalent*
- *Advisory: College-level reading and writing are expected.*

This advanced class is designed to increase the student's skills in producing and directing TV programs and operating television equipment. Students will produce and direct programs to prepare for positions in broadcast and cable TV as well as industrial television production facilities. CSU

FTVE-140 Introduction to Film and Media Scriptwriting

- 3 units SC
- 54 hours lecture per term
- *Advisory: College-level reading and writing are expected.*

This is a basic introductory course in writing for film and electronic media. Students will prepare fiction and non-fiction scripts in proper formats, and address technical, conceptual and stylistic issues related to writing for informational and entertainment purposes. A writing evaluation component is a significant part of the course requirement. CSU, UC

FTVE-141 Intermediate Film and Media Scriptwriting

- 3 units SC
- 54 hours lecture per term
- *Prerequisite: FTVE-140 or equivalent*
- *Advisory: College-level reading and writing are expected.*

This intermediate scriptwriting writing class builds on skills acquired in FTVE-140 with a focus on developing dramatic conflict within a three-act structure. Emphasis is placed on writing for a visual medium through assignments including the completion of the first-act of a feature-length screenplay or television series bible. CSU, UC

FTVE-142 Advanced Film and Media Scriptwriting

3 units SC

- 54 hours lecture per term
- Prerequisite: FTVE-141 or equivalent
- Advisory: College-level reading and writing are expected.

This advanced scriptwriting class builds on skills acquired in FTVE-141 with a focus on the writing of a feature-length screenplay or television pilot and show bible. Emphasis is placed on developing and refining authentic characters, solid stories, and dramatic structure through writing exercises and critiques. CSU, UC

FTVE-150 Topics in Film, Television, and Electronic Media

.3-4 units SC

- Variable hours
- Advisory: College-level reading and writing are expected.

A supplemental course in film, television, and electronic media to provide a study of current concepts and problems in film, television, and electronic media. Specific topics will be announced in the schedule of classes. CSU

FTVE-160 Introduction to Film Production

3 units SC

- 36 hours lecture/54 hours laboratory per term
- Advisory: College-level reading and writing are expected.

This course provides an introduction to single-camera narrative film production focusing on the aesthetics and fundamentals of scripting, producing, directing on location, and post-production. Theory, terminology, and operation of film production equipment, including composition and lighting techniques, camera operation, sound recording, directing actors, and basic editing will also be covered. CSU, UC

FTVE-161 Intermediate Film Production

3 units SC

- 36 hours lecture/54 hours laboratory per term
- Prerequisite: FTVE-160 or ARTDM-149 or Equiv.

In this course students produce intermediate level, single-camera short films that use sophisticated lighting schemes, sync sound, polished editing, and visual metaphors. Theory, terminology, and operation of digital film production equipment, including lighting techniques, camera operation, camera movement, sound recording, scriptwriting, directing actors, and editing will also be covered. CSU, UC

FTVE-165 Digital Editing

3 units SC

- 36 hours lecture/72 hours laboratory per term
- Note: Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply toward the 60 units required for the degree.

This course is an introduction to the techniques, concepts, and aesthetics of digital editing for film, television, and digital media using professional software programs. Emphasis is placed on organization, timelines, and story development as well as editing for visual and audio effect. CSU, UC

FTVE-166 Intermediate Digital Editing

3 units SC

- 36 hours lecture/72 hours laboratory per term
- Prerequisite: FTVE-165 or equivalent
- Advisory: College-level reading and writing are expected.
- Note: Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply toward the 60 units required for the degree.

This intermediate course is designed to advance the student's editing skills using current industry standard software programs. CSU, UC

FTVE-200 American Cinema/American Culture

3 units SC

- IGETC: 3A; CSU GE: C1; DVC GE: III
- 54 hours lecture per term

This course presents the history of cinema focusing on major genres in American filmmaking in a larger cultural context including literature, drama, vaudeville, and related art forms. The course investigates 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 include how Hollywood functions as a business, reflects societal values and concerns, and responds to evolving technology. CSU, UC

FTVE-205 Introduction to Film and Media Arts

3 units SC

- IGETC: 3A; CSU GE: C1; DVC GE: III
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This course will examine major trends and genres in the world of film and media. Analysis of how plot, theme and character are developed in a visual medium and how the language and syntax of film conveys meaning as compared to media, literature and drama will be emphasized. The relationship of film and media to historical, social, and cultural trends will also be examined. Topics include modes of production, narrative and non-narrative forms, visual design, editing, sound, genre, ideology and critical analysis. CSU, UC

FTVE-210 American Ethnic Cultures in Film

3 units SC

- *IGETC: 3A; CSU GE: C1, C2; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

In this course, students will evaluate and explore various American cultures: African American, Native American, Asian American, Hispanic, and European American as represented in feature film. Emphasis is placed on the analysis of similarities and differences, paying particular attention to social and cultural representations. In addition, the course will introduce issues specific to the world of cinema such as how film language communicates ideas and stimulates emotional responses. Economic considerations that influence Hollywood distribution practices will also be covered. CSU, UC

FTVE-240 Survey of Broadcasting and Electronic Media

3 units SC

- *IGETC: 4; CSU GE: D; DVC GE: IV*
- *54 hours lecture per term*

This course introduces the history, structure, function, economics, content and evolution of radio, television, film, the internet, social media and new media. Students will also research communication theories and the social, cultural, political, regulatory, ethical, and occupational impacts of broadcasting and electronic media. CSU, UC

FTVE-260 Ethnic Images in United States (U.S.) Television

3 units SC

- *IGETC: 3B; CSU GE: C2; DVC GE: III*
- *54 hours lecture per term*

This course will evaluate and explore the treatment of race and ethnicity U.S. television. The historical, commercial, ideological, and social factors that influence the cultural diversity of television programming are examined. Focus is placed on representation including the number and quality of on-screen roles as well as industry demographics behind the scenes. Students will analyze dominant racial caricatures and stereotypes while examining similarities and differences in the way various cultures are portrayed. Television's role in communicating ideas and stimulating emotional responses while functioning as a socializing force that teaches us about ourselves and other people is emphasized. CSU, UC

FTVE-280 American Cinema 1900-1950

3 units SC

- *IGETC: 3A; CSU GE: C1; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course is a survey of major trends in American Cinema from 1900 to the demise of the studio system in the 1950s. Students will view films from notable artists and movements that have influenced the development of film arts around the world. In addition, students will analyze how social, economic, and historical forces shape film art, the development of global media culture, and how cinema communicates as an art form. CSU, UC

FTVE-281 World Cinema 1900-1960

3 units SC

- *IGETC: 3A; CSU GE: C1; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course is a survey of major trends in World Cinema from 1900 to the French New Wave of the 1960s. Students will view films from notable artists and movements that have influenced the development of film arts around the world. In addition, students will analyze how social, economic, and historical forces shape film art, the development of global media culture, and how cinema communicates as an art form. CSU, UC

FTVE-282 American Cinema 1950 to the Present

3 units SC

- *IGETC: 3A; CSU GE: C1; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course is a survey of major trends in American Cinema from the demise of the studio system in the 1950's to the present. Students will view films from notable artists and movements that have influenced the development of film arts around the world. In addition, students will analyze how social, economic, and historical forces shape film art, the development of global media culture, and how cinema communicates as an art form. CSU, UC

FTVE-283 World Cinema 1960 to the Present

3 units SC

- *IGETC: 3A; CSU GE: C1; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course provides 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. 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 will be stressed. CSU, UC

FTVE-295 Occupational Work Experience Education in FTVE

2-4 units SC

- *May be repeated eight times*
- *Variable hours*
- *Note: In order to enroll in FTVE-295, students must be employed, register for the course, complete an online Employment Form, and participate in an orientation. Incomplete grades are not awarded for this course.*

FTVE-295 is supervised employment that extends classroom learning to the job site and relates to the student's chosen field of study or area of career interest. Under the supervision of a college instructor, students will engage in on-the-job and other learning experiences that contribute to their employability skills and occupational or educational goals. Each unit represents five hours of work per week or 75 hours work per term. Students may earn up to a total of 16 in any combination of WRKX courses. Repetition allowed per Title 5, Section 55253. CSU

FTVE-296 Internship in Occupational Work Experience Education in FTVE

2-4 units SC

- *May be repeated eight times*
- *Variable hours*
- *Note: In order to enroll in the FTVE-296 course, students must be interning or volunteering, register for the course, complete an online Employment Form, and participate in an orientation. Incomplete grades are not awarded for this course.*

FTVE-296 is a supervised internship in a skilled or professional level assignment in the student's major field of study or area of career interest. Under the supervision of a college instructor, students will engage in on-the-job and other learning experiences that contribute to their employability skills and occupational or educational goals. Internships may be paid, non-paid, or some partial compensation provided. Each unit represents five hours of paid work or four hours of unpaid work per week or 75 hours of paid work or 60 hours of unpaid work per term. Students may earn up to a total of 16 units in any combination of WRKX courses. Repetition allowed per Title 5, Section 55253. CSU

FTVE-298 Independent Study

.5-3 units SC

- *Variable hours*
- *Note: Submission of acceptable educational contract to department and Instruction Office is required.*

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. CSU

FTVE-299 Student Instructional Assistant

.5-3 units SC

- *Variable hours*
- *Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.*
- *Formerly BCA-299 and FILM-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

FRENCH – FRNCH

Janette Funaro, Dean
Arts and Communication Division

Possible career opportunities

The study of French can open up opportunities in communications, foreign trade and banking, transportation, government, the Foreign Service, tourism, library services, teaching, professional translating, journalism, and all levels of education, including university teaching. Most foreign language careers require more than two years of study.

Associate in arts degree French

Students completing the program will be able to...

- communicate verbally in the target language with accurate pronunciation in meaningful situations present in both informal and formal contexts.
- effectively apply rules of grammar and syntax in tandem with appropriate vocabulary in written and oral communication.
- demonstrate auditory comprehension of instruction, authentic content, and purposeful conversations in the target language.
- discuss, describe, and infer information from authentic texts in the target language.
- demonstrate cultural appreciation by making (comparative) connections, on both an individual and societal level, between the target cultures and students' own cultures.
- create (write or present) narratives and/or arguments that demonstrate cohesive critical thinking in the target language.

The associate in arts degree in French at DVC will provide students with skills in understanding, speaking, reading and writing French. The curriculum exposes students to French culture and civilization and provides foundational skills in language that can apply to a broad range of international and domestic career opportunities and professions. The degree will provide lower division preparation for transfer to UC, CSU and other four year colleges and universities to earn a bachelor's degree.

The DVC French 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 baccalaureate-granting institutions of their choice are met. Students who intend to transfer are advised to select General Education Option 2 (IGETC) or Option 3 (CSU GE). Option 1 (DVC General Education) is appropriate for those students who do not intend to transfer. Students may not take a pass/no pass option for major courses and each of the major requirements must be completed with a "C" grade or higher. Certain courses may satisfy both major and general education requirements; however, the units are counted only once.

Students must complete at least 20 units from the list of core courses. The core courses provide students with the essential grammar of the language, culture and basic literature of the francophone world. Students who have no prior knowledge of French will complete the first four courses in the list for a total of 20 units. Students with prior knowledge of French may start at the second term level and take fifth and sixth terms to achieve a total of 21 units.

<i>complete a minimum of 20 units from:</i>	<i>units</i>
FRNCH-120 First Term French	5
FRNCH-121 Second Term French	5
FRNCH-220 Third Term French	5
FRNCH-221 Fourth Term French	5
FRNCH-230 Fifth Term French	3
FRNCH-231 Sixth Term French	3
total minimum units for the major	20

Certificate of achievement French

Students completing the program will be able to...

- communicate verbally in the target language with accurate pronunciation in meaningful situations present in both informal and formal contexts.
- effectively apply rules of grammar and syntax in tandem with appropriate vocabulary in written and oral communication.
- demonstrate auditory comprehension of instruction, authentic content, and purposeful conversations in the target language.
- discuss, describe, and infer information from authentic texts in the target language.
- demonstrate cultural appreciation by making (comparative) connections, on both an individual and societal level, between the target cultures and students' own cultures.
- create (write or present) narratives and/or arguments that demonstrate cohesive critical thinking in the target language.

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. Students may not take a credit/no credit option for required courses and each course must be completed with a "C" grade or higher.

French

List A	units
FRNCH-120 First Term French	5
FRNCH-121 Second Term French	5
FRNCH-220 Third Term French	5
FRNCH-221 Fourth Term French	5
FRNCH-230 Fifth Term French	3
FRNCH-231 Sixth Term French	3

List B	units
FRNCH-121 Second 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	5
FRNCH-221 Fourth Term French	5
total minimum required units	13

FRNCH-120 First Term French

- 5 units SC
- IGETC: 6A
 - 90 hours lecture per term
 - Note: This course is equivalent to two years of high school study.

This course provides an introduction to the French language and the culture of French-speaking countries. Topics include the four language skills: speaking, listening, reading, and writing. Emphasis is placed on active use of the language in class as well as basic communicative functions and structures. CSU, UC

FRNCH-121 Second Term French

- 5 units SC
- IGETC: 3B, 6A; CSU GE: C2; DVC GE: III
 - 90 hours lecture per term
 - Prerequisite: FRNCH-120 or two years of high school study or equivalent
 - Note: Students may meet equivalency in a variety of ways. Students should seek assistance at Admissions and Records.

This is the second course in a sequence of French language courses. The course continues skill building in understanding, speaking, reading, and writing of the French language. The expansion of vocabulary and more advanced communicative functions and structures, as well as a deeper examination of the cultures of French-speaking countries are emphasized. CSU, UC

FRNCH-150 Topics in French

- .3-4 units SC
- 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
- 54 hours lecture per term
 - Note: This course does not satisfy major or general education requirements.

This is the first term of the conversational French series. Basic grammar and vocabulary as well as an introduction to French culture will also be covered. CSU

FRNCH-156 Second Term Conversational French

- 3 units SC
- 54 hours lecture per term
 - Advisory: FRNCH-155 or equivalent
 - Note: This course does not satisfy major or general education requirements.

This is the second term of the conversational French series. Emphasis will be placed on more advanced grammar and vocabulary to expand beyond the self to conversations of a more general nature. Comprehension will be reinforced through listening practice. CSU

FRNCH-157 Third Term Conversational French

- 3 units SC
- 54 hours lecture per term
 - Advisory: FRNCH-156 or equivalent
 - Note: This course does not satisfy major or general education requirements.

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. Topics will include social, political, and cultural issues as well as French culture. CSU

FRNCH-220 Third Term French

- 5 units SC
- IGETC: 3B, 6A; CSU GE: C2; DVC GE: III
 - 90 hours lecture per term
 - Prerequisite: FRNCH-121 or three years of high school study or equivalent
 - Note: Students may meet prerequisite in a variety of ways. Students should seek assistance at Admissions and Records.

This is the third term French course in a sequence that develops early intermediate fluency in understanding, speaking, reading and writing French. All verbal tenses are reviewed, expanded and refined. Advanced grammar concepts, new vocabulary, and idiomatic expressions are introduced. Selected readings about the culture and literature of French speaking countries will be explored. This course is taught entirely in French. CSU, UC

FRNCH-221 Fourth Term French

5 units SC

- *IGETC: 3B, 6A; CSU GE: C2; DVC GE: III*
- *90 hours lecture per term*
- *Prerequisite: FRNCH-220 or four years of high school study or equivalent*
- *Note: Students may meet equivalency in a variety of ways. Students should seek assistance at Admissions and Records.*

This is the fourth term French course in the sequence that develops intermediate fluency in understanding, speaking, reading and writing French. The grammatical moods are reviewed and developed; the sequences of tenses are introduced. Additional vocabulary and idiomatic expressions are introduced and connected to the selected readings. These readings about French culture and literature will be analyzed. This course is taught entirely in French. CSU, UC

FRNCH-230 Fifth Term French

3 units SC

- *IGETC: 3B, 6A; CSU GE: C2; DVC GE: III*
- *54 hours lecture per term*
- *Prerequisite: FRNCH-221 or equivalent*
- *Note: Students may meet equivalency in a variety of ways. Students should seek assistance at Admissions and Records.*

This is the fifth term advanced course emphasizing reading, writing (prioritizing the mechanics of academic writing), listening, and speaking skills. The rich heritage of French society and Francophone societies are explored through a wide range of materials including short stories, articles, poems, films, and documentaries. This course is taught entirely in French. CSU, UC

FRNCH-231 Sixth Term French

3 units SC

- *IGETC: 3B, 6A; CSU GE: C2; DVC GE: III*
- *54 hours lecture per term*
- *Prerequisite: FRNCH-230 or equivalent*
- *Note: Students may meet equivalency in a variety of ways. Students should seek assistance at Admissions and Records.*

This is the sixth term advanced French language course strengthening reading, writing (prioritizing the mechanics of academic writing), listening, and speaking skills. Deepening the exploration of the rich heritage of French and Francophone societies through a wide range of materials including novels, articles, poems, films, documentaries, and dramas. This course is taught entirely in French. CSU, UC

FRNCH-298 Independent Study

.5-3 units SC

- *Variable hours*
- *Note: Submission of acceptable educational contract to department and Instruction Office is required.*

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. CSU

FRNCH-299 Student Instructional Assistant

.5-3 units SC

- *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

Charles Ramos, Dean
 Sciences Division
 Physical Sciences Building, Room 263

Possible career opportunities

Geography is an interdisciplinary study focusing on the spatial relations of physical, cultural and economic systems of our world. As such, geographers are employed in a wide array of fields in many capacities such as: city/county planning; surveying; cartography; aerial photographic interpretation; remote sensing; environmental studies; meteorology; GIS (geographic information systems: and GPS (global positioning systems). Geographers are employed by private sector firms, government and non-profit organizations. Many career options may require more than two years of college study.

Cultural geography careers include geography education at many levels, analyst, consultant and planner. Most career options require more than two years of college study.

Associate in arts degree Social/cultural geography

Students completing the program will be able to...

- A. describe the spatial organization of the world's peoples, nations, cultural environments.
- B. compare and contrast the levels of economic development and their underlying environmental and cultural factors.
- C. demonstrate a global view with appreciation for diverse cultures and societies.
- D. demonstrate an understanding of how human activities impact the physical environment.

The social-cultural geography major at Diablo Valley College offers students the opportunity to prepare for a broad range of professions through the study of 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 GE). 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, maintain an overall GPA of 2.5 or higher in the coursework required for the major, and complete general education requirements as listed in the catalog. Certain courses may satisfy both major and general education requirements; however, the units are only counted once.

<i>major requirements:</i>		<i>units</i>
ANTHR-130	Cultural Anthropology	3
GEOG-120	Physical Geography	3
GEOG-130	Cultural Geography	3
GEOG-135	World Regional Geography.....	3
GEOG-162	Map Design and Visualization.....	3
SOCIO-131	The Urban Community.....	3
total minimum units for the major		18

Associate in arts in geography for transfer

Students completing the program will be able to...

- A. describe the various components of the geosystems and explain how they interact.
- B. explain the interaction between physical and human components of the environment and how the nature of interaction varies in different parts of the world.
- C. describe the role and significance of geospatial techniques in assessing and mapping the physical and cultural environments.
- D. describe the characteristics of different cultural realms and demonstrate a respect for diversity that exists between and among cultural or geographic regions.

The associate in arts in geography for transfer is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major.

In order to earn the degree, students must:

- Complete 60 CSU-transferable units.
- Complete the California State University-General Education pattern (CSU GE); or the Intersegmental General Education Transfer Curriculum (IGETC) pattern, including the Area 1C requirement for Oral Communication.
- Complete a minimum of 18 units in the major.
- Attain a minimum grade point average (GPA) of 2.0.
- Earn a grade of "C" or higher in all courses required for the major.

Students transferring to a CSU campus that accepts the degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system, or those students who do not intend to transfer.

Some courses in the major satisfy both major and CSU GE/IGETC general education requirements; however, the units are only counted once toward the 60 unit requirement for an associate degree. 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.

<i>major requirements:</i>		<i>units</i>
GEOG-120	Physical Geography	3
GEOG-121	Physical Geography Laboratory	1
GEOG-125	Introduction to Geographic Information Systems	3
GEOG-130	Cultural Geography	3
or		
GEOG-135	World Regional Geography	3
GEOG-140	Introduction to Weather	3

plus at least 6 units from any course not used above or:

ANTHR-130	Cultural Anthropology	3
GEOG-124	Thinking and Communicating Geospatially.....	3
GEOG-126	Advanced Geographic Information Systems	3
GEOG-129	Field Data Acquisition and Management	3
GEOG-160	Introduction to Remote Sensing	3
GEOG-162	Map Design and Visualization.....	3
GEOG-165	Drone and Remote Sensing and Mapping	3
GEOG-120	Physical Geography.....	3
total minimum units for the major		19

Associate in science degree Geographic information systems/ Global positioning system

Students completing the program will be able to...

- A. analyze the inter-disciplinary applications of GIS, GPS, and remote sensing.
- B. synthesize data from various sources and different formats for spatial analyses.
- C. apply spatial tools and techniques in a research or work environment.
- D. explain the fundamentals of the different geospatial technologies and how they function.

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 general education requirements as listed in the catalog. Certain courses may satisfy both major and general education requirements; however, the units are only counted once.

<i>major requirements:</i>		<i>units</i>
GEOG-125	Introduction to Geographic Information Systems (GIS).....	3
GEOG-126	Advanced Geographic Information Systems.....	3
GEOG-129	Field Data Acquisition and Management	3
GEOG-160	Introduction to Remote Sensing.....	4
GEOG-162	Map Design and Visualization.....	3

plus at least 6 units from:

COMSC-101	Computer Literacy	4
COMSC-110	Introduction to Programming.....	4
COMSC-120	SQL Programming	4
COMSC-172	UNIX and Linux Administration.....	2
COMSC-255	Programming with Java	4

plus at least 6 units from:

BIOSC-126	Ecology and Field Biology	4
BIOSC-170	Environmental Science	3
ENGTC-126	Computer Aided Design and Drafting - AutoCAD.....	3
GEOG-120	Physical Geography	3
GEOG-124	Thinking and Communicating Geospatially.....	3
GEOG-295	Occupational Work Experience Education in GEOG	2-4
GEOG-120	Physical Geology.....	3
total minimum units for the major		28

Associate in science degree Meteorology

Students completing the program will be able to...

- A. describe the structure and properties of the atmosphere and atmospheric circulation systems.
- B. develop and explain a forecast in the short to medium time range.
- C. demonstrate the ability to apply atmospheric studies to interdisciplinary and practical applications for commercial and public needs.

The meteorology major at Diablo Valley College offers students the opportunity to prepare for a range of professions through the study of meteorology as an applied science. Students will be prepared to transfer to UC, CSU and other four-year colleges and universities to earn a baccalaureate degree. DVC prepares students to pursue careers in government, private forecasting and broadcast meteorology.

The DVC meteorology major consists of 18 units of required core courses through which students develop an understanding of the atmosphere, the physical principles governing weather, the spatial distribution of weather and how the atmosphere links to other components of earth's physical environment.

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 GE). Option 1 (DVC General Education) is not generally advised.

Geography

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 general education requirements as listed in the catalog. Certain courses may satisfy both major and general education requirements; however, the units are only counted once.

<i>major requirements:</i>		<i>units</i>
GEOG-120	Physical Geography	3
GEOG-121	Physical Geography Laboratory	1
GEOG-135	World Regional Geography.....	3
GEOG-140	Introduction to Weather	3
GEOG-141	Introduction to Weather Laboratory	1
GEOG-162	Map Design and Visualization.....	3
PHYS-120	General College Physics I.....	4
total minimum units for the major		18

Associate in science degree Physical geography

Students completing the program will be able to...

- A. demonstrate proficiency in the use of field data collection and mapping techniques.
- B. demonstrate an understanding of how the physical and human elements of the environment interact and what are the outcomes.
- C. demonstrate a grounding in the modern technical skills of the discipline, including computer cartography, geographic information systems and global positioning systems.

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 baccalaureate 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 GE). 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, maintain an overall GPA of 2.5 or higher in the coursework required for the major, and complete general education requirements as listed in the catalog. Certain courses may satisfy both major and general education requirements; however, the units are only counted once.

<i>major requirements:</i>		<i>units</i>
GEOG-120	Physical Geography	3
GEOG-121	Physical Geography Laboratory	1
GEOG-135	World Regional Geography.....	3
GEOG-140	Introduction to Weather	3
GEOG-141	Introduction to Weather Laboratory	1
GEOG-162	Map Design and Visualization.....	3

<i>plus at least 4 units from:</i>		
BIOSC-126	Ecology and Field Biology	4
GEOG-125	Introduction to Geographic Information Systems (GIS).....	3
GEOG-120	Physical Geology.....	3
GEOG-122	Physical Geology Laboratory.....	1
GEOG-125	Geology of California	3

total minimum units for the major 18

Certificate of achievement Drone technology

Students completing this program will be able to...

- A. explain the basics of drone flight preparation.
- B. demonstrate how to download and post-process data acquired with a drone.
- C. describe UAS laws, air space regulations, and licensing.
- D. demonstrate the procedures for analyzing data obtained during a drone flight.
- E. demonstrate how the data obtained from drone is applied in a selected profession.
- F. explain the how data acquired by drone is used in geospatial applications.

The drone technology certificate of achievement program is designed to prepare students to take the Federal Aviation Administration Part 107 commercial drone pilot exam and for entry into careers that employ generalized or specialized applications of drones. Students will select an area of business, industry, or government to apply drone piloting, data acquisition, data processing.

To earn the certificate of achievement students must complete the following courses with a “C” grade or higher.

<i>required courses:</i>		<i>units</i>
GEOG-164	Fundamentals of Drone Operations and Licensing	3
GEOG-165	Drone Remote Sensing	3

complete at least 6 units from one of the following groups:

geography and geospatial		
GEOG-120	Physical Geology.....	3
GEOG-125	Introduction to Geographic Information Systems (GIS).....	3
GEOG-129	Field Data Acquisition and Management	3
GEOG-160	Introduction to Remote Sensing	3

administration of justice		
ADJUS-203	Crime Scene Investigation	4
ADJUS-222	Criminal Investigation.....	3
ADJUS-250	Terrorism and Homeland Security.....	3

art digital media	
ARTDM-105	Introduction to Digital Imaging3
ARTDM-117	Digital Illustration.....3
ARTDM-136	Introduction to Digital Photography.....3
FTVE-160	Introduction to Film Production3
FTVE-165	Digital Editing3
biology and environmental science	
BIOSC-126	Ecology and Field Biology4
BIOSC-170	Environmental Science3
GEOG-140	Introduction to Weather3
business and entrepreneurship	
ARCHI-120	Introduction to Architecture and Environmental Design3
CONST-124	Construction Details and Specifications3
CONST-170	Fundamentals of Building Inspection3
CONST-298	Independent Study..... 0.5-3
RE-162	Real Estate Appraisal.....3
horticulture	
ARCLA-120	Introduction to Landscape Architecture and Environmental Design3
HORT-110	Introduction to Horticulture and Plant Science4
HORT-179	Arboriculture.....3
HORT-185	Site Analysis1.5
HORT-298	Independent Study.....0.5-3
total minimum required units	12

**Certificate of achievement
Geographic information systems/
Global positioning system**

Students completing the program will be able to...

- A. analyze the inter-disciplinary applications of GIS, GPS, and remote sensing.
- B. synthesize data from various sources and different formats for spatial analyses.
- C. apply spatial tools and techniques in a research or work environment.
- D. explain the fundamentals of geospatial technologies and how they operate.

The geographic information systems (GIS)/global positioning system (GPS) program is designed to prepare students for entry into careers that employ generalized or specialized applications of GIS. GIS is a versatile and powerful technology that allows data input, data management, analysis and display of result within a single setup. Most local, state, and federal government agencies use GIS, as do businesses, planners, architects, foresters, geologists and a host of other occupations. Students learn technical and analytical skills for research as well as practical skills necessary to enter the job market and obtain positions with such titles as GIS technician, GIS specialist, GIS analyst, GIS programmer, GIS coordinator, GIS supervisor and GIS manager.

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

<i>required courses:</i>	<i>units</i>
GEOG-125	Introduction to Geographic Information Systems (GIS).....3
GEOG-126	Advanced Geographic Information Systems.....3
GEOG-129	Field Data Acquisition and Management3
GEOG-160	Introduction to Remote Sensing4
GEOG-162	Map Design and Visualization.....3

plus at least 6 units from:

COMSC-101	Computer Literacy..... 4
COMSC-110	Introduction to Programming..... 4
COMSC-120	SQL Programming 4
COMSC-172	UNIX and Linux Administration..... 2
COMSC-255	Programming with Java 4

plus at least 6 units from:

BIOSC-126	Ecology and Field Biology4
BIOSC-170	Environmental Science3
ENGTC-126	Computer Aided Design and Drafting - AutoCAD.....3
GEOG-120	Physical Geography3
GEOG-124	Thinking and Communicating Geospatially.....3
GEOG-295	Occupational Work Experience Education in GEOG 2-4
GEOG-120	Physical Geology.....3

total minimum required units 28

**Certificate of accomplishment
Drone technology fundamentals**

Students completing this program will be able to...

- A. explain the basics of drone flight preparation.
- B. demonstrate how to download and post-process data acquired with drone.
- C. describe UAS laws, air space regulations, and licensing.
- D. demonstrate the procedures for analyzing data obtained during drone flight.

The drone technology certificate of accomplishment program is designed to prepare students to take the Federal Aviation Administration Part 107 commercial drone pilot exam and for entry into careers that employ generalized or specialized applications of drones.

To earn the certificate of accomplishment students must complete each course used to meet a certificate requirement with a "C" grade or higher.

<i>required courses:</i>	<i>units</i>
GEOG-164	Fundamentals of Drone Operations and Licensing3
GEOG-165	Drone Remote Sensing.....3

total minimum required units 6

**Certificate of accomplishment
Geographic information systems/
Global positioning system**

Students completing the program will be able to...

- A. analyze the inter-disciplinary applications of GIS, GPS, and remote sensing.
- B. synthesize data from various sources and different formats for spatial analyses.
- C. apply spatial tools and techniques in a research or work environment.
- D. understand the fundamentals of geospatial technologies and how they function.

The geographic information systems (GIS)/global positioning system (GPS) program is designed to prepare students for entry into careers that employ generalized or specialized applications of GIS. GIS is a versatile and powerful technology that allows data input, data management, analysis and display of result within a single setup. Most local, state, and federal government agencies use GIS, as do businesses, planners, architects, foresters, geologists and a host of other occupations. Students learn technical and analytical skills for research as well as practical skills necessary to enter the job market and obtain positions with such titles as GIS technician, GIS specialist, GIS analyst, GIS programmer, GIS coordinator, GIS supervisor and GIS manager.

To earn a certificate of accomplishment, students must complete each course used to meet a certificate requirement with a "C" grade or higher. Required courses are available in the evening and during the day.

<i>required courses:</i>	<i>units</i>
GEOG-125 Introduction to Geographic Information Systems (GIS).....	3
GEOG-126 Advanced Geographic Information Systems.....	3
GEOG-129 Field Data Acquisition and Management	3
 <i>plus at least 3 units from:</i>	
BIOSC-126 Ecology and Field Biology	4
BIOSC-170 Environmental Science	3
COMSC-120 SQL Programming.....	4
ENGTC-126 Computer Aided Design and Drafting - AutoCAD.....	3
GEOG-120 Physical Geography	3
GEOG-121 Physical Geography Laboratory	1
GEOG-124 Thinking and Communicating Geospatially.....	3
GEOG-160 Introduction to Remote Sensing.....	4
GEOG-162 Map Design and Visualization.....	3
GEOG-295 Occupational Work Experience Education in GEOG	2-4
GEOG-298 Independent Study.....	0.5-3
GEOL-120 Physical Geology.....	3
GEOL-122 Physical Geology Laboratory.....	1
total minimum required units	12

GEOG-120 Physical Geography

- 3 units SC
- IGETC: 5A; CSU GE: B1; DVC GE: II
- 54 hours lecture per term
- Advisory: MATH-085 or MATH-085SP or one year of high school algebra or equivalent

This course introduces the fundamental principles of physical geography. Focus is placed on providing 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. C-ID GEOG 110, CSU, UC

GEOG-121 Physical Geography Laboratory

- 1 unit SC
- IGETC: 5C; CSU GE: B3
- 54 hours laboratory per term
- Prerequisite: GEOG-120 or equivalent (may be taken concurrently)

This course is the laboratory component for Physical Geography (GEOG-120). Emphasis is placed on using the skills and tools of modern physical geography and analyzing and interpreting geographic data. Topics include maps, aerial photographs, satellite images, weather instruments and computer analysis. C-ID GEOG 111, CSU, UC

GEOG-124 Thinking and Communicating Geospatially

- 3 units SC
- 54 hours lecture per term

This course is designed to develop and promote critical thinking and understanding of spatial concepts, such as location, direction, movement, space and time, pattern and association through geographic information technologies. Students will compare, evaluate, and analyze how the techniques of GIS (Geographic Information Systems), GPS (Global Positioning Systems), RS (Remote Sensing), maps and cartography, mobile and online mapping are utilized for information gathering, resource management, problem solving, and decision making. CSU, UC

GEOG-125 Introduction to Geographic Information Systems (GIS)

- 3 units SC
- 54 hours lecture/18 hours laboratory per term
- Advisory: GEOG-124 or equivalent

This course provides an introduction to Geographic Information Systems (GIS) as a tool for spatial analysis. GIS concepts, techniques and methodologies are covered and laboratory activities are used to reinforce lecture concepts. The course provides preparation for advanced university level courses in spatial analysis or for entry level positions in GIS-related fields. C-ID GEOG 155, CSU, UC

GEOG-126 Advanced Geographic Information Systems

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

This course is an application of advanced analytical techniques of geographic information systems (GIS) to manipulate, analyze and predict spatial patterns. Topics include how GIS is used as a tool for decision making, environmental prediction, and problem solving. Students will work on individual projects to learn the various advanced applications of GIS. CSU

GEOG-129 Field Data Acquisition and Management

- 3 units SC
- 54 hours lecture per term
 - Advisory: GEOG-124 or equivalent

This course covers the fundamentals of the Global Positioning System (GPS) and Global Navigation Satellite System (GNSS) for data acquisition, management, and integration of data with Geographic Information Systems (GIS). Students will configure GPS/GNSS devices, acquire and process field data and export the information to a GIS platform for advanced analyses. CSU

GEOG-130 Cultural Geography

- 3 units SC
- IGETC: 4; CSU GE: D; DVC GE: IV
 - 54 hours lecture per term
 - Advisory: College-level reading and writing are expected.

This course examines the nature and causes of the spatial distribution of human activity. Phenomena such as population, language, religion, popular culture, agricultural practices, political structure, economic organization, settlement patterns, resource exploration, and technological innovation are examined in order to understand the interactive relationship between human beings and their environment. C-ID GEOG 120, CSU, UC

GEOG-135 World Regional Geography

- 3 units SC
- IGETC: 4; CSU GE: D; DVC GE: IV
 - 54 hours lecture per term

This course is a geographic perspective of physical, cultural, political, and economic characteristics of countries and regions of the world. Topics include a general survey of world place locations, influence of geographic factors on international cooperation and conflict, and a survey of the transformation of the cultural landscape of the United States. C-ID GEOG 125, CSU, UC

GEOG-140 Introduction to Weather

- 3 units SC
- IGETC: 5A; CSU GE: B1; DVC GE: II
 - 54 hours lecture per term
 - Advisory: Math-085 or MATH-085SP or beginning algebra or equivalent

This introductory course in meteorology 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. Climatology as a scientific study and the Earth's climatic history are introduced. The course examines current research in climate modeling and global climate change. C-ID GEOG 130, CSU, UC

GEOG-141 Introduction to Weather Laboratory

- 1 unit SC
- IGETC: 5C; CSU GE: B3
 - 54 hours laboratory per term
 - Co-requisite: GEOG-140 or equivalent (may be taken previously)
 - Advisory: MATH-085 or MATH-085SP or beginning algebra or equivalent

This laboratory course is a supplement to GEOG-140. It includes coverage of fundamental concepts in meteorology and measurement techniques including selected mathematical concepts used to develop 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 SC
- 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

- 3 units SC
- 36 hours lecture/54 hours laboratory per term
 - Advisory: COMSC-101 or equivalent

This course introduces the basic principles of remote sensing techniques, including aerial photographs, satellite and LIDAR images. We teach techniques to collect data about the earth, how to interpret such data and how to map with the help of image processing software. CSU, UC

GEOG-162 Map Design and Visualization

3 units SC

- 36 hours lecture/54 hours laboratory per term
- Advisory: MATH-085 or MATH-085SP or beginning algebra or equivalent

This course introduces basic principles of mapping and representation of spatial data using conventional and computerized cartographic techniques and is designed to develop a better understanding of maps, map design, and map-interpretation. Elements of map such as scale, distance, direction, and map projections as well as cartographic techniques of data analysis, processing, visualization, and representation are examined in detail. CSU, UC

GEOG-164 Drone Operations and Piloting

3 units SC

- 36 hours lecture/54 hours laboratory

This course introduces students to Unmanned Aerial Systems (UAS), the technologies involved and their operation. Course topics include safety procedures, flight operations, and basic UAS maintenance. The laboratory portion of the course provides students with hands-on experience with piloting Unmanned Aerial Vehicles (UAVs or “drones”). The course also prepares students for the Federal Aviation Administration (FAA) UAS pilot examination. FAA UAS certification (part 107) is required to operate UAVs commercially. CSU

GEOG-165 Drone Remote Sensing and Mapping

3 units LR

- 36 hours lecture/54 hours laboratory per term

This course introduces Unmanned Aerial System (UAS) operations, data acquisition, and data processing techniques. Topics include UAS safety procedures, air space restrictions, flight mission planning, and data processing. Federal Aviation Administration (FAA) regulations and the requirements for obtaining UAS pilot certification are presented. the laboratory component of the course will offer students experience with UAS flight operations, data processing, and analysis. CSU

GEOG-295 Occupational Work Experience Education in GEOG

2-4 units SC

- May be repeated eight times
- Variable hours
- Note: In order to enroll in GEOG-295, students must be employed, register for the course, complete an online Employment Form, and participate in an orientation. Incomplete grades are not awarded for this course.

GEOG-295 is supervised employment that extends classroom learning to the job site and relates to the student’s chosen field of study or area of career interest. Under the supervision of a college instructor, students will engage in on-the-job and other learning experiences that contribute to their employability skills and occupational or educational goals. Each unit represents five hours of work per week or 75 hours of work per term. Students may earn up to a total of 16 units in any combination of WRKX courses. Repetition allowed per Title 5 Section 55253. CSU

GEOG-298 Independent Study

.5-3 units SC

- Variable hours
- Note: Submission of acceptable educational contract to department and Instruction Office is required.

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. CSU

GEOG-299 Student Instructional Assistant

.5-3 units SC

- 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

Charles Ramos, Dean
 Sciences Division
 Physical Sciences Building, Room 263

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.

Associate in science degree Geology

Students completing the program will be able to...

- A. identify, describe, and classify earth materials, formations, and structures and interpret them in terms of geologic processes.
- B. synthesize information from a variety of physical science disciplines to solve geologic problems.
- C. develop and demonstrate analytical and critical thinking skills required for transfer into a four-year geologic science program.

The geology major at Diablo Valley College (DVC) prepares students to transfer to a University of California, California State University, or other baccalaureate-granting college or university to earn a bachelor’s degree in geology or other earth science.

The geology major at DVC consists of at least 38 units of study, including 8 units of geology where students will learn the fundamentals of geologic science and gain hands-on experience in geology laboratories. In addition, students will complete a year of calculus courses, a year of chemistry courses, and a year of physics courses that are typically required for a bachelor’s degree at baccalaureate-granting institutions. A list of electives including courses such as California Geology, Maps and Cartography, or Introduction to Field Geology allows the student to explore specific fields of greater interest.

The DVC geology 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 baccalaureate-granting institutions of their choice are met. Students who intend to transfer are advised to select General Education Option 2 (IGETC) or Option 3 (CSU GE). Option 1 (DVC General Education) is not generally advised.

To earn an associate in science degree with a major in geology, 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 major and general education requirements; however, the units are only counted once.

<i>Group 1: Core geology courses</i>		<i>units</i>
GEOL-120	Physical Geology.....	3
GEOL-121	Earth and Life Through Time	3
GEOL-122	Physical Geology Laboratory.....	1
GEOL-124	Earth and Life Through Time Laboratory	1

<i>Group 2: Core mathematics courses</i>		
<i>complete at least the first two courses (at least 10 units):</i>		
MATH-192	Analytic Geometry and Calculus I	5
MATH-193	Analytic Geometry and Calculus II	5
MATH-292	Analytic Geometry and Calculus III	5

<i>Group 3: Core chemistry courses</i>		
<i>complete 10 units from:</i>		
CHEM-120	General College Chemistry I.....	5
CHEM-121	General College Chemistry II.....	5

<i>Group 4: Core physics courses</i>		
<i>complete a minimum of two terms from one sequence (at least 8 units):</i>		
PHYS-130	Physics for Engineers and Scientists A: Mechanics and Wave Motion.....	4
PHYS-230	Physics for Engineers and Scientists B: Heat and Electro-Magnetism.....	4
PHYS-231	Physics for Engineers and Scientists C: Optics and Modern Physics.....	4
or		
PHYS-120	General College Physics I	4
PHYS-121	General College Physics II	4

<i>Group 5: Electives</i>		
<i>complete at least one course (2-4 units):</i>		
GEOG-125	Introduction to Geographic Information Systems (GIS).....	3
GEOG-160	Introduction to Remote Sensing	4
GEOG-162	Map Design and Visualization.....	3
GEOL-125	Geology of California	3
GEOL-135	Introduction to Field Geology	2
total minimum units for the major		38

Associate in science in geology for transfer

Students completing the program will be able to...

- A. identify, describe, and classify earth materials, formations, and structures and interpret them in terms of geologic processes.
- B. synthesize information from a variety of physical science disciplines to solve geologic problems.
- C. develop and demonstrate analytical and critical thinking skills required for transfer into a four-year geologic science program.

The associate in science in geology for transfer at Diablo Valley College (DVC) prepares students to transfer to a California State University (CSU) or other four-year college or university to earn a bachelor's of science degree in geology, geological science, or similarly named earth science field. In addition, the course work prepares students for a wide range of professional opportunities across many scientific disciplines.

The associate in science in geology for transfer consists of 28 units of study, including eight units of geology where students will learn the fundamentals of geologic science and gain hands-on experience in geology laboratories. In addition, students will complete a year of calculus courses and a year of chemistry courses. Though not specifically required by this transfer major, it is highly recommended that students also take a year of physics courses that are typically required for a bachelor's degree at four-year institutions.

The associate in science in geology for transfer is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major.

In order to earn the degree, students must:

- Complete 60 CSU-transferable units.
- Complete the California State University-General Education pattern (CSU GE); or the Intersegmental General Education Transfer Curriculum (IGETC) pattern, including the Area 1C requirement for Oral Communication.
- Complete a minimum of 18 units in the major.
- Attain a minimum grade point average (GPA) of 2.0.
- Earn a grade of "C" or higher in all courses required for the major.

Students transferring to a CSU campus that accepts the degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system, or those students who do not intend to transfer.

Some courses in the major satisfy both major and CSU GE/IGETC general education requirements; however, the units are only counted once toward the 60 unit requirement for an associate degree. 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.

<i>major requirements:</i>		<i>units</i>
CHEM-120	General College Chemistry I.....	5
CHEM-121	General College Chemistry II.....	5
GEOL-120	Physical Geology.....	3
GEOL-121	Earth and Life Through Time.....	3
GEOL-122	Physical Geology Laboratory.....	1
GEOL-124	Earth and Life Through Time Laboratory.....	1
MATH 192	Analytic Geometry and Calculus I.....	5
MATH 193	Analytic Geometry and Calculus II.....	5
total minimum units for the major		28

GEOL-120 Physical Geology

- 3 units SC
- *IGETC: 5A; CSU GE: B1; DVC GE: II*
 - *54 hours lecture per term*
 - *Advisory: MATH-085 or MATH-085SP or beginning algebra or equivalent. College-level reading and writing are expected.*

This is a general course in geologic science that encompasses nearly all phases of geology. Students will gain an appreciation and understanding of the fundamental processes that 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. Students will practice quantitative reasoning and mathematical concepts. C-ID GEOL 100, CSU, UC

GEOL-121 Earth and Life Through Time

- 3 units LR
- *IGETC: 5A; CSU GE: B1; DVC GE: II*
 - *54 hours lecture per term*
 - *Advisory: GEOL-120, GEOL-122 or equivalent*

This course introduces 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 that have led to the features that are observed today. C-ID GEOL 110, CSU, UC

GEOL-122 Physical Geology Laboratory

- 1 unit SC
- *IGETC: 5C; CSU GE: B3*
 - *54 hours laboratory per term*
 - *Co-requisite: GEOL-120 (may be taken previously) or equivalent*
 - *Advisory: MATH-085 or MATH-085SP or beginning algebra or equivalents*
 - *Note: Field trips may be included in the course*

This course is the laboratory component to Physical Geology (GEOL-120). Topics include the description and identification of minerals and all types of rocks, studies of topographic and geologic maps, as well as the internal structure of the earth using cross-sections. Laboratory studies of earthquakes, tectonic activity, and surficial features of the earth are included. C-ID GEOL 100L, CSU, UC

GEOL-124 Earth and Life Through Time Laboratory

1 unit LR

- *IGETC: 5C; CSU GE: B3*
- *54 hours laboratory per term*
- *Prerequisite: GEOL-121 or equivalent (may be taken concurrently)*

This course is the laboratory component to Earth and Life Through Time (GEOL-121) and focuses on the techniques of historical geological investigations. Laboratory activities include identification and interpretation of the basic rocks and minerals that make up the earth, as well as recognition and classification of common types of fossils. Topics include geologic dating, plate tectonics, stratigraphy, fossils, biological evolution, the planet's origin and the processes that have influenced paleogeography during the past 4.6 billion years. C-ID GEOL 110L, CSU, UC

GEOL-125 Geology of California

3 units SC

- *IGETC: 5A; CSU GE: B1; DVC GE: II*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

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. C-ID GEOL 200, CSU, UC

GEOL-130 Earth Science

4 units LR

- *IGETC: 5A, 5C; CSU GE: B1, B3; DVC GE: II*
- *54 hours lecture/54 hours laboratory per term*
- *Advisory: MATH-085 or MATH-085SP or beginning algebra or equivalent. College-level reading and writing are expected.*

This course introduces the essentials of earth science including the geosphere, atmosphere, hydrosphere, and solar system. The interactions between physical and chemical systems of the Earth such as the tectonic cycle, rock cycle, hydrologic cycle, weather and climate are explored. C-ID GEOL 121, 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 presents general field methods of geologic science. It 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. CSU, UC

GEOL-298 Independent Study

.5-3 units SC

- *Variable hours*
- *Note: Submission of acceptable educational contract to department and Instruction Office is required.*

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. CSU

GEOL-299 Student Instructional Assistant

.5-3 units SC

- *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

GERMAN – GRMAN

Janette Funaro, Dean
Arts and Communication Division

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 learning outcomes

Program learning outcomes are subject to change. The most current list of program learning outcomes for each program is published on the DVC website at www.dvc.edu/slo.

Associate in arts degree

German

Students completing the program will be able to...

- A. communicate verbally in the target language with accurate pronunciation in meaningful situation present in both informal and formal contexts.
- B. effectively apply rules of grammar and syntax in tandem with appropriate vocabulary in written and oral communication.
- C. demonstrate auditory comprehension of instruction, authentic content, and purposeful conversations in the target language.
- D. discuss, describe, and infer information from authentic texts in the target language.
- E. demonstrate cultural appreciation by making (comparative) connections, on both an individual and societal level, between the target cultures and students' own culture.
- F. create (write or present) narratives and/or arguments that demonstrate cohesive critical thinking in the target language.

The associate in arts degree in German at DVC will provide students with skills in understanding, speaking, reading and writing German. It also gives students a greater understanding of German culture and civilization and will prepare them for a broad range of international and domestic career opportunities and professions. The degree will also provide students the opportunity to transfer to UC, CSU and other four-year colleges and universities to earn a bachelor's degree.

The DVC German 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 baccalaureate-granting institutions of their choice are met. Students who intend to transfer are advised to select General Education Option 2 (IGETC) or Option 3 (CSUGE). Option 1 (DVC General Education) is appropriate for those students who do not intend to transfer. Students may not take a credit/no credit option for major courses and each of the major requirements must be completed with a "C" grade or higher. Certain courses may satisfy both a major and a general education requirement; however, the units are counted only once.

To earn an associate in arts degree in German, students must complete 20 units from the list of major requirements, which will provide students with the essential grammar of the language, culture and basic literature of the German-speaking countries. Students with no previous knowledge of German when entering DVC will take the first four courses in the list for a total of 20 units. If students enter the program with previous knowledge of German, they may start at the second term level and take fifth and sixth terms to achieve a total of 21 units.

<i>complete at least 20 units from:</i>	<i>units</i>
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
total minimum units for the major	20

Certificate of achievement

German

Students completing the program will be able to...

- A. communicate verbally in the target language with accurate pronunciation in meaningful situations present in both informal and formal contexts.
- B. effectively apply rules of grammar and syntax in tandem with appropriate vocabulary in written and oral communication.
- C. demonstrate auditory comprehension of instruction, authentic content, and purposeful conversations in the target language.
- D. discuss, describe, and infer information from authentic texts in the target language.
- E. demonstrate cultural appreciation by making (comparative) connections, on both an individual and societal level, between the target cultures and students' own cultures.
- F. create (write or present) narratives and/or arguments that demonstrate cohesive critical thinking in the target language.

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 the following list of courses. Students may not take a credit/no credit option for required courses and each course must be completed with a "C" grade or higher.

<i>complete at least 13 units from:</i>	<i>units</i>
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
total minimum required units	13

GRMAN-120 First Term German

5 units SC

- *IGETC: 6A*
- *90 hours lecture per term*
- *Note: This course is equivalent to two years of high school study.*

This course provides an introduction to the German language and the culture of German-speaking countries. Topics include the four language skills: speaking, listening, reading, and writing. Emphasis is placed on active use of the language in class as well as basic communicative functions and structures. CSU, UC

GRMAN-121 Second Term German

5 units SC

- *IGETC: 3B, 6A; CSU GE: C2; DVC GE: III*
- *90 hours lecture per term*
- *Prerequisite: GRMAN-120 or two years of high school study or equivalent*
- *Note: Students may meet equivalency in a variety of ways. Students should seek assistance at Admissions and Records.*

This is the second course in a sequence of German language courses. The course continues skill building in understanding, speaking, reading, and writing of the German language. The expansion of vocabulary and more advanced communicative functions and structures, as well as a deeper examination of the cultures of German-speaking countries are emphasized. CSU, UC

GRMAN-150 Topics in German

.3-4 units SC

- *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-220 Third Term German

5 units SC

- *IGETC: 3B, 6A; CSU GE: C2; DVC GE: III*
- *90 hours lecture per term*
- *Prerequisite: GRMAN-121 or three years of high school study or equivalent*
- *Note: Students may meet equivalency in a variety of ways. Students should seek assistance at Admissions and Records.*

This is the third term German course in the sequence that develops early intermediate fluency in understanding, speaking, reading and writing German. All verbal tenses are reviewed, expanded and refined. Advanced grammar concepts, new vocabulary and idiomatic expressions are introduced. Selected readings about the culture and literature of German speaking countries will be explored. This course is taught mainly in German. CSU, UC

GRMAN-221 Fourth Term German

5 units SC

- *IGETC: 3B, 6A; CSU GE: C2; DVC GE: III*
- *90 hours lecture per term*
- *Prerequisite: GRMAN-220 or four years of high school study or equivalent*
- *Note: Students may meet equivalency in a variety of ways. Students should seek assistance at Admissions and Records.*

This is the fourth term German course in the sequence that develops intermediate fluency in understanding, speaking, reading and writing German. The grammatical moods are reviewed and developed; the sequences of tenses are introduced. Additional vocabulary and idiomatic expressions are introduced and connected to the selected readings. These readings about German culture and literature will be analyzed. This course is taught mainly in German. CSU, UC

GRMAN-230 Fifth Term German

3 units SC

- *IGETC: 3B, 6A; CSU GE: C2; DVC GE: III*
- *54 hours lecture per term*
- *Prerequisite: GRMAN-221 or equivalent*
- *Note: Students may meet equivalency in a variety of ways. Students should seek assistance at Admissions and Records.*

This is the fifth term advanced German language course emphasizing reading, writing (prioritizing the mechanics of academic writing), listening, and speaking skills. The rich German heritage is explored through a wide range of materials including short stories, articles, poems, films, and documentaries. This course is taught almost entirely in German. CSU, UC

GRMAN-231 Sixth Term German

3 units SC

- IGETC: 3B, 6A; CSU GE: C2; DVC GE: III
- 54 hours lecture per term
- Prerequisite: GRMAN-230 or equivalent
- Note: Students may meet equivalency in a variety of ways. Students should seek assistance at Admissions and Records.

This is the sixth term advanced German language course strengthening reading, writing (prioritizing the mechanics of academic writing), listening, and speaking skills. The exploration of the rich German heritage is deepened through a wide range of materials including novels, articles, poems, films, documentaries, and dramas. This course is taught almost entirely in German. CSU, UC

GRMAN-299 Student Instructional Assistant

.5-3 units SC

- 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

See Public Health - PH

**HEATING, VENTILATION, AIR
CONDITIONING, REFRIGERATION -
HVACR**

Despina Prapavessi, Dean
Mathematics and Engineering Division
Mathematics Building, Room 263

Possible career opportunities

Upon successful completion of the Heating Ventilation Air Conditioning and Refrigeration (HVACR) program, students will have the necessary knowledge and skills for a career in residential, commercial, or industrial HVACR, including careers as Heating and Air Conditioning Mechanics and Installers and as Refrigeration Mechanics and Installers. Program content includes an introduction to the electrical and mechanical principles used in air conditioning and refrigeration, including meters, circuits, contactors, relays, thermostats, pressure switches, motors, overloads, controls, and boilers. Reading and drawing of schematic diagrams, troubleshooting, and safe electrical practices are also covered.

**Associate in science degree
Heating, ventilation, air conditioning, and
refrigeration (HVACR)**

Students completing the program will be able to...

- A. analyze the electrical parts of the refrigeration system.
- B. differentiate between many types of motor.
- C. distinguish between mechanical and electrical controls.
- D. demonstrate basic control design that have applications to the HVACR industry.
- E. identify the different types of controllers for the HVACR industry.
- F. use oral and written communication skills in the HVACR industry.

In collaboration with Plumbers-Steamfitters-Refrigeration Union Local 342 www.ua342.org, DVC currently offers three five-year apprenticeship programs: steamfitting, plumbing, and HVACR. Apprenticeship is training that is designed to prepare an individual for a career in the skilled crafts and trades. Apprentices develop technical skills, experience the sharing of assignments and see how technical tasks relate specifically with theoretical knowledge and interpretation. Apprentices earn a wage while learning. Enrollment in this program is restricted. You must be registered as an apprentice with the State of California to participate in the program and accepted into the apprenticeship program by our union partners.

While completing their HVACR apprenticeship, DVC students can earn awards at three levels of completion: a certificate of accomplishment, a certificate of achievement, and an associate in science degree. To earn an associate in science degree with a major in HVACR, students must complete 20 out of 31 core courses to meet their individual educational and career goals. In addition they must complete 18 general education 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.

<i>major requirements:</i>	<i>units</i>
<i>complete at least 30 units from:</i>	
HVACR-110 Electrical Theory I	1.5
HVACR-111 Mechanical Refrigeration Theory.....	1.5
HVACR-112 Electrical Theory II.....	1.5
HVACR-113 The Refrigeration Cycle	1.5
HVACR-114 Intermediate Electrical I	1.5
HVACR-115 Intermediate Mechanical Refrigeration I.....	1.5
HVACR-116 Intermediate Electrical II	1.5
HVACR-117 Intermediate Mechanical Refrigeration II.....	1.5
HVACR-118 Electrical Troubleshooting I	1.5
HVACR-119 Electrical Troubleshooting II.....	1.5
HVACR-120 Introduction to Direct Digital Controls.....	1.5
HVACR-121 Introduction to Variable Frequency Drives	1.5
HVACR-122 Introduction to Market Refrigeration Systems	1.5
HVACR-123 Introduction to Pneumatic Controls.....	1.5
HVACR-124 Introduction to Boilers.....	1.5
HVACR-125 Advanced Compressor and Motor Theory.....	1.5
HVACR-126 Start Test Balance: Water Side I.....	1.5
HVACR-127 Start Test Balance: Air Side I.....	1.5
HVACR-128 Start Test Balance: Water Side II.....	1.5
HVACR-129 Start Test Balance: Air Side II.....	1.5
total units for the major	30

**Certificate of achievement
Heating ventilation air conditioning and refrigeration (HVACR)**

- Students completing the program will be able to...
- A. compare a number of basic principles and laws of electricity as they relate to in AC refrigeration.
 - B. analyze the electrical parts of the refrigeration system.
 - C. differentiate between many types of motor.
 - D. distinguish between mechanical and electrical controls.
 - E. demonstrate basic control design that have applications to the HVACR industry.
 - F. identify the different types of controllers for the HVACR industry

In collaboration with Plumbers-Steamfitters-Refrigeration Union Local 342 www.ua342.org, DVC currently offers three five-year apprenticeship programs: steamfitting, plumbing, and HVACR. Apprenticeship is training that is designed to prepare an individual for a career in the skilled crafts and trades. Apprentices develop technical skills, experience the sharing of assignments and see how technical tasks relate specifically with theoretical knowledge and interpretation. Apprentices earn a wage while learning. Enrollment in this program is restricted. You must be registered as an apprentice with the State of California to participate in the program and accepted into the apprenticeship program by our union partners.

While completing their HVACR apprenticeship, DVC students can earn awards at three levels of completion: a certificate of accomplishment, a certificate of achievement, and an associate in science degree. To earn a certificate of achievement, students must complete 14 out of 18 core courses. 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. The courses required for the certificate of achievement also meet some of the requirements of the major for the associate in science degree.

<i>required courses:</i>	<i>units</i>
<i>complete at least 21 units from:</i>	
HVACR-112 Electrical Theory II.....	1.5
HVACR-113 The Refrigeration Cycle	1.5
HVACR-114 Intermediate Electrical I	1.5
HVACR-115 Intermediate Mechanical Refrigeration I.....	1.5
HVACR-116 Intermediate Electrical II	1.5
HVACR-117 Intermediate Mechanical Refrigeration II.....	1.5
HVACR-118 Electrical Troubleshooting I	1.5
HVACR-119 Electrical Troubleshooting II.....	1.5
HVACR-120 Introduction to Direct Digital Controls.....	1.5
HVACR-121 Introduction to Variable Frequency Drives	1.5
HVACR-122 Introduction to Market Refrigeration Systems.....	1.5
HVACR-123 Introduction to Pneumatic Controls.....	1.5
HVACR-124 Introduction to Boilers.....	1.5
HVACR-125 Advanced Compressor and Motor Theory.....	1.5
HVACR-126 Start Test Balance: Water Side I.....	1.5
HVACR-127 Start Test Balance: Air Side I.....	1.5
HVACR-128 Start Test Balance: Water Side II.....	1.5
HVACR-129 Start Test Balance: Air Side II.....	1.5
total minimum required units	21

**Certificate of accomplishment
Heating ventilation air conditioning and refrigeration (HVACR)**

- Students completing the program will be able to...
- A. identify tools and equipment, used in the industry.
 - B. demonstrate general safety practices.
 - C. compare a number of basic principles and laws of electricity as they relate to AC refrigeration.
 - D. analyze the electrical parts of the refrigeration system.
 - E. differentiate between many types of motor.
 - F. distinguish between mechanical and electrical controls.

In collaboration with Plumbers-Steamfitters-Refrigeration Union Local 342 www.ua342.org, DVC currently offers three five-year apprenticeship programs: steamfitting, plumbing, and HVACR. Apprenticeship is training that is designed to prepare an individual for a career in the skilled crafts and trades. Apprentices develop technical skills, experience the sharing of assignments and see how technical tasks relate specifically with theoretical knowledge and interpretation. Apprentices earn a wage while learning. Enrollment in this program is restricted. You must be registered as an apprentice with the State of California to participate in the program and accepted into the apprenticeship program by our union partners.

While completing their HVACR apprenticeship, DVC students can earn awards at three levels of completion: a certificate of accomplishment, a certificate of achievement, and an associate in science degree. To earn a certificate of accomplishment, students must complete five out of seven core courses. 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. The courses required for the certificate of accomplishment also meet some of the requirements of the certificate of achievement and major for the associate in science degree.

required courses: units

complete at least 7.5 units from:

HVACR-110	Electrical Theory I.....	1.5
HVACR-111	Mechanical Refrigeration Theory.....	1.5
HVACR-112	Electrical Theory II	1.5
HVACR-113	The Refrigeration Cycle.....	1.5
HVACR-114	Intermediate Electrical I.....	1.5
HVACR-115	Intermediate Mechanical Refrigeration I.....	1.5
HVACR-116	Intermediate Electrical II.....	1.5
	total minimum required units	7.5

HVACR-110 Electrical Theory I

1.5 units LR

- 18 hours lecture/36 hours laboratory per term
- Note: This program is sponsored by The United Association of Journeymen and Apprentices of the Plumbing and Pipefitting Industry of the United States and Canada and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the union local responsible for the section.

This course introduces concepts of electrical principles used in air conditioning and refrigeration. Topics include meters, circuits, contactors, relays, thermostats, pressure switches, motors, overloads, circuitry and troubleshooting. Kirchhoffs Law, and Ohms Law. Safety topics for the Heating Ventilation Air Conditioning and Refrigeration (HVACR) industry will also be covered.

HVACR-111 Mechanical Refrigeration Theory

1.5 units LR

- 18 hours lecture/36 hours laboratory per term
- 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 course presents the study of the design, assembly, and operation of compression systems. Topics include basic liquid and vapor control and metering devices as well as the design and construction of system piping including techniques of leak detection, dehydration of systems, charging methods, recovery and troubleshooting. In addition, safety, torch techniques, cutting, fitting, and brazing of various copper projects will be explored. Further, the techniques for isometric drawing and pipe symbols for soldering and brazing will be practiced.

HVACR-112 Electrical Theory II

1.5 units LR

- 18 hours lecture/36 hours laboratory per term
- Note: This program is sponsored by the United Association of Journeymen and Apprentices of the Plumbing and Pipefitting Industry of the United States and Canada and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the union local responsible for the section.

This course presents advanced concepts of electrical principles used in air conditioning and refrigeration. Topics include installation of heating, cooling, and refrigeration systems; basic electric motors and their components; contactors, relays, and overloads; thermostats, pressure switches, common electrical components used on a schematic, and other electric control devices; heating control devices; and troubleshooting.

HVACR-113 The Refrigeration Cycle

1.5 units LR

- 18 hours lecture/36 hours laboratory per term
- Note: This program is sponsored by the United Association of Journeymen and Apprentices of the Plumbing and Pipefitting Industry of the United States and Canada and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the union local responsible for the section.

This course covers the design, assembly and operation of refrigeration compression systems. Topics include charging, recovery, recycling, and reclamation; installation of heat pumps, safety procedures, leak testing and troubleshooting.

HVACR-114 Intermediate Electrical I

1.5 units LR

- 18 hours lecture/36 hours laboratory per term
- Note: This program is sponsored by the United Association of Union Plumbers, Fitters, Welders, and Service Technicians and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the union local responsible for the section.

This course introduces basic series and parallel circuits related to air conditioning (AC) and refrigeration. Motors, relays, contactors, thermostats, pressure switches and overloads will be examined and wired. Emphasis will be placed on electrical circuit troubleshooting.

HVACR-115 Intermediate Mechanical Refrigeration I

1.5 units LR

- 18 hours lecture/36 hours laboratory per term
- 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 course covers components and applications of refrigeration systems; electric, gas, oil, and alternative (stoves, fire-place inserts, and solar) heating; indoor air quality, comfort and psychometrics; and refrigeration applied to air conditioning.

HVACR-116 Intermediate Electrical II

1.5 units LR

- 18 hours lecture/36 hours laboratory per term
- Note: This program is sponsored by the United Association of Journeymen and Apprentices of the Plumbing and Pipefitting Industry of the United States and Canada and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the union local responsible for the section.

This course presents continued study of series and parallel circuits related to complex air conditioning (AC) and refrigeration systems. Advanced applications for motors, relays, contactors, thermostats, magnetic starters, pressure switches and overloads are examined and wired. Emphasis will be placed on electrical circuit troubleshooting.

HVACR-117 Intermediate Mechanical Refrigeration II

1.5 units LR

- 18 hours lecture/36 hours laboratory per term
- 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 course presents the practical and theoretical aspects of heating, air conditioning, and refrigeration (HVACR). Topics include gas controls, gas ignition systems, gas furnace troubleshooting and safety.

HVACR-118 Electrical Troubleshooting I

1.5 units LR

- 18 hours lecture/36 hours laboratory per term
- 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 course will cover advanced electrical controls with special emphasis on troubleshooting and repair. Topics include proportional controls, economizers and variable air volume (VAV) controls and motors. Safety procedures will be stressed.

HVACR-119 Electrical Troubleshooting II

1.5 units LR

- 18 hours lecture/36 hours laboratory per term
- 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 course presents additional topics in advanced electrical controls with emphasis on troubleshooting and repair. Topics include proportional, open/closed transition, pump, fans, economizers, and variable air volume (VAV) controls, as well as motor starting techniques including variable frequency drives (VFD). Safety procedures are also emphasized.

HVACR-120 Introduction to Direct Digital Controls

1.5 units LR

- 18 hours lecture/36 hours laboratory per term
- 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 course will cover direct digital controls (DDC) as they apply to the heating, air conditioning and refrigeration industry. Techniques to troubleshoot and diagnose hardware and software problems with DDC systems will be presented. The course includes hands-on wiring, testing, and programming of typical components found in the industry. Basic programming languages and pneumatic actuators to better understand the internal operation of the system will also be introduced.

HVACR-121 Introduction to Variable Frequency Drives

1.5 units LR

- 18 hours lecture/36 hours laboratory per term
- 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 course provides an introduction to variable frequency drives (VFD's), applications of use, and limited troubleshooting. Parameterization for start up, open loop, closed loop, floating point, and preset speed profiles will be covered.

HVACR-122 Introduction to Market Refrigeration Systems

1.5 units LR

- 18 hours lecture/36 hours laboratory per term
- *Note: This program is sponsored by the United Association of Journeymen and Apprentices of the Plumbing and Pipefitting Industry of the United States and Canada and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the union local responsible for the section.*

This course covers refrigeration equipment, cases, defrost methods, timers, control devices, oil float systems, and heat reclaim controls. Topics will include print reading, wiring and piping diagrams, and refrigeration schedule in a typical market setting. Operation and location of compressors, evaporators, condensers, refrigerated cases, walk-ins, heat reclaim, and connecting paraphernalia will also be presented.

HVACR-123 Introduction to Pneumatic Controls

1.5 units LR

- 18 hours lecture/36 hours laboratory per term
- *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 course presents the operation of direct and reverse acting controls, air compressors, sizing of valves and dampers, thermostats, auxiliary devices, transmitters, pneumatic and receiver controllers.

HVACR-124 Introduction to Boilers

1.5 units LR

- 18 hours lecture/36 hours laboratory per term
- *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 course covers the components and operation of boiler systems used in hotels, apartment buildings, schools, and other large institutions. A comprehensive overview of the safe and efficient operation of high pressure boilers and related equipment is provided, including the latest combustion control technology, and Environmental Protection Agency (EPA) regulations and their implications. This course is designed to prepare students for licensing examinations.

HVACR-125 Advanced Compressor and Motor Theory

1.5 units LR

- 18 hours lecture/36 hours laboratory per term
- *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 course presents reciprocating compressor disassembly and assembly. Topics include compressor function, safety, troubleshooting, alignment, and performance. Unloaders, oils, electrical, refrigerant gas, starters, and start-up procedures will also be explored.

HVACR-126 Start Test Balance: Water Side I

1.5 units LR

- 18 hours lecture/36 hours laboratory per term
- *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 course introduces the basic principles of air and water flow. The Mollier Diagram will be used to apply these principles to air conditioning and refrigeration.

HVACR-127 Start Test Balance: Air Side I

1.5 units LR

- 18 hours lecture/36 hours laboratory per term
- *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 course provides an overview of commercial air conditioning systems operations. Topics include direct expansion (DX) and chiller systems, fan types, pumps, boiler controls, related systems, and service methods. The use and application of heat load equations, charts, and procedures is introduced.

HVACR-128 Start Test Balance: Water Side II

1.5 units LR

- 18 hours lecture/36 hours laboratory per term
- *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 course describes proper procedures for start, test, and balance of air conditioning systems utilizing principles of air and water flow. Topics include sizing of refrigerant piping for liquid, the benefits of psychometrics on human comfort, fan laws, air movement, pumps, piping, evaporative cooling, and air and water measurement.

HVACR-129 Start Test Balance: Air Side II

1.5 units LR

- 18 hours lecture/36 hours laboratory per term
- 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 course provides an overview of commercial air conditioning systems emphasizing air distribution, heat flow, and service methods. Students will also investigate air measurement and the impact of duct design on air distribution.

HISTORY – HIST

Obed Vazquez, Dean

Social Sciences Division

Faculty Office Building, Room 136

Possible career opportunities

The study of history contributes to cultural literacy, developing 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.

Associate in arts in history for transfer

Students completing the program will be able to...

- understand and value the importance of diverse perspectives in history.
- analyze the causes and the effects of historical events.
- apply critical thinking strategies to better understand and explain why historical events occurred and how those events affected various populations.
- evaluate, using critical thinking strategies, how interpretations of historical events can be disputed.

The associate in arts in history for transfer is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major.

In order to earn the degree, students must:

- Complete 60 CSU-transferable units.
- Complete the California State University-General Education pattern (CSU GE); or the Intersegmental General Education Transfer Curriculum (IGETC) pattern, including the Area 1C requirement for Oral Communication.
- Complete a minimum of 18 units in the major.
- Attain a minimum grade point average (GPA) of 2.0.
- Earn a grade of "C" or higher in all courses required for the major.

Students transferring to a CSU campus that accepts the degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system, or those students who do not intend to transfer.

Some courses in the major satisfy both major and CSU GE/IGETC general education requirements; however, the units are only counted once toward the 60 unit requirement for an associate degree. 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:

	<i>units</i>
HIST-120 History of the United States before 1865	3
HIST-121 History of the United States after 1865	3

plus at least 3 units from:

HIST-140 History of Western Civilization to the Renaissance	3
HIST-180 World History to 1500	3

plus at least 3 units from:

HIST-141 History of Western Civilization since the Renaissance	3
HIST-181 World History since 1500	3

*plus at least 3 units from:**any course not used above, or:*

HIST-124 History of California	3
HIST-125 History of the United States: A Mexican American Perspective	3
HIST-126 The American West	3
HIST-127 African American Perspective History of the US to 1865	3
HIST-128 African American Perspective History of the US after 1865	3
HIST-129 History of Asians and Pacific Islanders in the United States	3
HIST-135 History of Latin America-The Colonial Period	3
HIST-136 History of Latin America-The National Period	3
HIST-150 History of East Asia (to 1600)	3
HIST-151 History of East Asia (from 1600- Present)	3
HIST-170 History of Women in the United States before 1877	3
HIST-171 History of Women in the United States after 1865	3

*plus at least 3 units from:**any course not used above, or:*

HIST-122 Critical Reasoning in History	3
HIST-142 Contemporary European History	3

total minimum units for the major 18

HIST-120 History of the United States before 1865

- 3 units SC
- *IGETC: 3B, 4; CSU GE: C2, D; DVC GE: III, IV*
 - *54 hours lecture per term*
 - *Advisory: College-level reading and writing are expected.*

This course presents a multicultural history of the United States before 1865. Students will explore social, political, cultural and economic experiences and contributions of African American, Asian American, European American, Latinx American, and Native American men and women in the development of United States society. The origins, nature, and impact of the U.S. Constitution on United States history before 1865 including the political philosophies of the framers, the operation of political institutions, and the rights and obligations of citizens will also be covered. C-ID HIST 130, CSU, UC

HIST-121 History of the United States after 1865

- 3 units SC
- *IGETC: 3B, 4; CSU GE: C2, D; DVC GE: III, IV*
 - *54 hours lecture per term*
 - *Advisory: College-level reading and writing are expected.*

This course presents a multicultural history of the United States from 1865 to present. Students will explore social, political, cultural, and economic factors in the development of the United States. Topics will include the operation and the continuing evolution of local, state and federal governments under the U.S. and California constitutions and the experiences of groups from diverse backgrounds such as European Americans, Asian Americans, African Americans, Native Americans and Latinx Americans. The growing international role of the United States from the late nineteenth century to the present will also be examined. C-ID HIST 140, CSU, UC

HIST-122 Critical Reasoning in History

- 3 units SC
- *IGETC: 1B; CSU GE: A3; DVC GE: IB*
 - *54 hours lecture per term*
 - *Prerequisite: ENGL-122 or equivalent*

This course presents the processes of questioning, analyzing, and evaluating oral and written ideas, concepts, and interpretations of the past. The principles of inductive and deductive reasoning are applied to examine historical viewpoints, gather and organize historical information, recognize historical relationships and patterns, and assess the relevance of history to current events and issues. CSU, UC

HIST-124 History of California

- 3 units SC
- *IGETC: 3B, 4; CSU GE: C2, D; DVC GE: III, IV*
 - *54 hours lecture per term*
 - *Advisory: College-level reading and writing are expected.*

This course is a survey of the history of California from pre-conquest to the present. The course highlights California Constitutions, the formation and growth of state and local governments, and the unique social, political, economic and cultural forces that spurred the development of modern California. Topics will include the role of Native Americans, immigration, geography, war, and natural resources in the formation of a vibrant and multicultural California. CSU, UC

HIST-125 History of the United States: A Mexican American Perspective

- 3 units SC
- *IGETC: 3B, 4; CSU GE: C2, D; DVC GE: III, IV*
 - *54 hours lecture per term*
 - *Advisory: College-level reading and writing are expected.*

This course presents an overview of United States (U.S.) history from 1848 to the present with an emphasis on the role of peoples of Mexican-origin -- both immigrants and U.S. born. History from social, political, economic, and cultural perspectives will be examined. The contributions of Mexican-origin people to the multicultural development of contemporary American society, including their interaction with other Latino communities, as well as people of European, African, Asian, and Native descent are emphasized. The impact of U.S. attitudes and policies on peoples of Mexican-origin will also be addressed. CSU, UC

HIST-126 The American West

- 3 units SC
- *IGETC: 3B, 4; CSU GE: C2, D; DVC GE: III, IV*
 - *54 hours lecture per term*
 - *Advisory: College-level reading and writing are expected.*

This course surveys the movement of the American people from the Atlantic seaboard across North America and into the Pacific, including the history of western half of the current United States of America. Focusing on the Westward Movement during the nineteenth century, this course examines the historical experience from a social, political, economic, and cultural perspective into the present. The role of the diverse ethnic and racial communities of the West and their interaction with one another, their contributions to the construction of the American national character, and the experience of "the West" as a moving borderland with other nations, societies and cultures will also be emphasized. CSU, UC

HIST-127 African American Perspective History of the US to 1865

3 units SC

- IGETC: 3B, 4; CSU GE: C2, D; DVC GE: III, IV
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This course presents a survey of the history of the United States from the perspective of African Americans and compares the African experience with the experiences of Europeans, Native Americans, Asian Americans and Mexicans/Mexican Americans. Early African presence in the Americas, the trade in African slaves, and the political, economic, demographic and cultural influences shaping African American life and culture prior to 1865 will be examined. The U.S. government and the Constitution, the California government and Constitution, and other constitutional models for comparison and contrast will also be covered. CSU, UC

HIST-128 African American Perspective History of the US after 1865

3 units SC

- IGETC: 3B, 4; CSU GE: C2, D; DVC GE: III, IV
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This course presents a survey of the history of the United States from the perspective of African Americans and compares the African American experience with that of Native peoples, Europeans, Asian Americans and Hispanics/Latinos after 1865. The course explores the economic, cultural, institutional, political history of African Americans from the post-Civil War period to the present. The African American relationship with national, California state and local governments will also be covered. CSU, UC

HIST-129 History of Asians and Pacific Islanders in the United States

3 units SC

- IGETC: 3B, 4; CSU GE: C2, D; DVC GE: III, IV
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This course provides a comparative analysis of Asian American History from 1848 to the present. Topics include an exploration of Asian American perspectives; immigration and settlement patterns; labor, legal, political and social history. A comparative historical approach, placing Asian immigration within the context of global interdependence and inequality, frames the course materials. This course will examine migration theories and patterns, the politics and policies of U.S. immigration, resettlement patterns, and the reconstruction of identities and social networks. The three periods of Asian Immigration: Before World War II; during and after World War II and the Cold War; and after 1965 to the present will be explored. CSU, UC

HIST-135 History of Latin America - The Colonial Period

3 units SC

- IGETC: 3B, 4; CSU GE: C2, D; DVC GE: III, IV
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This course introduces the student to the history of colonial Latin America from 1492 through the European conquest, the creation of new empires, and the subsequent fall of the latter in the first two decades of the 19th century. Students will examine 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. The connections of past and present in the Latin American world including early Latin-American history from pre-Columbian indigenous cultures through the early nineteenth century independence movements will also be explored. CSU, UC

HIST-136 History of Latin America - The National Period

3 units SC

- IGETC: 3B, 4; CSU GE: C2, D; DVC GE: III, IV
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This course surveys the history of Latin America during the National Period (from independence to the present), considering the legacies of conquest and 300 years of Spanish colonialism. Latin American political, economic, social and cultural development from the 19th to 21st centuries is examined using specific countries and regions as case studies. 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 is also explored. CSU, UC

HIST-140 History of Western Civilization to the Renaissance

3 units SC

- IGETC: 3B, 4; CSU GE: C2, D; DVC GE: III, IV
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This course presents the history of modern civilization from the ancient world to the Renaissance (circa 1500). Political, economic, social, cultural, and intellectual developments and relationships in the western world are examined. C-ID HIST 170, CSU, UC

HIST-141 History of Western Civilization since the Renaissance

- 3 units SC
- IGETC: 3B, 4; CSU GE: C2, D; DVC GE: III, IV
 - 54 hours lecture per term
 - Advisory: College-level reading and writing are expected.

This course presents the history of western civilization from the 16th century to the present time. Emphasis is placed on the emergence of Europe's unique social structures and development, tracing political, economic, social, cultural, and intellectual change from the late medieval to the contemporary era. The development of modern Europe will be explored in its global context, addressing important issues such as class, gender, race, religion, empire, power, and equality. C-ID HIST 180, CSU, UC

HIST-142 Contemporary European History

- 3 units SC
- IGETC: 3B, 4; CSU GE: C2, D; DVC GE: III, IV
 - 54 hours lecture per term
 - Advisory: College-level reading and writing are expected.

This course is a study of political, social, economic and cultural developments in recent European history from the late 19th century to the present. Students will examine the influence of Europe in international events since the late 19th century. Emphasis is placed on the impact of ideologies, the origins of wars, the ongoing effects of conflict, and progress toward coexistence. The impact of United States foreign policy in twentieth century Europe will be explored, as will the important process of decolonization and the European Union. CSU, UC

HIST-150 History of East Asia (to 1600)

- 3 units SC
- IGETC: 3B, 4; CSU GE: C2, D; DVC GE: III, IV
 - 54 hours lecture per term
 - Advisory: College-level reading and writing are expected.

This course offers a 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
- IGETC: 3B, 4; CSU GE: C2, D; DVC GE: III, IV
 - 54 hours lecture per term
 - Advisory: College-level reading and writing are expected.

This course presents the history of East Asia, from the 17th century to the present with emphasis on China and Japan. The history of Korea and Vietnam will also be considered. CSU, UC

HIST-155 Topics in History

- .3-4 units SC
- 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-170 History of Women in the United States before 1877

- 3 units SC
- IGETC: 3B, 4; CSU GE: C2, D; DVC GE: III, IV
 - 54 hours lecture per term

This course is a survey of United States history before 1877, with an emphasis on women's life experiences within the context of broader historical change. We will examine the commonalities of women's experiences and explore the impacts of race, law, ethnicity, class, and region on women's lives. This course also explores how women both fostered and were affected by social, political, economic, legal and cultural transformations in the United States. The impact of the U.S. and California Constitutions on women's life experiences and the activities of federal, state, and local governments will also be assessed. CSU, UC

HIST-171 History of Women in the United States after 1865

- 3 units SC
- IGETC: 3B, 4; CSU GE: C2, D; DVC GE: III, IV
 - 54 hours lecture per term
 - Advisory: College-level reading and writing are expected.

This course is a survey of United States history, after 1865 to present, emphasizing women's life experiences within the context of larger historical changes. Students will examine the commonalities of women's experiences and explore the impacts of race, class, gender, and region on women's lives. This course will explore how women fostered and were affected by social, political, economic, and cultural transformations in the United States. The impact of the U.S. and California Constitutions and the activities of federal, state, and local governments on the experiences of women will also be covered. CSU, UC

HIST-180 World History to 1500

3 units SC

- IGETC: 3B, 4; CSU GE: C2, D; DVC GE: III, IV
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This course presents a broad survey of world history, emphasizing the dynamic interaction of cultures and peoples and the broad patterns of global history to 1500 CE. This course examines the key social, political, economic, cultural, and intellectual forces that shaped the major world civilizations. While the legacy of these major civilizations will be emphasized, less influential societies are also examined for perspective. C-ID HIST 150, CSU, UC

HIST-181 World History since 1500

3 units SC

- IGETC: 3B, 4; CSU GE: C2, D; DVC GE: III, IV
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This course surveys world history from 1500 CE to the present, with an emphasis on the dynamic interaction of cultures and societies around the globe. The course considers the social, political, economic, cultural, and intellectual forces that shaped the major societies and less influential ones. The course examines the legacy of these forces worldwide and their contributions to present-day circumstances, including on going tensions between tradition and modernity. Specifically, it transcends nationalist versions of history to connect the histories of people worldwide through the methodology of World History. C-ID HIST 160, CSU, UC

HIST-298 Independent Study

.5-3 units SC

- Variable hours
- Note: Submission of acceptable educational contract to department and Instruction Office is required.

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. CSU

HIST-299 Student Instructional Assistant

.5-3 units SC

- 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

Charles Ramos, Dean

Sciences Division

Physical Sciences Building, Room 263

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.

Associate in science in agriculture plant science for transfer**Students completing this program will be able to...**

- recognize and remediate soil properties in terms of chemistry, plant growth requirements, erosion, organic content, pore space and carbon sequestration.
- produce plants using sexual and asexual methods of propagation, identifying water, nutrient, light, pH and temperature requirements per crop to produce crop production cost estimates.
- evaluate, formulate, and apply needed nutrients for specific crops grown on given soils on a seasonal basis.
- demonstrate pest problem solving skills through data analysis of biological and environmental factors influencing pest populations and application of integrated pest management options.
- describe how markets function as applied to plant science.

The associate in science in agriculture plant science for transfer degree (AS-T in Agriculture Plant Science) provides students with courses aligned for transfer to the California State University plant science baccalaureate majors and courses in agriculture plant sciences. Potential careers include: Pest Control Advisor (PCA), farm management positions, landscape design, greenhouse manager, quality control manager, county and governmental compliance inspector, sales and marketing of seed and crop related materials. Courses include soils, plant propagation, plant identification, plant pest control, and water management.

Students transferring to a CSU campus that accepts this degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. Students should consult with a counselor for more information on specific university admission and transfer requirements.

Horticulture

In order to earn the degree, students must:

- Complete 60 semester CSU-transferable units.
- Complete the California State University-General Education-Breadth pattern (CSU GE-Breadth); or the Intersegmental General Education Transfer Curriculum (IGETC) pattern, including the Area 1C requirement for Oral Communication.
- Complete a minimum of 18 semester units in the major.
- Obtain a minimum grade point average (GPA) of 2.0.
- Earn a grade of “C” or higher in all courses required for the major.

Students transferring to a CSU campus that accepts the degree will be required to complete no more than 60 units after transfer to earn a bachelor’s degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to university or college that is not part of the CSU system, or those students who do not intend to transfer.

Some courses in the major satisfy both major and CSUGE/IGETC general education requirements; however, the units are only counted once toward the 60-unit requirement for an associate’s degree. 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.

<i>major requirements:</i>	<i>units</i>
HORT-110 Introduction to Horticulture and Plant Science	4
HORT-120 Soil Science and Management	3
HORT-121 Soil Science and Management Laboratory	1
CHEM-108 Introductory Chemistry	4
or	
CHEM-120 General College Chemistry I	5
ECON-221 Principles of Microeconomics	3
BUS-240 Business Statistics	3
or	
MATH-142 Elementary Statistics with Probability	4
or	
MATH-144 Statway II	4

plus at least 3 units from:

HORT-111* Plant Propagation and Production: Winter and Spring	3
and	
HORT-112* Plant Propagation and Production: Summer and Fall	3
HORT-113 Plant Materials and their Uses: Winter and Spring	3
HORT-114 Plant Materials and their Uses: Summer and Fall	3
CHEM-226 Organic Chemistry I	5

total minimum required units 21

**must take both as equivalent to C-ID AG-EH 116 L*

Certificate of achievement Arboriculture

Students completing the program will be able to...

- identify commonly planted trees in local landscapes.
- use dichotomous keys to correctly identify tree species.
- use site analysis data to determine appropriate tree species.
- explain how trees should be planted, staked, pruned, and irrigated.
- identify common insect pests and disease pathogens of common trees.
- assess tree health and recognize potential hazards.
- interpret local tree ordinance regulations for county residents.
- describe tree selection mistakes.
- demonstrate techniques to mitigate tree pruning errors.

This certificate of achievement prepares students for employment as arborists in a variety of settings including public and private gardens, parks, golf courses, institutions, municipalities, utilities, government agencies, and commercial and residential tree care services. It includes classroom, laboratory, and work experience/internships. Completion of the certificate requirements will also prepare students to sit for the International Society of Arboriculture (ISA) certification.

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/or on weekends.

<i>required courses:</i>	<i>units</i>
HORT-110 Introduction to Horticulture	4
HORT-120 Soil Science and Management	3
HORT-125 Integrated Pest Management	3.5
HORT-170 Woody Plants: Identification and Maintenance	4
HORT-171 Pruning Laboratory	1
HORT-179 Arboriculture	4
HORT 185 Site Analysis	1.5
HORT-187 Sustainable Water Practices	3

plus at least 2 units from:

HORT-296 Internship Occupational Work Experience Education in HORT	2-4
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total minimum required units 26

Certificate of achievement Arboriculture entrepreneurship

Students completing this program will be able to...

- A. implement tree trimming safety procedures.
- B. use field examinations to determine tree problems.
- C. diagnose woody plant suitability for given sites.
- D. recognize species and the characteristics of a given species.
- E. construct a business plan and essential financial documents for a small business.
- F. describe basic accounting and marketing knowledge to support a business.

This certificate of achievement adds business courses to the Tree Technician Certificate of Accomplishment. The additional coursework provides the business skills needed to start and run arboriculture businesses or enhance employability in local arboriculture businesses.

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/or on weekends.

<i>required courses:</i>	<i>units</i>
HORT-110 Introduction to Horticulture and Plant Science.....	4
HORT-170 Woody Plants: Identification and Maintenance.....	4
HORT-171 Pruning Laboratory.....	1
HORT-179 Arboriculture.....	4

<i>plus at least 3 units from:</i>	
BUSMG-191 Small Business Management	3
BUSMG-192 Entrepreneurship and Venture Management	3

<i>plus at least 3 units from:</i>	
BUSAC-185 QuickBooks Accounting for Business I.....	1.5
BUSAC-188 QuickBooks Accounting for Business II.....	1.5
BUSMK-259 Digital Marketing Fundamentals.....	3
BUSMK-260 Social Media Marketing	3

total minimum required units.....19

Certificate of achievement Landscape design

Students completing the program will be able to...

- A. develop fundamental designer and client communication techniques.
- B. perform a site analysis and inventory.
- C. recognize and develop a personal landscape design process.
- D. create presentations through graphic sketching and drafting.
- E. identify plant and non-plant material suitable for specific site design.
- F. produce a portfolio and related documents necessary to enter the marketplace

This certificate presents the fundamental skills used by landscape designers. Using hand-drawing and digital tools, students will develop designs based upon environments typical of residential and small commercial landscape sites. Through portfolio development and presentations, students will emulate the industry practice of designer/client interaction.

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/or on weekends.

<i>required courses:</i>		<i>units</i>
ARCLA-120 Introduction to Landscape Architecture and Environmental Design		3
ARCLA-121 Landscape Design		3
ARCLA-130 Landscape Design and Graphics		3
HORT-110 Introduction to Horticulture and Plant Science...4		
HORT-120 Soil Science and Management.....		3
HORT-185 Site Analysis		1.5
HORT-187 Sustainable Water Management.....		3

<i>plus at least 3 units from:</i>	
HORT-113 Plant Materials and their Uses: Winter and Spring	3
HORT-114 Plant Materials and their Uses: Summer and Fall	3

<i>plus at least 3 units from:</i>	
ARCHI-135 Digital Tools for Design	3
ARCHI-136 Digital Tools for Architecture	3
total minimum required units	26.5

Certificate of achievement Landscape design entrepreneurship

Students completing this program will be able to...

- A. apply principles of planting design theory to landscape design projects.
- B. prepare rendered documents for presentation.
- C. prepare professional level planting plans and schedules, estimating quantity and sizes of plants required.
- D. construct a business plan and essential financial documents for a small business.
- E. describe basic accounting and marketing knowledge to support a business.

This certificate of achievement adds business courses to the Landscape Design Fundamentals Certificate of Accomplishment. The additional coursework provides the business skills needed to start and run landscape design businesses or to enhance employability in local landscaping businesses.

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/or on weekends.

<i>required courses:</i>		<i>units</i>
ARCLA-130 Landscape Drafting and Graphics.....		3
HORT-110 Introduction to Horticulture and Plant Science.....		4
HORT-185 Site Analysis.....		1.5

<i>plus at least 3 units from:</i>	
HORT-113 Plant Materials and their Uses: Winter and Spring	3
HORT-114 Plant Materials and their Uses: Summer and Fall	3

Horticulture

plus at least 3 units from:

BUSMG-191 Small Business Management	3
BUSMG-192 Entrepreneurship and Venture Management	3

plus at least 3 units from:

BUSAC-185 QuickBooks Accounting for Business I	1.5
BUSAC-188 QuickBooks Accounting for Business II	1.5
BUSMK-259 Digital Marketing Fundamentals	3
BUSMK-260 Social Media Marketing	3

total minimum required units 17.5

Certificate of achievement Master grower

Students completing this program will be able to...

- describe specific environmental and cultural requirements to grow common plants.
- describe the pests and control methods for pests common to controlled environment plant production
- identify the requirements for successful seed and vegetative propagation of cannabis.
- construct a business plan and essential financial documents for a small business.
- describe basic accounting and marketing knowledge to support a business.

This certificate of achievement will allow students who are interested in becoming Master Growers to develop the business skills needed to start and run their own nurseries and greenhouses as Master Growers or to increase their employability in local businesses.

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/or on weekends.

required courses:	units
HORT-110 Introduction to Horticulture and Plant Science	4
HORT-125 Integrated Pest Management	3.5
HORT-151 Controlled Environment Growing (CEG): Methods of Plant Production	3

plus at least 3 units from:

HORT-163 Nursery and Greenhouse Practices: Summer/Fall	3
HORT-168 Nursery and Greenhouse Practices: Winter/Spring	3

plus at least 3 units from:

BUSMG-191 Small Business Management	3
BUSMG-192 Entrepreneurship and Venture Management	3

plus at least 3 units from:

BUSAC-185 QuickBooks Accounting for Business I	1.5
BUSAC-188 QuickBooks Accounting for Business II	1.5
BUSMK-259 Digital Marketing Fundamentals	3
BUSMK-260 Social Media Marketing	3

total minimum required units 19.5

Certificate of achievement Nursery and greenhouse

Students completing the program will be able to...

- identify, alleviate, and recommend treatment for diseases and pathogens.
- describe specific environmental and cultural requirements to grow seasonal common plants.
- select plants based on analysis of a specific landscape setting.
- maintain and support nursery operations.
- describe and differentiate among physical and growth characteristics of common seasonal plants.
- group plants according to water needs (zoning).
- implement safety and procedures.

This certificate provides the skills needed to work in the local nursery industry including plant identification, plant propagation, labeling, nursery sales, marketing and nursery management. The program includes lectures, laboratory, and work experience.

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/or on weekends.

required courses:	units
HORT-110 Introduction to Horticulture and Plant Science	4
HORT-113 Plant Materials and their Uses: Winter and Spring	3
HORT-114 Plant Materials and their Uses: Summer and Fall	3
HORT-163 Nursery and Greenhouse Practices: Summer/Fall	3
HORT-183 Garden Design	1.5
HORT-185 Site Analysis	1.5
HORT-187 Sustainable Water Management	3

plus at least 2 units from:

HORT-296 Internship in Occupational Work Experience Education in HORT	2-4
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plus at least 3 units from:

HORT-111 Plant Propagation and Production: Winter and Spring	3
HORT-112 Plant Propagation and Production: Summer and Fall	3

total minimum required units 24

Certificate of achievement – Nursery and greenhouse entrepreneurship

Students completing this program will be able to...

- A. identify, alleviate and recommend treatment for diseases and pathogens.
- B. describe specific environmental and cultural requirements to grow seasonal common plants.
- C. maintain and support nursery operations.
- D. construct a business plan and essential financial documents for a small business.
- E. describe basic accounting and marketing knowledge to support a business.

This certificate of achievement adds business courses to the Nursery Technician Certificate of Accomplishment. The additional coursework provides the business skills needed to start and run nurseries and greenhouses or to enhance employability in local nursery and greenhouse businesses.

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/or on weekends.

<i>required courses:</i>		<i>units</i>
HORT-110	Introduction to Horticulture and Plant Science.....	4
<i>plus at least 3 units from:</i>		
HORT-163	Nursery and Greenhouse Practices: Summer/Fall	3
HORT-168	Nursery and Greenhouse Practices Winter/Spring	3
<i>plus at least 3 units from:</i>		
HORT-111	Plant Propagation and Production: Winter and Spring	3
HORT-112	Plant Propagation and Production: Summer and Fall	3
<i>plus at least 3 units from:</i>		
BUSMG-191	Small Business Management.....	3
BUSMG-192	Entrepreneurship and Venture Management.....	3
<i>plus at least 3 units from:</i>		
BUSAC-185	QuickBooks Accounting for Business I	1.5
BUSAC-188	QuickBooks Accounting for Business II	1.5
BUSMK-259	Digital Marketing Fundamentals.....	3
BUSMK-260	Social Media Marketing.....	3
total minimum required units.....		16

Certificate of achievement Plant science and horticulture

Students completing the program will be able to...

- A. integrate the knowledge of higher plant functions with site analysis
- B. describe local geographical features and their relationship to soils.
- C. select appropriate plants for specific environmental conditions.
- D. apply appropriate plant pruning techniques.
- E. demonstrate proper use of botanical nomenclature.
- F. identify exotic and native woody plants.
- G. explain the effects of temperature, water, humidity, and fertility on winter and spring plant growth,
- H. apply learned skills to gardens.

This certificate program is designed to prepare students with the skills, knowledge, and training to enter into local green industry jobs in fields such as landscape installation, maintenance, park service, plant propagation, nursery, and remediation. The certificate provides a strong foundation for students who intend to pursue a baccalaureate degree in horticulture, plant science, and agriculture majors.

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 evenings and/or weekends.

<i>required courses:</i>		<i>units</i>
HORT-110	Introduction to Horticulture and Plant Science	4
HORT-120	Soil Science and Management.....	3
HORT-121	Soil Science and Management Laboratory.....	1
HORT-171	Pruning Laboratory	1
HORT-187	Sustainable Water Management.....	3
<i>plus at least 2 units from:</i>		
HORT-296	Internship in Occupational Work Experience Education in HORT	2-4
<i>plus at least 3 units from:</i>		
HORT-113	Plant Materials and their Uses: Winter and Spring	3
HORT-114	Plant Materials and their Uses: Summer and Fall	3
<i>plus at least 4 units from:</i>		
CONST-135	Construction Processes: Residential	4
HORT-170	Woody Plants: Identification and Maintenance.....	4
<i>plus at least 3 units from:</i>		
HORT-111	Plant Propagation and Production: Winter and Spring	3
HORT-112	Plant Propagation and Production: Summer and Fall	3
total minimum required units		24

**Certificate of accomplishment
Horticulture technician**

Students completing the program will be able to...

- A. integrate the knowledge of higher plant functions with site analysis.
- B. describe local geographical features and their relationship to soils.
- C. describe the relationship between plants, soil and water.
- D. evaluate plant pruning needs.

This certificate introduces students to the comprehensive field of plant science and horticulture, the green industry. Green industry professionals are responsible for nurturing and protecting our natural resources and integrating them into the built environment. This foundational certificate can lead to further study in the fields of landscape installation, maintenance, park service, plant propagation, nursery, and remediation.

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 evenings and/or weekends.

<i>required courses:</i>	<i>units</i>
HORT-110 Introduction to Horticulture and Plant Science	4
HORT-120 Soil Science and Management	3
HORT-171 Pruning Laboratory	1
HORT-187 Sustainable Water Management.....	3
total minimum required units	11

**Certificate of accomplishment
Landscape design fundamentals**

Students completing the program will be able to...

- A. apply principles of planting design theory to landscape design projects.
- B. prepare rendered documents for presentation.
- C. prepare professional level planting plans and schedules, estimating quantity and sizes of plants required.

This certificate incorporates the basic principles of site analysis, plant science, and soil science as applied to landscape design principles. Students are prepared for entry-level positions in the landscape industry focusing on residential settings and small commercial sites.

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 evenings and/or weekends.

<i>required courses:</i>	<i>units</i>
ARCLA-130 Landscape Design and Graphics	3
HORT-110 Introduction to Horticulture and Plant Science...	4
HORT-185 Site Analysis	1.5

plus at least 3 units from:

HORT-113 Plant Materials and their Uses: Winter and Spring	3
HORT-114 Plant Materials and their Uses: Summer and Fall	3
total minimum required units	11.5

**Certificate of accomplishment
Nursery technician**

Students completing the program will be able to...

- A. identify, alleviate and recommend treatment for diseases and pathogens.
- B. describe specific environmental and cultural requirements to grow seasonal common plants.
- C. maintain and support nursery operations.

This certificate provides the fundamental skills required for entry-level employment in the nursery industry. It includes classroom and hands-on laboratory experiences.

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/or on weekends.

<i>required courses:</i>	<i>units</i>
HORT-110 Introduction to Horticulture and Plant Science	4
HORT-163 Nursery and Greenhouse Practices: Summer/Fall	3

plus at least 3 units from:

BUSMG-191 Small Business Management	3
BUSMG-192 Entrepreneurship and Venture Management	3
HORT-111 Plant Propagation and Production: Winter and Spring	3
HORT-112 Plant Propagation and Production: Summer and Fall	3
total minimum required units	10

**Certificate of accomplishment
Tree technician**

Students completing the program will be able to...

- A. implement tree trimming safety procedures.
- B. use field examinations to determine tree problems.
- C. diagnose woody plant suitability for given sites.
- D. recognize species and the characteristics of a given species.

This program prepares students for employment as assistant tree trimmers, pruners, or fallers working under certified arborists

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 evenings and/or on weekends.

<i>required courses:</i>		<i>units</i>
HORT-110	Introduction to Horticulture and Plant Science	4
HORT-170	Woody Plants: Identification and Maintenance.....	4
HORT-171	Pruning Laboratory	1
HORT-179	Arboriculture.....	4
total minimum required units		13

HORT-110 Introduction to Horticulture and Plant Science

4 units SC

- 54 hours lecture/54 hours laboratory per term
- *Advisory: CHEM-106, MATH-085 or MATH-085SP or beginning algebra and college-level reading and writing are expected or equivalents*

This course provides an introduction to plant sciences as related to horticulture. Topics include plant morphology, growth processes, propagation, physiology, growth media, biological competitors, and post-harvest factors of food, fiber, ornamental and native plants. CID AG-PS 106L, CSU, UC

HORT-111 Plant Propagation and Production: Winter and Spring

3 units SC

- 36 hours lecture/54 hours laboratory per term
- *Prerequisite: HORT-110 (may be taken concurrently) or equivalent*
- *Advisory: HORT-125 or equivalent*

This course introduces plant propagation and production practices for nursery operations, with an emphasis on sexual and asexual reproduction of winter and spring plants. Topics include winter and spring planting specifications, transplanting, fertilizing, plant pest and disease control; structures and site layout; preparation and use of propagating and planting mediums; use and maintenance of common tools and equipment; regulations pertaining to plant production; and new plant introductions in the nursery industry. Students will also participate in greenhouse management, scheduling of plant production, seed-starting, vegetative propagation and the marketing of winter and spring containerized nursery stock. HORT 111 + HORT 112 = C-ID AG - EH 116L, CSU

HORT-112 Plant Propagation and Production: Summer and Fall

3 units SC

- 36 hours lecture/54 hours laboratory per term
- *Prerequisite: HORT-110 (may be taken concurrently) or equivalent*
- *Advisory: HORT-125 or equivalent*

This course introduces plant propagation and production practices for nursery operations, with an emphasis on sexual and asexual reproduction of summer and fall plants. Topics include summer and fall planting specifications, transplanting, fertilizing, plant pest and disease control; structures and site layout; preparation and use of propagating and planting mediums; use and maintenance of common tools and equipment; regulations pertaining to plant production; and new plant introductions in the nursery industry. Students will also participate in greenhouse management, scheduling of plant production, seed-starting, vegetative propagation and the marketing of summer and fall containerized nursery stock. HORT 111 + HORT 112 = C-ID AG-EH 116L, CSU

HORT-113 Plant Materials and their Uses: Winter and Spring

3 units SC

- 36 hours lecture/54 hours laboratory per term
- *Prerequisite: HORT-110 (may be taken concurrently) or equivalent*

This course introduces the identification and uses of common plants in the California landscape that are of special interest in the winter or spring. Topics include native and introduced plant identification, growth habits, cultural and environmental requirements, uses in the landscape. Plants emphasized will come from the current California Association of Nurseries & Garden Centers (CANGC) and Professional Landcare Network (PLANET) Certification Tests Plant Lists. C-ID AG-EH 108L, CSU

HORT-114 Plant Materials and their Uses: Summer and Fall

3 units SC

- 36 hours lecture/54 hours laboratory per term
- *Prerequisite: HORT-110 (may be taken concurrently) or equivalent*

This course introduces the identification and uses of common plants in the California landscape that are of special interest in the summer or fall. Topics include native and introduced plant identification, growth habits, cultural and environmental requirements, uses in the landscape. Plants emphasized will come from the current California Association of Nurseries & Garden Centers (CANGC) and Professional Landcare Network (PLANET) Certification Tests Plant Lists. C-ID AG-EH 112 109L, CSU

HORT-120 Soil Science and Management

3 units SC

- 54 hours lecture per term
- Prerequisite: HORT-110 or equivalent
- Advisory: CHEM-106, MATH-085 or MATH-085SP or beginning algebra or equivalents, and college-level reading and writing are expected.

This course presents a study of soil science and management of soils. Biology, physics and chemistry are integrated with geological concepts to provide a comprehensive overview of all facets of soil science. Topics covered include soil classification, derivation, use, function and management including erosion, moisture retention, structure, cultivation, organic matter and microbiology. HORT 120 + HORT 121 = C-ID AG-PS 128L, CSU, UC

HORT-121 Soil Science and Management Laboratory

1 unit SC

- 54 hours laboratory per term
- Prerequisite: HORT-110, HORT-120 or equivalents (may be taken concurrently)
- Advisory: CHEM-106, MATH-085 or MATH-085SP or beginning algebra or equivalents, and college-level reading and writing are expected
- Formerly HORT-120L

The lab for soils will include identifying soil types, classifications, reactions, fertility and physical properties. Soil management, biology, chemistry and microbiology will be explored. Regional soils and soil quality are investigated. Laboratory required for transfer to CSU. HORT 120 + HORT 121 = C-ID AG - PS 128 128L, CSU

HORT-125 Integrated Pest Management

3.5 units SC

- 54 hours lecture/27 hours laboratory per term
- Prerequisite: HORT-110 (may be taken concurrently) or equivalent
- Advisory: MATH-085 or MATH-085SP or beginning algebra or equivalents, and college-level reading and writing are expected
- 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 CEUs necessary for pest control operators and advisors

This course will introduce students to plant, insect and disease pests associated in California. Key concepts in applied ecology of pest and beneficial species, insect, vertebrate and disease identification and control methodologies using Integrated Pest Management (IPM) and Plant Health Care models are emphasized. CSU

HORT-148L California Native Plants Laboratory

1 unit SC

- 54 hours laboratory per term
- Advisory: HORT-110 or equivalent

This course presents a study of California plant communities and the environments that shape them. The dominant and typical plant constituents of each vegetation unit, focusing on native species currently used in the nursery industry will be covered. Habitat, soil, and climatic factors will be discussed as related to the plant species established in their natural and horticultural environment, exploring possibilities of integration into residential landscapes. Local field trips to select California vegetation environments are taken to record relevant plant and habitat data. Destinations will vary based on season and term. CSU

HORT-150 Topics in Horticulture

.3-4 units SC

- 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-151 Controlled Environment Growing (CEG): Methods of Plant Production

3 units SC

- 36 hours lecture/54 hours laboratory per term
- Advisory: HORT-110 or equivalent

This course presents the history, current state, and future of Controlled Environment Growing (CEG), also know as Controlled Environment Agriculture (CEA). Topics include hydroponics, aquaponics, and aeroponic systems, as well as a review of basic plant anatomy and physiology. Emphasis is placed on cultural practices, plant protection (insects and diseases), pollination/fertilization and bee management, plant nutrition and disorders, irrigation systems and nutrient solutions, transplant production, structures, control systems and energy conservation, harvesting, grading and storage, marketing and economics of CEG systems. CSU

HORT-160 Plant Propagation

1.5 units SC

- 18 hours lecture/27 hours laboratory per term
- Advisory: HORT-110 or equivalent and College-level reading and writing are expected.

This course will introduce students to the principles and practices of plant propagation from seed and vegetative material to marketable nursery stock. The key concepts of physiological processes, environmental requirements and techniques required for successful plant production will be covered. CSU

HORT-163 Nursery and Greenhouse Practices: Summer/Fall

3 units SC

- 36 hours lecture/54 hours laboratory per term
- Advisory: College-level reading and writing are expected.

This course develops the knowledge and skills needed to work as a manager or supervisor in the wholesale and retail plant nursery industry and provides advanced training in the production, staging and marketing of plants, staff management and customer care in summer and fall. Topics include office practices, business operations and management and marketing for container, hydroponics and aquaponic greenhouse systems. CSU

HORT-168 Nursery and Greenhouse Practices: Winter/Spring

3 units SC

- 36 hours lecture/54 hours laboratory per term
- Advisory: College-level reading and writing are expected.

This course develops the knowledge and skills needed to work as a manager or supervisor in the wholesale and retail plant nursery industry and provides advanced training in the production, staging and marketing of plants, staff management and customer care in winter and spring. Topics include office practices, business operations, and management and marketing for container, hydroponics and aquaponic greenhouse systems. CSU

HORT-170 Woody Plants: Identification and Maintenance

4 units SC

- 54 hours lecture/36 hours laboratory per term
- Advisory: HORT-110 or equivalents and College-level reading and writing are expected.
- Note: Field Trips Required. This course meets the plant certification for California Association of Nurserymen, California Landscape Contractor's Licensing and satisfies International Society of Arboriculture Continuing Education units.
- Formerly HORT-143 and HORT-143L

Students will learn the taxonomy, identification, growth habits, landscape values, maintenance requirements and native plants of woody plants used in regional landscapes. Emphasis will be placed on regenerative landscape design with a focus on ecologically appropriate choices. CSU

HORT-171 Pruning Laboratory

1 unit SC

- 54 hours laboratory per term
- Formerly HORT-137L

This course will provide hands-on experience with winter and spring mechanical modification of common landscape plants, including roses, dormant trees and shrubs, and post-bloom pruning for spring flowering plants. Safety, tool maintenance, tool use, disease prevention and techniques that enhance plant structure will be covered. CSU

HORT-179 Arboriculture

4 units SC

- 54 hours lecture/54 hours laboratory per term
- Advisory: College-level reading and writing are expected. HORT-110 or equivalents
- Note: This course meets the requirements for the California Association of Nurserypersons and International Society of Arboriculture Continuing Education Units (CEU).

This comprehensive class teaches students how to manage trees in urban and suburban landscapes. Included are the benefits that trees provide, and species profiles, form and ecological functions. Observational analysis skills will be taught in conjunction with scientific knowledge to direct assessment and diagnosis. Tree health subjects and applications include species selection, planting and establishment, pruning, safety, cabling, bracing, staking, watering, fertilizing, and pest control. The focus will be on trees appropriate for Contra Costa soils and micro-climates. CSU

HORT-183 Garden Design

1.5 units SC

- 18 hours lecture/27 hours laboratory per term
- Advisory: HORT-110 or equivalent

This basic design course is intended for students in the nursery and landscape industry as well as interested laypersons and residential homeowners. Fundamental design principles, plant selection, hardscape materials and planting techniques will be covered. Plant selection for seasonal color, energy efficiency and water usage will be introduced. Students will layout a rough site plan overview of a personal garden design. CSU

HORT-185 Site Analysis

1.5 units SC

- 18 hours lecture/27 hours laboratory per term
- Advisory: HORT-110 and HORT-182 or equivalents

This course provides an introduction to the site analysis skills required by landscape designers, architects, contractors, maintenance technicians and gardeners. Details of specified sites are assessed, inventoried and documented including climatic, geographical, historical, legal, and infrastructural conditions. CSU

HORT-187 Sustainable Water Management

3 units SC

- 36 hours lecture/54 hours laboratory per term
- Notes: Field trips may be required

This course introduces concepts and practices in landscape irrigation and sustainable water use. Topics include the relationships between plants, soils and water auditing; irrigation design; monitoring techniques; rainwater/greywater collection and delivery systems; subsurface installation; irrigation and system repair. State and local water regulations, water supply and quality are also covered. CSU

HORT-296 Internship in Occupational Work Experience Education in HORT

2-4 units SC

- *May be repeated eight times*
- *Variable hours*
- *Note: In order to enroll in the HORT-296 course, students must be interning or volunteering, register for the course, complete an online Employment Form, and participate in an orientation. Incomplete grades are not awarded for this course.*

HORT-296 is a supervised internship in a skilled or professional level assignment in the student's major field of study or area of career interest. Under the supervision of a college instructor, students will engage in on-the-job and other learning experiences that contribute to their employability skills and occupational or educational goals. Internships may be paid, non-paid, or some partial compensation provided. Each unit represents five hours of paid work or four hours of unpaid work per week or 75 hours of paid work or 60 hours of unpaid work per term. Students may earn up to a total of 16 units in any combination of WRKX courses. Repetition allowed per Title 5, Section 55253. CSU

HORT-298 Independent Study

.5-3 units SC

- *Variable hours*
- *Note: Submission of acceptable educational contract to department and Instruction Office is required.*

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. CSU

HORT-299 Student Instructional Assistant

.5-3 units SC

- *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

Janette Funaro, Dean

Arts and Communication Division

Possible career opportunities

The study of humanities can open up career opportunities in such diverse fields as advertising, banking, editing, publishing, teaching, writing, foreign service, library science, law, public administration, museum work, website design, archaeology, cultural anthropology, art criticism, tourism and journalism.

Associate in arts degree Humanities

Students completing the program will be able to...

- use their critical thinking skills to analyze and evaluate both formally and contextually, a variety of creative works and literary documents.
- compare and contrast the historic meaning and impact of works selected from the various arts, and from philosophic and religious literature.
- recognize and explain the integration of arts and ideas in selected cultural, historical, and thematic contexts.
- demonstrate their ability to articulate clearly in oral and written form objective analysis of major works from the various arts, and from philosophic and religious literature.

This degree is designed for students who wish to study a broad range of the arts: music, dance, visual arts, architecture, literature, drama, film, philosophy and history. Through this course of student students will learn to analyze, interpret, and compare a diverse range of art forms and cultures while deepening their understanding of the arts as human expression and honing their critical thinking and writing skills.

The associate in arts in humanities degree is both an interdisciplinary and integrative degree dedicated to the student of arts and ideas in their cultural contexts and to the comparative analysis of the arts. The degree provides a well-rounded and rich background in the creative and intellectual expression of major world civilizations, intellectual and cultural movements, and cultural works of creative expression. Humanities students develop skills in artistic analysis, aesthetic judgements, 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 GE). General Education Option 1 (DVC General Education) is appropriate for students who do not intend to transfer.

To earn an associate in arts degree in humanities, students must complete each required course with a “C” grade or higher, and complete general education requirements as listed in the catalog. Degree requirements can be completed by attending classes in the day, the evening, or both. Certain courses may satisfy both major and general education requirements; however, the units are only counted once.

<i>major requirements:</i>	<i>units</i>
<i>complete at least 3 units from:</i>	
HUMAN-110 Humanities: Ancient Civilizations (to 500 A.D.).....	3
HUMAN-111 Humanities: The Middle Ages and Renaissance	3
HUMAN-112 Humanities: The Modern World	3
 <i>complete at least 15 units from:</i>	
HUMAN-105 Introduction to Humanities: Arts and Ideas.....	3
HUMAN-108 Humanities: The Roots of Hell	3
HUMAN-115 Humanities: The Multicultural American Experience.....	3
HUMAN-116 Humanities: The Arts and Culture of Asia	3
HUMAN-118 Humanities: Film, Fiction, and Criticism.....	3
HUMAN-123 Humanities: American Popular Culture	3
HUMAN-124 Humanities: California Culture	3
total minimum units for the major	18

HUMAN-105 Introduction to Humanities: Arts and Ideas

3 units SC

- *IGETC: 3B; CSU GE: C2; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This is a non-chronological course that introduces students to the integration of creative arts and the world of ideas. Students will learn to analyze, interpret, and relate masterworks selected from literature, music, drama, painting, sculpture, photography, architecture, dance, and film, to trends in philosophy, religion and scientific thought. Works from diverse global cultures may be selected from throughout the various ages of history. Emphasis is placed on the student's personal interaction with human creative expression. CSU, UC

HUMAN-108 Humanities: The Roots of Hell

3 units SC

- *IGETC: 3B; CSU GE: C2; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course presents an introduction to humanities focused on the theme of hell. Integrating literature, philosophy, the visual arts, music, and film from international sources, students will explore themes such as guilt and responsibility, trial and redemption, and life after death from a variety of cultures. CSU, UC

HUMAN-110 Humanities: Ancient Civilizations

3 units SC

- *IGETC: 3B; CSU GE: C2; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course presents an introduction to humanities in the ancient world. Integrating the visual arts, music, literature, drama, architecture, philosophy, religion, science, technology, and history, students will explore creative works and ideas from ancient Egypt and Mesopotamia through the late Roman period. CSU, UC

HUMAN-111 Humanities: The Middle Ages and Renaissance

3 units SC

- *IGETC: 3B; CSU GE: C2; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course presents an introduction to humanities in the Middle Ages and Renaissance. Integrating the visual arts, music, literature, drama, architecture, philosophy, religion, science, technology, and history, students will explore creative works and ideas from the end of the Roman period to the end of the Renaissance. CSU, UC

HUMAN-112 Humanities: The Modern World

3 units SC

- *IGETC: 3B; CSU GE: C2; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course presents an introduction to humanities in the modern world. Integrating the visual arts, music, literature, drama, architecture, philosophy, religion, science, technology, and history, students will explore creative works and ideas from the Baroque era to the present. CSU, UC

HUMAN-115 Humanities: The Multicultural American Experience

3 units SC

- *IGETC: 3B; CSU GE: C2; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course presents an introduction to 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. 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 Humanities: The Arts and Culture of Asia

- 3 units SC
- IGETC: 3B; CSU GE: C2; DVC GE: III
 - 54 hours lecture per term
 - Advisory: College-level reading and writing are expected.

This course presents an introduction to the humanities in Asia. Integrating the visual arts, music, literature, drama, architecture, philosophy, religion, science, technology, and history, students will explore creative works and ideas from a variety of Asian cultures. CSU, UC

HUMAN-118 Humanities: Film, Fiction, and Criticism

- 3 units SC
- IGETC: 3B; CSU GE: C2; DVC GE: III
 - 54 hours lecture per term
 - Advisory: College-level reading and writing are expected.

This course presents an introduction to the integration of three areas of the humanities--literature, cinema, and aesthetic criticism. Students will explore and evaluate the aesthetic make-up of masterworks of literature and film. CSU, UC

HUMAN-123 Humanities: American Popular Culture

- 3 units SC
- IGETC: 3B; CSU GE: C2; DVC GE: III
 - 54 hours lecture per term
 - Advisory: College-level reading and writing are expected.

This course presents an introduction to humanities focusing on American popular culture, including the arts, entertainment, myths, the heroic tradition, and symbols. CSU, UC

HUMAN-124 Humanities: California Culture

- 3 units SC
- IGETC: 3B; CSU GE: C2; DVC GE: III
 - 54 hours lecture per term
 - Advisory: College-level reading and writing are expected.

This course presents an introduction to humanities through the study of California arts and culture by integrating the visual arts, music, literature, drama, architecture, philosophy, religion, science, technology, and history. California's artistic expression has shaped the way both native and non-native Californians perceive themselves and their culture. Students will explore creative works and ideas from select periods of California history. Course themes include California land, California people, and "The California Myth" as both utopia and dystopia. CSU, UC

HUMAN-298 Independent Study

- .5-3 units SC
- Variable hours
 - Note: Submission of acceptable educational contract to department and Instruction Office is required.

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. CSU

HUMAN-299 Student Instructional Assistant

- .5-3 units SC
- 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

INDUSTRIAL DESIGN - IDSGN

Despina Prapavessi, Dean
 Mathematics and Engineering Division
 Mathematics Building, Room 267

**Associate in science degree
 Industrial design**

Students completing the program will be able to...

- work within a team of diverse industry professionals to establish and meet design criteria.
- use advanced consumer research techniques to better understand human-centered design.
- design a product using two-dimensional and three-dimensional computer software.
- develop detailed technical drawings of a product.
- determine the most efficient and responsible manufacturing method for the product.
- prototype an object from a given technical drawing or three-dimensional CAD model.
- design and prototype mechanical parts in collaborating with engineers.
- use computer integrated manufacturing (CIM) and computer numerical control (CNC) software for automation of manufacturing.
- create color renderings and presentation techniques that showcase product drawings at a professional level.

The associate in science degree in industrial design is offered to provide students with academic and technical skills required for transfer to leading industrial design programs offered at four-year universities. The associate in science degree curriculum also provides students with a highly valued skillset needed to enter the modern workforce.

Graduates of the industrial design program can be employed in research and development, rapid prototyping and fabrication, product design, package design, soft goods design, and transportation design. Students in the program will learn how to design products for consumers and industry, as well as utilize advanced surface modeling software and milling programs used for computer numerical control (CNC) manufacturing equipment including 3D printers. Students completing this program will also be candidates for a broad range of manufacturing and corporate jobs requiring a combination of technical knowledge and communication skills needed to collaborate with marketing and engineering personnel and skilled workers in various trades and specialties.

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 GE). Option 1 (DVC General Education) is not generally advised.

To earn an associate degree with a major in industrial design, students must complete each of the courses required for the major with a "C" grade or higher, maintain an overall GPA of 2.5 or higher and complete general education requirements as listed in the catalog. Certain courses may satisfy both major and general education requirements; however, the units are only counted once.

<i>required courses:</i>	<i>units</i>
ARCHI-135 Digital Tools for Design.....	3
ART-102 Introduction to Three-Dimensional Design and Sculpture	3
ART-105 Introduction to Drawing	3
ENGTC-119 Introduction to Technical Drawing.....	3
ENGTC-128 Fusion 360 for Design and Prototyping.....	3
IDSGN-120 Introduction to Industrial and Product Design	3
IDSGN-121 Industrial and Product Design Foundations	3
IDSGN-131 Color Visualization for Product Design	3
 <i>plus at least 2 units from:</i>	
IDSGN-105 Assembly and Fabrication Workshop	2
IDSGN-107 Furniture Design Studio	2
 <i>plus at least 3 units from:</i>	
ENGTC-126 Computer Aided Design and Drafting-AutoCAD	3
ENGTC-129 Product Design I Using SolidWorks	3
 <i>plus at least 4 units from:</i>	
IDSGN-220 Soft Goods Product Design Studio.....	4
IDSGN-221 Transportation Design Studio.....	4
total minimum units for the major	33

Certificate of achievement Industrial design

Students completing the program will be able to...

- A. work within a team of diverse industry professionals to establish and meet design criteria.
- B. use advanced consumer research techniques to better understand human-centered design.
- C. design a product using two-dimensional and three-dimensional computer software.
- D. develop detailed technical drawings of a product.
- E. determine the most efficient and responsible manufacturing method for the product.
- F. prototype an object from a given technical drawing or three-dimensional CAD model.
- G. design and prototype mechanical parts in collaborating with engineers.
- H. use computer integrated manufacturing (CIM) and computer numerical control (CNC) software for automation of manufacturing.
- I. create color renderings and presentation techniques that showcase product drawings at a professional level.

The certificate of achievement in industrial design is intended for students who wish to enter the workforce directly in an industrial design field without transferring to a four-year university program. The certificate of achievement prepares students for a career as an industrial design intern, modeler or designer offering technical support, design, and modeling and fabrication assistance in an industrial design office.

Industrial design interns and technicians prepare models, presentation drawings, computer models and renderings for the design and production of everyday objects and tools, household products, soft goods, packaging and transportation design.

To earn a certificate of achievement in industrial design, students must complete each of the required courses required with a "C" grade or higher and maintain an overall GPA of 2.5 or higher.

<i>required courses:</i>	<i>units</i>
ARCHI-135 Digital Tools for Design.....	3
ART-102 Introduction to Three-Dimensional Design and Sculpture	3
ART-105 Introduction to Drawing	3
ENGTC-119 Introduction to Technical Drawing.....	3
ENGTC-128 Fusion 360 for Design and Prototyping.....	3
IDSGN-120 Introduction to Industrial and Product Design	3
IDSGN-121 Industrial and Product Design Foundations.....	3
IDSGN-131 Color Visualization for Product Design.....	3
 <i>plus at least 2 units from:</i>	
IDSGN-105 Assembly and Fabrication Workshop	2
IDSGN-107 Furniture Design Studio	2
 <i>plus at least 3 units from:</i>	
ENGTC-126 Computer Aided Design and Drafting-AutoCAD	3
ENGTC-129 Product Design I Using SolidWorks	3

Industrial design

plus at least 4 units from:

IDSGN-220	Soft Goods Product Design Studio.....	4
IDSGN-221	Transportation Design Studio.....	4
total minimum required units		33

IDSGN-105 Assembly and Fabrication Workshop

2 units SC

- 18 hours lecture/54 hours laboratory per term

This course presents methods of fabrication for projects in metal, wood, plastic and other materials and includes an introduction to shop safety. The use of hand tools, power tools and an introduction to computer controlled tools such as laser cutters and computer numerical control (CNC) routers is also covered. This course introduces the principles necessary to fabricate parts, components, and prototypes for a variety of technical applications. CSU

IDSGN-107 Furniture Design Studio

2 units SC

- 18 hours lecture/54 hours laboratory per term
- Advisory: IDSGN-105 or equivalent

This course introduces furniture design, construction, and assembly. Topics include design development, working drawings and assembly drawings, digital and physical modeling, and final assembly of furniture. Detailing, fabrication, and utilization of computer numerical control (CNC) routers to build finished products will be emphasized. CSU

IDSGN-120 Introduction to Industrial and Product Design

3 units SC

- 36 hours lecture/72 hours laboratory per term

This introductory course will expose students to a broad spectrum of product design and general design principles and theories with a focus on visual theory, aesthetics, and historical context. Emphasis is placed on develop of critical thinking skills through the analysis of cultural and technological constructs that influence the creation of specific products. Design research methodology and creative problem solving skills will be emphasized and explored through the completion of studio projects. CSU, UC

IDSGN-121 Industrial and Product Design Foundations

3 units SC

- 36 hours lecture/72 hours laboratory per term
- Prerequisite: IDSGN-120 or equivalent

This project-based industrial design course introduces comprehensive design strategy and thought processes required to develop consumer products. Product research, design, and three-dimensional prototyping will be based on design briefs to develop problem-solving abilities. CSU

IDSGN-131 Color Visualization for Product Design

3 units SC

- 36 hours lecture/72 hour laboratory per term
- Prerequisite: ENGTC-119 or equivalent
- Note: Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This course introduces color drawing as a component of the design process through the use of traditional marker rendering and digital imaging. Drawings will reflect the product development process including the initial concept, iterations, and final presentation drawings. Specific focus will be given to principles of perspective, shade and tone, shadow casting, and color. Computer-assisted imaging software and digital drawing tablets will be introduced. Students will develop a portfolio of color drawing that showcases their hand renderings and digital visualization skills. CSU

IDSGN-137 Digital Fabrication and Prototyping

3 units SC

- 36 hours lecture/72 hours laboratory per term
- Advisory: ENGTC-119 or Equivalent
- Note: Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This is an introductory course in design prototyping and digital fabrication methods. Manual and digital modeling with an exploration of computer numerical control (CNC) fabrication methods will be explored. Shaping and material removal using three-axis and five-axis CNC fabrication tools for a variety of materials, including plastics, wood, metals and ceramics will be practiced in addition to three-dimensional printing methods. CSU

IDSGN-220 Soft Goods Product Design Studio

4 units SC

- 36 hours lecture/108 hours laboratory per term
- Prerequisite: IDSGN-120 or equivalent

This course explores materials and textiles required for the construction of wearable products and their impact on lifestyles and fashion. Students will design a variety of soft goods products including fashion, high-end accessories, clothing, shoes, and recreational equipment such as tents and sleeping bags. Creative problem-solving, research, design, and prototyping are emphasized. CSU

IDSGN-221 Transportation Design Studio

4 units SC

- 36 hours lecture/108 hours laboratory per term
- Prerequisite: IDSGN-120 or equivalent

This course presents the history of automotive styling trends and evolution, design philosophy, and cultural influences on the automobile. Emphasis is placed on accurate proportion based on the packaging of occupants and components, human factors, target market analysis, and brand identity. Final outcomes include sketches, renderings, package drawings, written reports, and scale models. CSU

INTERDISCIPLINARY STUDIES - INTD

Nikki Moultrie, Senior Dean (Interim)
 Instruction Office
 Administration Building, AB 214

Noncredit - Certificate of competency Skills for success in science, math, and engineering pathways

Students completing this program will be able to...

- identify the variables and problem-solving strategy for word problems involving applications in science and engineering.
- use algebraic terms, expressions, and equations to solve problems in science and engineering.
- apply algebraic laws to science and engineering concepts.
- use technology including calculators and graphing programs to perform calculations and to visualize and interpret data in science and engineering.

This noncredit certificate of completion presents the critical algebra skill development necessary for students to be successful in science and engineering educational pathways. The courses cover the application of fundamental skills in advanced science and engineering courses contextualized to a student's course of interest.

To earn a noncredit certificate of completion, students must complete both courses. The courses are noncredit. They are non-degree applicable and do not transfer to the California State University (CSU) or University of California (UC) systems or other private universities.

<i>required courses:</i>	<i>units</i>
INTD-080NC Problem Solving Skills for Science and Engineering Courses.....	0
INTD-081NC Applying Algebra Skills in Advanced Science and Engineering	0
total minimum required units	0

INTD-010NC Supervised Tutoring

0 units P/NP
 • Variable hours

This noncredit open entry/open exit course provides students with tutoring and learning support in areas of identified academic need, including: communication/literacy skills, quantitative reasoning skills, and critical thinking skills. Students receive assistance from peer tutors to develop their ability to learn independently in order to increase academic success.

INTD-080NC Problem Solving Skills for Science and Engineering Courses

0 units P/NP

- 24 hours lecture per term
- Note: Students enrolled in CHEM-107, CHEM-108, PHYS-110, PHYS-111, PHYS-113, PHYSC-112 and ENGIN-130 should check the schedule of classes for information about section offerings.

This course is designed to help students improve their math problem-solving abilities in the sciences. Algebra skills critical for success in introductory science courses will be applied to typical science discipline problems.

INTD-081NC Applying Algebra Skills in Advanced Science and Engineering

0 units P/NP

- 24 hours lecture per term
- Note: Students enrolled in CHEM-120, CHEM-121, ENGIN-121, ENGIN-140, PHYS-120, PHYS-121, PHYS-129, and PHYS-130 should check the schedule of classes for information about section offerings.

This course is designed to help students improve their math problem-solving abilities in the sciences. Algebra skills critical for success in advanced science and engineering major courses will be applied to typical science discipline problems.

INTD-100 Study Abroad Life and Culture

3 units SC

- 54 hours lecture per term

This course introduces students to the norms, culture, social structures, economic, and political systems of a foreign country as part of the study abroad program. Students learn about another culture through lectures by local experts, organized field trips, and authentic experiences. CSU

INTD-140 Tutor Training

1 unit SC

- 18 hours lecture per term
- Note: Students who want to tutor in the Pleasant Hill Campus English Lab must take ENGL-140 instead of INTD-140. Students who want to tutor in the Pleasant Hill Campus Math Lab must take MATH-140 instead of INTD-140.

This one-unit course introduces students to the principles of effective tutoring. The strategies of tutoring that foster independent learning and promote critical thinking and understanding are emphasized. CSU

ITALIAN – ITAL

Janette Funaro, Dean
Arts and Communication Division

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.

Associate in arts degree Italian

Students completing the program will be able to...

- A. communicate verbally in the target language with accurate pronunciation in meaningful situations present in both informal and formal contexts.
- B. effectively apply rules of grammar and syntax in tandem with appropriate vocabulary in written and oral communication.
- C. demonstrate auditory comprehension of instruction, authentic content, and purposeful conversations in the target language.
- D. discuss, describe, and infer information from authentic texts in the target language.
- E. demonstrate cultural appreciation by making (comparative) connections, on both an individual and societal level, between the target cultures and students' own cultures.
- F. create (write or present) narratives and/or arguments that demonstrate cohesive critical thinking in the target language.

The associate in arts degree in Italian at DVC will provide students with skills in understanding, speaking, reading and writing Italian. It also gives students a greater understanding of Italian culture and civilization and will prepare them for a broad range of international and domestic career opportunities and professions. The degree will also provide students the opportunity to transfer to UC, CSU and other four-year colleges and universities to earn a bachelor's degree.

The DVC Italian 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 baccalaureate-granting institutions of their choice are met. Students who intend to transfer are advised to select General Education Option 2 (IGETC) or Option 3 (CSU GE). Option 1 (DVC General Education) is appropriate for those students who do not intend to transfer. Students may not take a pass/no pass option for major courses and each of the major requirements must be completed with a "C" grade or higher. Certain courses may satisfy both major and general education requirements; however, the units are counted only once.

To earn an associate degree in Italian, students must complete 20 units from the list of major requirements, which will provide students with the essential grammar of the language, culture and basic literature of Italy. Students with no previous knowledge of Italian when entering DVC will take the first four courses in the list for a total of 20 units. If students enter the program with previous knowledge of Italian, they may start at the second term level and take fifth and sixth terms to achieve a total of 21 units.

<i>complete at least 20 units from:</i>		<i>units</i>
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
total minimum units for the major		20

Certificate of achievement Italian

Students completing the program will be able to...

- A. communicate verbally in the target language with accurate pronunciation in meaningful situations present in both informal and formal contexts.
- B. effectively apply rules of grammar and syntax in tandem with appropriate vocabulary in written and oral communication.
- C. demonstrate auditory comprehension of instruction, authentic content, and purposeful conversations in the target language.
- D. discuss, describe, and infer information from authentic texts in the target language.
- E. demonstrate cultural appreciation by making (comparative) connections, on both an individual and societal level, between the target cultures and students' own cultures.
- F. create (write or present) narratives and/or arguments that demonstrate cohesive critical thinking in the target language.

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 list of courses. Students may not take a credit/no credit option for required courses and each course must be completed with a "C" grade or higher.

complete at least 13 units from:		units
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
total minimum required units		13

ITAL-120 First Term Italian

5 units SC

- *IGETC: 6A*
- *90 hours lecture per term*
- *Note: This course is equivalent to two years of high school study.*

This course provides an introduction to the Italian language and the culture of Italian-speaking countries. Topics include the four language skills: speaking, listening, reading, and writing. Emphasis is placed on active use of the language in class as well as basic communicative functions and structures. CSU, UC

ITAL-121 Second Term Italian

5 units SC

- *IGETC: 3B, 6A; CSU GE: C2; DVC GE: III*
- *90 hours lecture per term*
- *Prerequisite: ITAL-120 or two years of high school study or equivalent*
- *Note: Students may meet equivalency in a variety of ways. Students should seek assistance at Admissions and Records.*

This is the second course in a sequence of Italian courses. The course continues skill building in understanding, speaking, reading, and writing of the Italian language. The expansion of vocabulary and more advanced communicative functions and structures, as well as a deeper examination of the cultures of Italian-speaking countries are emphasized. CSU, UC

ITAL-150 Topics in Italian

.3-4 units SC

- *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-220 Third Term Italian

5 units SC

- *IGETC: 3B, 6A; CSU GE: C2; DVC GE: III*
- *90 hours lecture per term*
- *Prerequisite: ITAL-121 or three years of high school study or equivalent*
- *Note: Students may meet equivalency in a variety of ways. Students should seek assistance at Admissions and Records.*

This is the third term Italian course in the sequence that develops intermediate fluency in understanding, speaking, reading, and writing Italian. All verbal tenses are reviewed, expanded, and refined. Advanced grammar concepts, new vocabulary, and idiomatic expressions are introduced. Selected readings about the culture and literature of Italy will be explored. This course is taught mainly in Italian. CSU, UC

ITAL-221 Fourth Term Italian

5 units SC

- *IGETC: 3B, 6A; CSU GE: C2; DVC GE: III*
- *90 hours lecture per term*
- *Prerequisite: ITAL-220 or four years of high school study or equivalent*
- *Note: Students may meet equivalency in a variety of ways. Students should seek assistance at Admissions and Records.*

This is the fourth term Italian course in the sequence that develops high-intermediate fluency in understanding, speaking, reading and writing Italian. The grammatical moods are reviewed and developed; the sequences of tenses are introduced. Additional vocabulary and idiomatic expressions are introduced and connected to the selected readings. These readings about Italian culture and literature will be analyzed. This course is taught mainly in Italian. CSU, UC

ITAL-230 Fifth Term Italian

3 units SC

- *IGETC: 3B, 6A; CSU GE: C2; DVC GE: III*
- *54 hours lecture per term*
- *Prerequisite: ITAL-221 or equivalent*
- *Note: Students may meet equivalency in a variety of ways. Students should seek assistance at Admissions and Records.*

This is the fifth term advanced Italian course emphasizing reading, writing (prioritizing the mechanics of academic writing), listening, and speaking skills. The rich Italian heritage is explored through a wide range of materials including short stories, articles, poems, films, and documentaries. This course is taught entirely in Italian. CSU, UC

ITAL-231 Sixth Term Italian

3 units SC

- IGETC: 3B, 6A; CSU GE: C2; DVC GE: III
- 54 hours lecture per term
- Prerequisite: ITAL-230 or equivalent
- Note: Students may meet equivalency in a variety of ways. Students should seek assistance at Admissions and Records.

This is the sixth term advanced Italian language course strengthening reading, writing (prioritizing the mechanics of academic writing), listening, and speaking skills. Deepening the exploration of the rich Italian heritage through a wide range of materials including novels, articles, poems, films, documentaries, and dramas. This course is taught entirely in Italian. CSU, UC

ITAL-299 Student Instructional Assistant

.5-3 units SC

- 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

Janette Funaro, Dean
Arts and Communication Division

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 learning outcomes

Program learning outcomes are subject to change. The most current list of program learning outcomes for each program is published on the DVC website at www.dvc.edu/slo.

**Associate in arts degree
Japanese**

Students completing the program will be able to...

- communicate verbally in the target language with accurate pronunciation in meaningful situations present in both informal and formal contexts.
- effectively apply rules of grammar and syntax in tandem with appropriate vocabulary in written and oral communication.
- demonstrate auditory comprehension of instruction, authentic content, and purposeful conversations in the target language.
- discuss, describe, and infer information from authentic texts in the target language.
- demonstrate cultural appreciation by making (comparative) connections, on both an individual and societal level, between the target cultures and students' own cultures.
- create (write or present) narratives and/or arguments that demonstrate cohesive critical thinking in the target language.

The associate in arts degree in Japanese at DVC will provide students with skills in understanding, speaking, reading and writing Japanese. The curriculum exposes students to Japanese culture and civilization and provides foundational skills in language that can apply to a broad range of international and domestic career opportunities and professions. The degree will provide lower division preparation for transfer to UC, CSU and other four year colleges and universities to earn a bachelor's degree.

The DVC Japanese 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 baccalaureate-granting institutions of their choice are met. Students who intend to transfer are advised to select General Education Option 2 (IGETC) or Option 3 (CSU GE). Option 1 (DVC General Education) is appropriate for those students who do not intend to transfer. Students may not take a pass/no pass option for major courses and each of the major requirements must be completed with a "C" grade or higher. Certain courses may satisfy both major and general education requirements; however, the units are counted only once.

To earn an associate in arts degree in Japanese, students must complete one of the following lists of courses. The core Japanese courses provide students with the essential grammar of the language and culture of Japan. The Kanji courses provide students with practice in Kanji characters used in writing the Japanese language.

List A

complete at least 20 units from:		units
JAPAN-120	First Term Japanese.....	5
JAPAN-121	Second Term Japanese	5
JAPAN-220	Third Term Japanese.....	5
JAPAN-221	Fourth Term Japanese	5
total minimum units for the major		20

List B

complete at least 21 units from:

JAPAN-121	Second Term Japanese	5
JAPAN-130	First Term Kanji.....	3
JAPAN-131	Second Term Kanji.....	3
JAPAN-132	Third Term Kanji	3
JAPAN-220	Third Term Japanese.....	5
JAPAN-221	Fourth Term Japanese	5

total minimum units for the major 21

List C

complete at least 19 units from:

JAPAN-130	First Term Kanji.....	3
JAPAN-131	Second Term Kanji.....	3
JAPAN-132	Third Term Kanji	3
JAPAN-220	Third Term Japanese.....	5
JAPAN-221	Fourth Term Japanese	5

total minimum units for the major 19

Certificate of achievement Japanese

Students completing the program will be able to...

- communicate verbally in the target language with accurate pronunciation in meaningful situations present in both informal and formal contexts.
- effectively apply rules of grammar and syntax in tandem with appropriate vocabulary in written and oral communication.
- demonstrate auditory comprehension of instruction, authentic content, and purposeful conversations in the target language.
- discuss, describe, and infer information from authentic texts in the target language.
- demonstrate cultural appreciation by making (comparative) connections, on both an individual and societal level, between the target cultures and students' own cultures.
- create (write or present) narratives and/or arguments that demonstrate cohesive critical thinking in the target language.

The 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 one of the following lists of courses. Students may not take a credit/no credit option for required courses and each course must be completed with a "C" grade or higher.

complete at least 15 units from:

JAPAN-120	First Term Japanese.....	5
JAPAN-121	Second Term Japanese	5
JAPAN-220	Third Term Japanese.....	5
JAPAN-221	Fourth Term Japanese	5

total minimum required units 15

complete at least 13 units from:

JAPAN-121	Second Term Japanese	5
JAPAN-130	First Term Kanji	3
JAPAN-131	Second Term Kanji	3
JAPAN-132	Third Term Kanji	3
JAPAN-220	Third Term Japanese	5
JAPAN-221	Fourth Term Japanese	5

total minimum required units 13

JAPAN-120 First Term Japanese

5 units SC

- IGETC: 6A
- 90 hours lecture per term
- Note: This course is equivalent to two years of high school study.

This course provides an introduction to the Japanese language and the culture of Japanese-speaking countries. Topics include the four language skills: speaking, listening, reading, and writing. Emphasis is placed on active use of the language in class as well as basic communicative functions and structures. CSU, UC

JAPAN-121 Second Term Japanese

5 units SC

- IGETC: 3B, 6A; CSU GE: C2; DVC GE: III
- 90 hours lecture per term
- Prerequisite: JAPAN-120 or two years of high school study or equivalent
- Note: Students may meet equivalency in a variety of ways. Students should seek assistance at Admissions and Records.

This is the second course in a sequence of Japanese language courses. The course continues skill building in understanding, speaking, reading, and writing of the Japanese language. The expansion of vocabulary (characters) and more advanced communicative functions and structures, as well as a deeper examination of the cultures of Japanese-speaking countries are emphasized. CSU, UC

JAPAN-130 First Term Kanji

3 units SC

- 54 hours lecture per term
- Advisory: JAPAN-120 or equivalent

This course is an intensive study of Kanji characters to enhance competence in reading and writing Japanese in daily life situations. Examples include reading and comprehending simple essays and articles, and understanding Kanji used in everyday life. The course will cover up to 169 characters. CSU

JAPAN-131 Second Term Kanji

3 units SC

- 54 hours lecture per term
- Advisory: JAPAN-130 or equivalent

This course is designed for those who have taken JAPAN-130 or who have the equivalent knowledge and skills. Students will further develop their competence in reading and writing Japanese. 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
- Advisory: JAPAN-131 or equivalent

This course is designed for those who have taken JAPAN-131 or who have the equivalent knowledge and skills. Students will improve their advanced competence in reading and writing Japanese. 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-150 Topics in Japanese

.3-4 units SC

- 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

- IGETC: 3B, 6A; CSU GE: C2; DVC GE: III
- 90 hours lecture per term
- Prerequisite: JAPAN-121 or three years of high school study or equivalent
- Note: Students may meet equivalency in a variety of ways. Students should seek assistance at Admissions and Records.

This is the third term Japanese course in the sequence that develops pre-intermediate fluency in understanding, speaking, reading, and writing Japanese. All verbal tenses are reviewed, expanded and refined, and more advanced grammar concepts, new vocabulary and idiomatic expressions are introduced. Selected readings about the culture of Japan will be explored. This course is taught mainly in Japanese. CSU, UC

JAPAN-221 Fourth Term Japanese

5 units SC

- IGETC: 3B, 6A; CSU GE: C2; DVC GE: III
- 90 hours lecture per term
- Prerequisite: JAPAN-220 or four years of high school study or equivalent
- Note: Students may meet equivalency in a variety of ways. Students should seek assistance at Admissions and Records.

This is the fourth term Japanese course in the sequence that develops early intermediate fluency in understanding, speaking, reading, and writing Japanese. The sequence of verb tenses and grammatical moods are reviewed and developed. Additional new vocabulary and idiomatic expressions are introduced and connected with the selected readings. These readings about Japanese culture will be analyzed. This course is taught mainly in Japanese. CSU, UC

JAPAN-298 Independent Study

.5-3 units SC

- Variable hours
- Note: Submission of acceptable educational contract to department and Instruction Office is required.

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. CSU

JAPAN-299 Student Instructional Assistant

.5-3 units SC

- 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

Obed Vazquez, Dean
Social Sciences Division
Faculty Office Building, Room 136

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.

Associate in arts in journalism for transfer

Students completing the program will be able to...

- use a variety of media and sources to produce journalistic products that demonstrate good news judgment, appropriate sourcing, accuracy and completeness, technical competence and adherence to ethical, legal and style guidelines.
- understand and analyze how history, economics, politics, law or government regulation affect the climate for journalism and freedom of speech in the United States.
- demonstrate good work habits, time management and professionalism while working collaboratively and under deadline pressure to produce a news product.

The journalism program prepares students in the writing, reporting and critical thinking skills required for jobs in the news media and for transfer to a journalism program at a four-year institution. Career options include copy editor, script writer, broadcast journalist, news reporter, magazine writer, columnist, public information officer, online writer, freelance writer, advertising copy writer, editor and photojournalist. Some career options may require more than two years of college study.

The associate in arts in journalism for transfer is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major.

In order to earn the degree, students must:

- Complete 60 CSU-transferable units.
- Complete the California State University-General Education pattern (CSU GE); or the Intersegmental General Education Transfer Curriculum (IGETC) pattern, including the Area 1C requirement for Oral Communication.
- Complete a minimum of 18 units in the major.
- Attain a minimum grade point average (GPA) of 2.0.
- Earn a grade of "C" or higher in all courses required for the major.

Students transferring to a CSU campus that accepts the degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system, or those students who do not intend to transfer.

Some courses in the major satisfy both major and CSU GE/IGETC general education requirements; however, the units are only counted once toward the 60 unit requirement for an associate degree. 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:	units
JRNAL-110 Mass Media of Communications	3
JRNAL-120 Introduction to Newswriting and Reporting	3
JRNAL-126 News Production Laboratory I	3

plus at least 3 units from:

JRNAL-127 News Production Laboratory II	3
JRNAL-130 Multimedia Reporting	3

plus at least 6 units from:

ART-160 Photography I	3
BUS-240 Business Statistics	3
or	
MATH-142 Elementary Statistics with Probability	4
COMM-123 Argumentation and Debate	3
ENGL-126 Critical Thinking: Writing about Non-Fiction	3
ECON-220 Principles of Macroeconomics	3
or	
ECON-221 Principles of Microeconomics	3
POLSC-121 Introduction to United States Government	3
POLSC-220 Comparative Politics	3

total minimum units for the major 18

JRNAL-110 Mass Media of Communication

3 units SC

- IGETC: 4; CSU GE: D; DVC GE: IV
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This course is an introduction to major mass media and their impact on American life. The history of mass media, how they are structured, who controls them and how they influence individual and social values are explored. 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. Critical thinking and analysis of the images and sounds that shape the public mind will be emphasized. C-ID JOUR 100, CSU, UC

JRNAL-120 Introduction to Newswriting and Reporting

3 units SC

- 54 hours lecture per term
- Advisory: ENGL-122 or equivalent

This course introduces students to journalism reporting and writing for print, online and the broadcast media. It includes generating story ideas, developing sources, conducting interviews and online research, taking accurate notes, observing detail, exercising news judgment and crafting stories appropriate for various media. 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. Students may publish some assignments in the college's student newspaper, *The Inquirer*, or use them for other student media. C-ID JOUR 110, CSU

JRNAL-125 News Production Fundamentals

3 units SC

- 54 hours lecture
- Note: Journalism majors should take JRNAL-120.

This course introduces non-journalism majors to the fundamentals of reporting and writing the news through a practical approach that is intended to include publication in the college's student newspaper, *The Inquirer*, or its online news site. Emphasis is placed on news judgment, basic legal and ethical principles, interviews and note-taking, digital news photographs and news story basics. CSU

JRNAL-126 News Production Laboratory I

3 units SC

- 36 hours lecture/54 hours laboratory per term
- Advisory: JRNAL-120 (may be taken concurrently) or JRNAL-125 or JRNAL-130 and ENGL-118 or equivalents

Intermediate journalism students refine news-gathering skills introduced in JRNAL-120 while producing content for *The Inquirer*, the college's student newspaper and its website. Emphasis is placed on beat coverage and working in formats suitable for print, social media and the Internet. Students will practice news judgment, ethics, and accuracy while meeting daily and weekly deadlines. They will also exercise their First Amendment responsibilities by ensuring that *The Inquirer* is a forum for the diverse views of the DVC community. C-ID JOUR 130, CSU

JRNAL-127 News Production Laboratory II

3 units SC

- 18 hours lecture/108 hours laboratory per term
- Prerequisite: JRNAL-126 or equivalent

This course is a continuation of JRNAL-126 and requires higher skill level and/or leadership/management involvement for the college's student newspaper, *"The Inquirer"* and its website. Emphasis is placed on management skills, methods for tackling longer-term projects, practical experience in design/layout, and working in formats suitable for print, social media and the internet. Students will be expected to exercise news judgment, meet daily and weekly deadlines, adhere to the highest ethical principles and be vigilant about accuracy. They will also exercise their First Amendment responsibilities by allowing *The Inquirer* to be a forum for the diverse views of the DVC community. C-ID JOUR 131, CSU

JRNAL-128 News Production Portfolio Development

3 units SC

- 18 hours lecture/108 hours laboratory per term
- Note: Classes such as JRNAL-120, ART-105, ART-160, ARTDM-136, ARTDM-165, ARTDM-214 or FTVE-120 could provide good preparation for this course of instruction.

This intermediate class is designed for students preparing for employment in journalism and associated fields. Students with prior instruction in reporting, photography, illustration, design or digital media will create and publish works for *"The Inquirer"* while learning the basic principles of preparing a professional portfolio. CSU

JRNAL-130 Multimedia Reporting

3 units SC

- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This course is an introduction to multimedia storytelling tools for journalism. Students will explore techniques that use tools such as text, photographs, video or audio to tell news or feature stories on the Internet or through social media. It will also include techniques in digital research. C-ID JOUR 120, CSU

JRNAL-160 Intermediate Reporting

3 units SC

- 54 hours lecture per term
- Advisory: ENGL-122 or equivalent

This course equips students to research, write and market feature stories for magazines, websites and newspapers. Topics covered include choosing and focusing on a story idea, interviewing sources, using storytelling techniques, locating a market and framing a query. Students learn to evaluate and use online sources and public documents. Basic principles of media law, including libel and copyright, are introduced. Students develop feature stories and market them to appropriate venues. CSU

JRNAL-295 Occupational Work Experience Education in JRNAL

2-4 units SC

- *May be repeated eight times*
- *Variable hours*
- *Note: In order to enroll in JRNAL-295, students must be employed, register for the course, complete an online Employment Form, and participate in an orientation. Incomplete grades are not awarded for this course.*

JRNAL-295 is supervised employment that extends classroom learning to the job site and relates to the student's chosen field of study or area of career interest. Under the supervision of a college instructor, students will engage in on-the-job and other learning experiences that contribute to their employability skills and occupational or educational goals. Each unit represents five hours of work per week or 75 hours work per term. Students may earn up to a total of 16 units in any combination of WRKX courses. Repetition allowed per Title 5, Section 55253. CSU

JRNAL-296 Internship in Occupational Work Experience Education in JRNAL

2-4 units SC

- *May be repeated eight times*
- *Variable hours*
- *Note: In order to enroll in the JRNAL-296 course, students must be interning or volunteering, register for the course, complete an online Employment Form, and participate in an orientation. Incomplete grades are not awarded for this course.*

JRNAL-296 is a supervised internship in a skilled or professional level assignment in the student's major field of study or area of career interest. Under the supervision of a college instructor, students will engage in on-the-job and other learning experiences that contribute to their employability skills and occupational or educational goals. Internships may be paid, non-paid, or some partial compensation provided. Each unit represents five hours of paid work or four hours of unpaid work per week or 75 hours of paid work or 60 hours of unpaid work per term. Students may earn up to a total of 16 units in any combination of WRKX courses. Repetition allowed per Title 5, Section 55253. CSU

JRNAL-298 Independent Study

.5-3 units SC

- *Variable hours*
- *Note: Submission of acceptable educational contract to department and Instruction Office is required.*

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. CSU

KINESIOLOGY – KINES

Christine Worsley, Dean

Kinesiology, Athletics, and Health Sciences Division

Kinesiology Office Building, Room 104

Possible career opportunities

Kinesiology is the interdisciplinary study of human movement, including but not limited to history, sociology, psychology, physiology and biomechanics. As a result, students earning a degree in kinesiology are able to pursue a wide variety of careers: physical education, coaching, athletic training (including sports medicine and allied health fields such as physical therapy, physician assistant and nursing), fitness instruction (personal training and strength and conditioning) and sports/recreation management (including sport administration, journalism, marketing, and law, as well as community parks and recreation). Many career options require more than two years of college study.

Associate in arts in kinesiology for transfer

Students completing the program will be able to...

- describe and explain the scholarly study of human movement and its significance to our understanding of physical activity.
- assess the importance of physical activity in our daily lives (e.g. recreation, self-expression, health, competition, etc.).
- differentiate among the sub-disciplines of kinesiology (e.g. history, biomechanics, philosophy, etc.) and discuss the knowledge specific to those areas.
- demonstrate knowledge in related disciplines required as core preparation for kinesiology majors (e.g. chemistry, biology, physics, statistics, etc.).
- apply a variety of research methods to locate and use appropriate information from various sources.

Kinesiology is the academic discipline focusing on the study of all aspects of human movement. Programs of study at the baccalaureate level include exercise science, sports management, allied health profession preparation, and pursuit of a teaching credential to become a secondary school teacher/coach.

The associate in arts in kinesiology for transfer is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major.

Kinesiology

In order to earn the degree, students must:

- Complete 60 CSU-transferable units.
- Complete the California State University-General Education-Breadth pattern (CSU GE-Breadth); or the Intersegmental General Education Transfer Curriculum (IGETC) pattern, including the Area 1C requirement for Oral Communication.
- Complete a minimum of 18 units in the major.
- Attain a minimum grade point average (GPA) of 2.0.
- Earn a grade of “C” or higher in all courses required for the major.

Students transferring to a CSU campus that accepts the degree will be required to complete no more than 60 units after transfer to earn a bachelor’s degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system, or those students who do not intend to transfer.

Students must complete each course used to meet a major requirement with a “C” grade or higher. Some courses in the major satisfy both major and CSUGE/IGETC general education requirements; however, the units are only counted once toward the 60 unit requirement for an associate degree. 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.

<i>major requirements:</i>	<i>units</i>
BIOSC-139 Human Anatomy.....	5
BIOSC-140 Human Physiology	5
KINES-210 Introduction to Kinesiology.....	3

<i>plus a minimum of 6 units from:</i>	
BUS-240 Business Statistics.....	3
or	
MATH-142 Elementary Statistics with Probability.....	4
BIOSC-117 Human Biology with Laboratory.....	4
CHEM-120 General College Chemistry I.....	5
PH-230 Advanced First Aid/CPR	3
PHYS-120 General College Physics.....	4
or	
PHYS-130 Physics for Engineers and Scientists A-Mechanics and Wave Motion.....	4

*plus at least 3 units from:
Maximum of one course (minimum one unit) from any three of the following areas:*

Aquatics	
KNACT-100A Beginning Swimming	1
KNACT-100B Intermediate Swimming	1
KNACT-102A Beginning Aquatic Fitness	1

Fitness

DANCE-105A Pilates Mat Work I	1
DANCE-105B Pilates Mat Work II	
KNACT-110A Beginning Hatha Yoga	1
KNACT-110B Intermediate Hatha Yoga	1
KNACT-122A Beginning Exercise, Balance, and Mobility.....	1
KNACT-128A Beginning Cardio Kickboxing	1
KNACT-130A Beginning Fitness Walking.....	1
KNACT-132 Hiking.....	1
KNACT-144A Beginning Strength and Cardio Circuit Training	1
KNACT-144B Intermediate Strength and Cardio Circuit Training	1
KNACT-146A Theory and Practice of Strength Training and Fitness I	1
KNACT-148A Beginning Power Training	1
KNACT-148B Intermediate Power Training	1

Individual sports

KNACT-160A Beginning Badminton.....	1
KNACT-160B Intermediate Badminton	1
KNACT-162 Bowling.....	1
KNACT-164A Beginning Golf.....	1
KNACT-164B Intermediate Golf.....	1
KNACT-166A Beginning Tennis.....	1

Team sports

KNACT-170A Beginning Basketball	1
KNACT-170B Intermediate Basketball	1
KNACT-176A Beginning Soccer.....	1
KNACT-176B Intermediate Soccer.....	1
KNACT-178A Beginning Indoor Soccer	1
KNACT-182A Beginning Volleyball.....	1
KNACT-182B Intermediate Volleyball.....	1
KNACT-182C Advanced Volleyball.....	1

Combatives

KNCMB-110 Self Defense	1
KNCMB-118A Beginning Taekwondo	1
KNCMB-118B Intermediate Taekwondo	1
KNCMB-118C Advanced Taekwondo	1
KNCMB-126A Beginning Aikido	1
KNCMB-126B Intermediate Aikido	1
KNCMB-130 Judo.....	1
KNCMB-134 Karate	1

Dance

DANCE-100 Introduction to Dance	1
DANCE-110A Ballet Fundamentals I	1
DANCE-110B Ballet Fundamentals II	1
DANCE-120A Jazz Dance Fundamentals I.....	1
DANCE-120B Jazz Dance Fundamentals II.....	1
DANCE-130A Modern Dance Fundamentals I	1
DANCE-130B Modern Dance Fundamentals II	1
DANCE-160A Tap Dance I	1
DANCE-166 Swing Dance	1
DANCE-168A Salsa and Latin Dance I	1
DANCE-168B Salsa and Latin Dance II	1
DANCE-169A Argentine Tango	1
DANCE-170A Hip-Hop and Urban Funk Dance I	1
DANCE-170B Hip-Hop and Urban Funk Dance II	1
DANCE-164A Ballroom/Social Dance I	1

total minimum units for the major

22

Recommended general education courses:

KINES-100	Fitness and Wellness	1
KINES-248	Sport and Society	3

**Associate in science degree
Fitness instruction**

Students completing the program will be able to...

- A. conduct assessment of personal fitness levels.
- B. develop a conditioning program to improve conditioning levels utilizing the periodization model.
- C. design a conditioning program to meet the unique needs of special populations.

The associate in science degree in fitness instruction is a two-year course of study designed for students who are interested in a career in the fitness industry and/or wish to transfer to a four-year institution in kinesiology or related major. It will expose students to many facets of the fitness industry and is appropriate for those students who wish to become a personal trainer and/or group exercise instructor. Completion of the degree will also prepare students to sit for one of the national personal training or group exercise instructor certification examinations. Students who intend to transfer to a four-year institution must consult with program faculty and college counselors to ensure that the requirements for transfer to appropriate institutions are met. Possible programs of study at the baccalaureate level include exercise science, strength and conditioning, preparation for a teaching credential or other specialty area under the kinesiology umbrella.

To earn a degree, students must complete each course used to meet a major requirement with a "C" grade or higher and complete general education requirements as listed in the catalog. Certain courses may satisfy both major and general education requirements; however, the units are only counted once.

<i>major requirements:</i>		<i>units</i>
KINES-100	Fitness and Wellness	1
KINES-234	Introduction to Sports Medicine and Athletic Training.....	3
KINES-240	Principles of Optimizing Human Performance.....	3
KINES-242	Exercise Techniques and Fitness Assessments	1
KINES-246	Sport and Exercise Psychology.....	3
KINES-248	Sport and Society	3
KINES-250	Professional Aspects of Personal Training.....	3
KINES-252	Professional Aspects of Group Personal Training	1.5
KINES-254	Practical Experience in Personal Training and Fitness Instruction I	4
KINES-255	Practical Experience in Personal Training and Fitness Instruction II.....	4
NUTRI-120	Sports Nutrition: Fueling the Athlete.....	3
PH-230	Advanced First Aid/CPR	3

plus at least 3 units from:

BIOSC-101	Fundamentals of Biological Science	3
BIOSC-102	Fundamentals of Biological Science with Laboratory	4
BIOSC-116	Human Biology	3
BIOSC-117	Human Biology with Laboratory	4
BIOSC-120	Introduction to Human Anatomy and Physiology	5
BIOSC-139	Human Anatomy.....	5
BIOSC-140	Human Physiology	5

plus at least 2 units from:

KNACT-146A	Theory and Practice of Strength Training and Fitness I	1
KNACT-146B	Theory and Practice of Strength Training and Fitness II	1
KNACT-146C	Theory and Practice of Strength Training and Fitness III	1
KNACT-146D	Theory and Practice of Strength Training and Fitness IV	1
KNACT-148A	Beginning Power Training	1
KNACT-148B	Intermediate Power Training	1

plus at least 2 units from:

DANCE-105A	Pilates Mat Work I.....	1
KNACT-110A	Beginning Hatha Yoga.....	1
KNACT-110B	Intermediate Hatha Yoga	1
KNACT-110C	Advanced Hatha Yoga	1
KNACT-120	Physical Fitness.....	1
KNACT-122A	Beginning Exercise, Balance, and Mobility	1
KNACT-124A	Beginning Strength, Core, and More	1
KNACT-124B	Intermediate Strength, Core, and More.....	1
KNACT-128A	Beginning Cardio Kickboxing.....	1
KNACT-128B	Intermediate Cardio Kickboxing.....	1
KNACT-140	Indoor Cycling.....	1
KNACT-144A	Beginning Strength and Cardio Circuit Training.....	1
KNACT-144B	Intermediate Strength and Cardio Circuit Training	1

total minimum units for the major 39.5

recommended courses:

	<i>units</i>	
BUSMG-191	Small Business Management	3
KINES-210	Introduction to Kinesiology.....	3
KINES-230	Overview of Sports Medicine and Fitness Professions.....	2
KINES-232	Introduction to Sports Massage.....	1.5
KINES-235	Advanced Sports Medicine and Athletic Training	3
KINES-256	Theory & Practice of Performance Exercise Training & Exam Prep.....	2
KINES-257	Theory & Practice of Corrective Exercise Training & Exam Prep.....	2
KINES-258	Personal Training National Examination Preparation.....	2

**Associate in science degree
Kinesiology**

Students completing the program (coaching emphasis) will be able to...

- A. develop practice plans, analyze strategy and teach techniques specific to a chosen sport.
- B. incorporate concepts of an athlete’s psychological and physical health to improve performance.
- C. develop an educational and career plan matched to their skills, aptitudes, and professional requirements.

Students completing the program (Sports and recreation management) will be able to...

- A. compare and contrast career opportunities within the sports management and kinesiology sectors.
- B. apply management and organizational techniques to the sports and recreation setting.
- C. design individual components sports management programs.
- D. describe basic principles of kinesiology.
- E. utilize these disciplines in completing a transfer degree pathway.

The associate in science degree in kinesiology offers students two areas of specialization from which to choose: sport and recreation management or coaching. The degree is a two-year course of study designed for students who are interested in a career as an athletic coach and/or preparing for an entry level job in sports or recreation administration at a wide variety of businesses such as fitness centers, spas and wellness centers, recreational facilities, etc.

While most of the kinesiology major requirements are transferable and many meet prerequisites required in associate majors, this degree is not designed as a transfer curriculum. 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. Possible programs of study at the baccalaureate level include pursuit of a teaching credential to become a secondary school teacher/coach, or exercise science, sports management or other specialty area related to the discipline of kinesiology. Students who intend to transfer are advised to select General Education Option 2 (IGETC) or Option 3 (CSU GE). Option 1 (DVC General Education) is appropriate for students who do not intend to transfer.

To earn this degree, students must complete the core major requirements as indicated and select an area of specialization. Students must complete each course used to meet a major requirement with a “C” grade or higher and complete general education requirements as listed in the catalog. Certain courses may satisfy both major and general education requirements; however the units are only counted once. For this degree a maximum of 15 units may be double-counted.

major requirements:

	<i>units</i>
KINES-100 Fitness and Wellness	1
KINES-210 Introduction to Kinesiology	3
KINES-234 Introduction to Sports Medicine and Athletic Training	3
KINES-240 Principles of Optimizing Human Performance.....	3
KINES-242 Exercise Techniques and Fitness Assessments.....	1
KINES-246 Sport and Exercise Psychology.....	3
KINES-248 Sport and Society	3
PH-230 Advanced First Aid/CPR	3
PSYCH-101 Introduction to Psychology	3

plus at least 3 units from:

BUS-240 Business Statistics.....	3
MATH-135 College Algebra.....	4
MATH-142 Elementary Statistics with Probability	4

plus at least 3 units from:

BIOSC-116 Human Biology.....	3
BIOSC-117 Human Biology with Laboratory	4
BIOSC-139 Human Anatomy.....	5

coaching emphasis

required courses:

KINES-260 Theory of Coaching Sports.....	3
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*plus at least 2 units from: **

KNACT-100A Beginning Swimming	1
KNACT-100B Intermediate Swimming	1
KNACT-160A Beginning Badminton.....	1
KNACT-160B Intermediate Badminton.....	1
KNACT-164A Beginning Golf.....	1
KNACT-164B Intermediate Golf.....	1
KNACT-166A Beginning Tennis.....	1
KNACT-170A Beginning Basketball	1
KNACT-170B Intermediate Basketball	1
KNACT-174A Beginning Men’s Lacrosse.....	1
KNACT-174B Intermediate Men’s Lacrosse.....	1
KNACT-176A Beginning Soccer.....	1
KNACT-176B Intermediate Soccer.....	1
KNACT-182A Beginning Volleyball	1
KNACT-182B Intermediate Volleyball	1
KNACT-182C Advanced Volleyball	1
KNACT-195A Beginning Plyometrics and Agility Training for Female Athletes.....	1
KNACT-195B Intermediate Plyometrics and Agility Training for Female Athletes.....	1
KNACT-195C Advanced Plyometrics and Agility Training for Female Athletes.....	1

total minimum units for the major 34

sport and recreation management emphasis

required courses:

	<i>units</i>
KINES-220 Introduction to Sport and Recreation Management.....	3
KINES-222 Practical Experience in Sport and Recreation Management I	4
KINES-223 Practical Experience in Sport and Recreation Management II	4

plus a least 2 units from:

KNACT-100A	Beginning Swimming	1
KNACT-100B	Intermediate Swimming	1
KNACT-160A	Beginning Badminton	1
KNACT-160B	Intermediate Badminton	1
KNACT-164A	Beginning Golf	1
KNACT-164B	Intermediate Golf	1
KNACT-166A	Beginning Tennis	1
KNACT-170A	Beginning Basketball	1
KNACT-170B	Intermediate Basketball	1
KNACT-174A	Beginning Men's Lacrosse	1
KNACT-174B	Intermediate Men's Lacrosse	1
KNACT-176A	Beginning Soccer	1
KNACT-176B	Intermediate Soccer	1
KNACT-182A	Beginning Volleyball	1
KNACT-182B	Intermediate Volleyball	1
KNACT-182C	Advanced Volleyball	1
KNACT-195A	Beginning Plyometrics and Agility Training for Female Athletes	1
KNACT-195B	Intermediate Plyometrics and Agility Training for Female Athletes	1
KNACT-195C	Advanced Plyometrics and Agility Training for Female Athletes	1
total minimum units for the major		42

recommended degree electives:

BIOSC-140	Human Physiology	5
KINES-230	Overview of Sports Medicine and Fitness Professions	2
NUTRI-120	Sports Nutrition: Fueling the Athlete	3
NUTRI-160	Nutrition: Science and Applications	3

Associate in science degree Sports medicine/athletic training

Students completing the program will be able to...

- differentiate between a variety of anatomical structures and related technology.
- utilize injury evaluation, treatment, rehabilitation and massage techniques.
- develop an educational and career plan matched to their skills, aptitudes, and professional requirements.

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 all requirements for transfer to four-year institutions of their choice, including the appropriate general education pattern are met.

Students must complete each course used to meet a major requirement with a "C" grade or higher, maintain an overall GPA of 2.75 or higher and complete general education requirements as listed in the catalog. Certain courses may satisfy both major and general education requirements; however, the units are only counted once.

major requirements:

	units	
BIOSC-139	Human Anatomy	5
BIOSC-140	Human Physiology	5
KINES-230	Overview of Sports Medicine and Fitness Professions	2
KINES-232	Introduction to Sports Massage	1.5
KINES-234	Introduction to Sports Medicine and Athletic Training	3
KINES-235	Advanced Sports Medicine and Athletic Training	3
KINES-236	Clinical Experiences in Sports Medicine and Athletic Training I	2
KINES-237	Clinical Experiences in Sports Medicine and Athletic Training II	2
KINES-238	Clinical Experiences in Sports Medicine and Athletic Training III	2
KINES-239	Clinical Experiences in Sports Medicine and Athletic Training IV	2
KINES-240	Principles of Optimizing Human Performance	3
KINES-242	Exercise Techniques and Fitness Assessments	1
KINES-248	Sport and Society	3
PSYCH-101	Introduction to Psychology	3

plus at least 4 units from:

CHEM-107	Integrated Inorganic, Organic, and Biological Chemistry	5
CHEM-108	Introductory Chemistry	4
CHEM-109	Introduction to Organic and Biochemistry	4
CHEM-120	General College Chemistry I	5

plus at least 3 units from:

BIOSC-101	Fundamentals of Biological Science	3
BIOSC-116	Human Biology	3
KINES-210	Introduction to Kinesiology	3
NUTRI-160	Nutrition: Science and Applications	3
PH-230	Advanced First Aid/CPR	3
PHYS-110	Elementary Physics	3
PHYS-120	General College Physics I	4

total minimum units for the major 41.5

Certificate of achievement Coaching

Students completing the program will be able to...

- develop practice plans, analyze strategy and teach techniques specific to a chosen sport.
- incorporate concepts of an athlete's psychological and physical health to improve performance.
- develop an educational and career plan matched to their skills, aptitudes, and professional requirements.

The coaching certificate of achievement 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 "C" grade or higher.

Kinesiology

<i>required courses:</i>	<i>units</i>
KINES-234 Introduction to Sports Medicine and Athletic Training.....	3
KINES-240 Principles of Optimizing Human Performance.....	3
KINES-242 Exercise Techniques and Fitness Assessments.....	1
KINES-246 Sport and Exercise Psychology.....	3
KINES-260 Theory of Coaching Sports.....	3
PH-230 Advanced First Aid/CPR.....	3

plus at least 3 units from:

NUTRI-120 Sports Nutrition: Fueling the Athlete.....	3
NUTRI-160 Nutrition: Science and Applications.....	3

*plus at least 2 units from: **

KNACT-100A Beginning Swimming.....	1
KNACT-100B Intermediate Swimming.....	1
KNACT-160A Beginning Badminton.....	1
KNACT-160B Intermediate Badminton.....	1
KNACT-164A Beginning Golf.....	1
KNACT-164B Intermediate Golf.....	1
KNACT-166A Beginning Tennis.....	1
KNACT-170A Beginning Basketball.....	1
KNACT-170B Intermediate Basketball.....	1
KNACT-174A Beginning Men's Lacrosse.....	1
KNACT-174B Intermediate Men's Lacrosse.....	1
KNACT-176A Beginning Soccer.....	1
KNACT-176B Intermediate Soccer.....	1
KNACT-182A Beginning Volleyball.....	1
KNACT-182B Intermediate Volleyball.....	1
KNACT-182C Advanced Volleyball.....	1
KNACT-195A Beginning Plyometrics and Agility Training for Female Athletes.....	1
KNACT-195B Intermediate Plyometrics and Agility Training for Female Athletes.....	1
KNACT-195C Advanced Plyometrics and Agility Training for Female Athletes.....	1

or at least 2 units from:

KNICA-199 Sport-Specific Athletic Conditioning.....	0.5-2
KNICA-200 Intercollegiate Baseball, Men.....	3
KNICA-202A Intercollegiate Basketball-A, Men.....	2
KNICA-202B Intercollegiate Basketball-B, Men.....	1
KNICA-203A Intercollegiate Basketball-A, Women.....	2
KNICA-203B Intercollegiate Basketball-B, Women.....	1
KNICA-206 Intercollegiate Football, Men.....	3
KNICA-210 Intercollegiate Soccer, Women.....	3
KNICA-215 Intercollegiate Softball, Women.....	3
KNICA-216 Intercollegiate Swimming and Diving, Men.....	3
KNICA-217 Intercollegiate Swimming and Diving, Women.....	3
KNICA-223 Intercollegiate Volleyball, Women.....	3
KNICA-224 Intercollegiate Water Polo, Men.....	3
KNICA-225 Intercollegiate Water Polo, Women.....	3

*Activity courses or intercollegiate athletic participation must be in the selected area of coaching emphasis.

total minimum required units 21

Certificate of achievement

Personal training

Students completing the program will be able to...

- conduct assessment of personal fitness levels.
- develop a conditioning program to improve conditioning levels utilizing the periodization model.
- design a conditioning program to meet the unique needs of special populations.

The personal training certificate program is a one-year course of study that will expose students to many facets of the fitness industry and prepares them to obtain entry-level employment as a personal trainer. Completion of the certificate requirements will also prepare students to sit for national personal training 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*

KINES-240 Principles of Optimizing Human Performance.....	3
KINES-242 Exercise Techniques and Fitness Assessments.....	1
KINES-246 Sport and Exercise Psychology.....	3
KINES-250 Professional Aspects of Personal Training and Fitness Instruction.....	3
KINES-254 Practical Experience in Personal Training and Fitness Instruction I.....	4
KINES-255 Practical Experience in Personal Training and Fitness Instruction II.....	4

plus at least 1.5 units from:

COMM-128 Interpersonal Communication.....	3
KINES-234 Introduction to Sports Medicine and Athletic Training.....	3
KINES-252 Professional Aspects of Group Personal Training.....	1.5

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 1 unit from:

KNACT-146A Theory and Practice of Strength Training and Fitness I.....	1
KNACT-146B Theory and Practice of Strength Training and Fitness II.....	1
KNACT-146C Theory and Practice of Strength Training and Fitness III.....	1
KNACT-146D Theory and Practice of Strength Training and Fitness IV.....	1
KNACT-148A Beginning Power Training.....	1
KNACT-148B Intermediate Power Training.....	1

plus at least 1 unit from:

DANCE-105A Pilates Mat Work I.....	1
KNACT-110A Beginning Hatha Yoga.....	1
KNACT-110B Intermediate Hatha Yoga.....	1
KNACT-110C Advanced Hatha Yoga.....	1
KNACT-120 Physical Fitness.....	1
KNACT-122A Beginning Exercise, Balance, and Mobility.....	1
KNACT-124A Beginning Strength, Core, and More.....	1
KNACT-124B Intermediate Strength, Core, and More.....	1
KNACT-128A Beginning Cardio Kickboxing.....	1
KNACT-128B Intermediate Cardio Kickboxing.....	1
KNACT-140 Indoor Cycling.....	1
KNACT-144A Beginning Strength and Cardio Circuit Training.....	1
KNACT-144B Intermediate Strength and Cardio Circuit Training.....	1
total minimum required units	24.5

KINES-100 Fitness and Wellness

1 unit SC

- CSU GE: E
- 18 hours lecture per term
- Advisory: College-level reading and writing are expected.

This course presents the physiological, psychological and sociological aspects of healthy choices and habits that lead to fitness and overall wellness. Emphasis is placed on behavior that contribute to a lifetime of good health. CSU, UC (credit limits may apply to UC - see counselor)

KINES-150 Topics in Kinesiology Theory

.3-4 units SC

- Variable hours

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 in the schedule of classes. CSU

KINES-210 Introduction to Kinesiology

3 units SC

- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This is an introductory course surveys the sub-disciplines related to the study of human movement including history, sociology, biomechanics, physiology, and psychology, as they pertain 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 also introduces students to the concepts and skills of locating, evaluating, synthesizing, and communicating information in various formats. C-ID KIN 100, CSU, UC (credit limits may apply to UC - see counselor)

KINES-220 Introduction to Sport and Recreation Management

3 units SC

- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This is an introductory course in sport and recreation management. Students will examine the history and development of the profession, discover and evaluate a variety of career opportunities, discuss organizational and managerial strategies, and analyze current trends in sport and recreation management. CSU

KINES-222 Practical Experience in Sport and Recreation Management I

4 units SC

- 36 hours lecture/108 hours laboratory by arrangement per term
- Advisory: KINES-220 or equivalent

This is an internship course that exposes students to the practical application and responsibilities within the field of sport and recreation management. Students have the opportunity to assist with a variety of projects including marketing, game management, website management, sports information, fundraising, and/or scheduling. CSU

KINES-223 Practical Experience in Sport and Recreation Management II

4 units SC

- 36 hours lecture/108 hours laboratory by arrangement per term
- Prerequisite: KINES-222 or equivalent

This internship course continues to develop students' skills and practical experiences within the field of sport and recreation management. Students participate in creating and implementing projects. Topics for projects include, but are not limited to, marketing, game management, website management, sports information, fundraising, and/or scheduling. CSU

KINES-230 Overview of Sports Medicine and Fitness Professions

2 units SC

- 36 hours lecture per term

This course will acquaint students with a variety of sports medicine, fitness and health care professions. Information presented will include job descriptions, educational and certification/licensure requirements, work environment and potential salary ranges. CSU

KINES-232 Introduction to Sports Massage

- 1.5 units SC
 • 18 hours lecture/27 hours laboratory per term

This course will present the theory and practice of massage and its role in treating and preventing athletic injuries as well as preparing athletes for competition. Students will apply and experience the application of a variety of massage, stretching and relaxation techniques. CSU

KINES-234 Introduction to Sports Medicine and Athletic Training

- 3 units SC
 • 36 hours lecture/54 hours laboratory per term
 • *Advisory: College-level reading and writing are expected.*

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)

KINES-235 Advanced Sports Medicine and Athletic Training

- 3 units SC
 • 36 hours lecture/54 hours laboratory per term
 • *Prerequisite: KINES-234 or equivalent*

This course builds on concepts from KINES-234. It will introduce the student to the theoretical knowledge and practical skills necessary to evaluate and rehabilitate injuries. The medical and surgical management of injuries will also be discussed in presentations by orthopedic surgeons and podiatrists. CSU

KINES-236 Clinical Experiences in Sports Medicine and Athletic Training I

- 2 units SC
 • 108 hours laboratory by arrangement per term
 • *Prerequisite: KINES-234 or completion of one year high school ROP sports medicine or equivalent*

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

KINES-237 Clinical Experiences in Sports Medicine and Athletic Training II

- 2 units SC
 • 108 hours laboratory by arrangement per term
 • *Prerequisite: KINES-235 (may be taken concurrently) and KINES-236 or equivalents*

This course will expose students to injury evaluation and career exploration in the area of sports medicine. Students will observe and assist athletic trainers in evaluating and treating DVC athletes. This may be augmented by off-campus observations of physicians and/or other health care providers. CSU

KINES-238 Clinical Experiences in Sports Medicine and Athletic Training III

- 2 units SC
 • 108 hours laboratory by arrangement per term
 • *Prerequisite: KINES-237 or equivalent*

This course will expose the student to advanced athletic injury evaluation and anatomy. Problem solving and professional development will be emphasized. The student will observe and assist athletic trainers in evaluating and rehabilitating DVC student athletes. This may be augmented by off-campus observations of surgery. CSU

KINES-239 Clinical Experiences in Sports Medicine and Athletic Training IV

- 2 units SC
 • 108 hours laboratory by arrangement per term
 • *Prerequisite: KINES-238 or equivalent*

This course will expose the student to advanced injury rehabilitation principles and clinical intervention techniques. Problem solving and professional development will be emphasized. Students will observe and assist athletic trainers in evaluating and rehabilitating DVC student athletes. This may be augmented by off-campus observations of surgery. CSU

KINES-240 Principles of Optimizing Human Performance

- 3 units SC
 • 54 hours lecture per term
 • *Advisory: College-level reading and writing are expected.*

This course is a study of the body's adaptations to exercise. The development of fitness programs to maximize these strength and conditioning adaptations is emphasized. The information is relevant for students interested in professions such as personal training, physical therapy, athletic training/sports medicine, teaching and coaching, as well as for people seeking to improve their own fitness level or athletic performance. This course presents the principles and foundations for national personal training exams. CSU, UC (credit limits may apply to UC - see counselor)

KINES-242 Exercise Techniques and Fitness Assessments

1 unit SC

- 54 hours laboratory per term
- Advisory: KINES-240 or equivalent (may be taken concurrently)

This course is a companion laboratory course to KINES-240. Topics include cardiovascular, pulmonary and muscular responses to exercise. Students will also practice the instruction of proper techniques of strength training and fitness conditioning, conditioning, conduct fitness assessments and evaluate progress in exercise programs. CSU, UC (credit limits may apply to UC - see counselor)

KINES-246 Sport and Exercise Psychology

3 units SC

- CSU GE: E
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This course addresses the scientific approach to psychological aspects of sport and exercise performance, as well as the practical application of that knowledge. Factors that influence sport performance and/or exercise adherence, such as personality, cognitive and physiological anxiety, motivation, group/social dynamics, and leadership, are presented. In addition, psychological skills training methods such as arousal management, imagery, goal setting, and concentration are introduced. Lastly, the course defines the relationship between sport/exercise participation (from childhood through adulthood), and psychological health, wellness, and development. CSU

KINES-248 Sport and Society

3 units SC

- IGETC: 4; CSU GE: D; DVC GE: IV
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This course demonstrates the many ways sport and society interact and affect one another. The process of socialization as well as the roles of violence, gender, race, media, politics and others within the realm of sport, are examined. Considerations of pertinent current events and scholarly journal articles to enhance students' understanding of the topics addressed. CSU, UC

KINES-250 Professional Aspects of Personal Training

3 units SC

- 54 hours lecture per term
- Advisory: KINES-240 or equivalent

This course is for students who are, or aspire to be, personal trainers. Emphasis is on how to become nationally certified as a personal trainer, effectively work with clients, including those within special populations, conduct assessments and create long term and short term goals, and create appropriate program design. CSU

KINES-252 Professional Aspects of Group Personal Training

1.5 units SC

- 18 hours lecture/27 hours laboratory per term
- Advisory: KINES-240 or equivalent

This course prepares the potential personal trainer and group exercise instructor for the practical aspects of training and managing clients in a small group fitness/strength training setting. Principles and management of appropriate progression, regression and modification will be emphasized. Program design, exercise sequencing, training variables, use of strength equipment/modalities and practical teaching skills will also be included. CSU

KINES-254 Practical Experience in Personal Training and Fitness Instruction I

4 units SC

- 36 hours lecture/108 hours laboratory by arrangement per term
- Prerequisite: KINES-240 (may be taken concurrently) or equivalent

This is an internship course that exposes students to the practical application and responsibilities of personal training through the observation and assistance of a fitness professional. Students observe and conduct assessments on clients for fitness programs and program design development. Students examine the adaptations/adjustments (appropriate progressions/regressions) of fitness programs to meet the changing needs of the client's fitness level and risk factor management and development of long and short term fitness goals. CSU

KINES-255 Practical Experience in Personal Training and Fitness Instruction II

4 units SC

- 36 hours lecture/108 hours laboratory by arrangement per term
- Prerequisite: KINES-240 (may be taken concurrently) and KINES-250 (may be taken concurrently) or equivalents

This is an internship course where students experience the practical application and responsibilities of personal training. Students perform objective assessments with clients, prepare, and execute program design, as well as create long and short term health and wellness goals based on assessments outcomes. CSU

KINES-256 Theory and Practice of Performance Exercise Training and Exam Prep.

2 units SC

- 36 hours lecture per term
- Advisory: KINES-240 and KINES-250 or equivalents

This course is for personal trainers, athletic trainers and coaches to advance their knowledge in the area of performance exercise. Performance exercise theory, assessment techniques, and strategies for optimizing human performance are emphasized. Students may be able to earn continuing education units (CEU's) and/or sit for a national examination in performance exercise. CSU

KINES-257 Theory and Practice of Corrective Exercise Training and Exam Prep.

2 units SC

- 36 hours lecture per term
- Advisory: KINES-240 and KINES-250 or equivalents

This course is for personal trainers, athletic trainers, and coaches to advance their knowledge in the area of corrective exercise. Emphasis includes corrective exercise theory, assessing human movement dysfunction, the corrective exercise continuum, and corrective strategies. Students may be able to earn continuing education units (CEU's) and/or sit for a national examination in corrective exercise. CSU

KINES-258 Personal Training National Exam Preparation

2 units SC

- 36 hours lecture per term
- Advisory: KINES-250 or equivalent

This course is designed to provide students with the information necessary to sit for a national personal training exam. The course expands upon information presented in other personal training courses within our program to emphasize knowledge required for passing these exams. CSU

KINES-260 Theory of Coaching Sports

3 units SC

- 54 hours lecture per term

This course is an introduction to a variety of coaching sports. Topics include methods of instruction, practice design, mental preparation, and program building. This course is appropriate for those looking for a career in coaching, current youth coaches and the athlete wanting to increase knowledge of their sport. No previous coaching experience is necessary. CSU, UC (credit limits may apply to UC - see counselor)

KINES-265 Theory and Strategies of American Football Offense

2 units SC

- 36 hours lecture per term

This course presents an overview of the strategies and techniques of American football offense. Topics include terminology, rules, strategies, mental preparation, skills, and methods of implementing the offense. CSU, UC (credit limitations may apply to UC - see counselor)

KINES-266 Theory and Strategies of American Football Defense

2 units SC

- 36 hours lecture per term

This course presents an overview of the strategies and techniques of American football defense. Topics include terminology, rules, strategies, mental preparation, skills, and methods of implementing the defense. CSU, UC (credit limitations may apply to UC - see counselor)

KINES-295 Occupational Work Experience Education in KINES

2-4 units SC

- May be repeated eight times
- Variable hours
- Note: In order to enroll in KINES-295, students must be employed, register for the course, complete an online Employment Form, and participate in an orientation. Incomplete grades are not awarded for this course.

KINES-295 is supervised employment that extends classroom learning to the job site and relates to the student's chosen field of study or area of career interest. Under the supervision of a college instructor, students will engage in on-the-job and other learning experiences that contribute to their employability skills and occupational or educational goals. Each unit represents five hours of work per week or 75 hours of work per term. Students may earn up to a total of 16 units in any combination of WRKX courses. Repetition allowed per Title 5 Section 55253. CSU

KINES-298 Independent Study

.5-3 units SC

- Variable hours
- Note: Submission of acceptable educational contract to department and Instruction Office is required.

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. CSU

KINES-299 Student Instructional Assistant

.5-3 units SC

- 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

KINESIOLOGY ACTIVITY – KNACT

Christine Worsley, Dean
Kinesiology, Athletics, and Health Sciences Division
Kinesiology Office Building, Room 104

Limitations on enrollment

Effective fall term 2013, changes to the regulations that govern community college enrollments placed limitations on the number of courses that students may take in certain disciplines within the Contra Costa Community College District. The charts below indicate which Diablo Valley College (DVC) courses are assigned to groups of courses (“families”) for which limitations have been imposed. Certain courses within certain “families” may be repeated (see catalog description), however, students are limited to four enrollments within the family. Certain DVC courses are equivalent to courses at Los Medanos College and Contra Costa College. An enrollment in an equivalent course at one of those colleges will count toward the allowable four enrollments within the family.

NOTE: Diablo Valley College may offer experimental or topics courses. When appropriate, based on content, such courses will be assigned to a “family” and that enrollment will be counted as an experience within the “family”.

KINESIOLOGY

Family: Swimming

KNACT-100A Beginning Swimming
KNACT-100B Intermediate Swimming

Family: Yoga

KNACT-110A Beginning Hatha Yoga
KNACT-110B Intermediate Hatha Yoga
KNACT-110C Advanced Hatha Yoga
KNACT-114A Beginning Stretch and Yoga for Sports
KNACT-114B Intermediate Stretch and Yoga for Sports

Family: Walking/jogging

KNACT-130A Beginning Fitness Walking
KNACT-130B Intermediate Fitness Walking
KNACT-132 Hiking
KNACT-134A Beginning Fitness Jogging
KNACT-134B Intermediate Fitness Jogging
KNACT-136 Distance Track Training

Family: Aerobics

KNACT-102A Beginning Aquatic Fitness
KNACT-102B Intermediate Aquatic Fitness
KNACT-104 Water Aerobics
KNACT-120 Physical Fitness
KNACT-125 Zumba
KNACT-126 Aerobics/Step Aerobics
KNACT-128A Beginning Cardio Kickboxing
KNACT-128B Intermediate Cardio Kickboxing
KNACT-140 Indoor Cycling
KNACT-142A Beginning Boot Camp
KNACT-144A Beginning Strength and Cardio Circuit Training
KNACT-144B Intermediate Super Circuit
KNACT-150A Zumba
KNACT-150E Boot Camp

Family: Core

DANCE-105A Pilates Mat Work I
DANCE-105B Pilates Mat Work II
KNACT-122A Beginning Exercise, Balance, and Mobility
KNACT-122B Intermediate Exercise, Balance, and Mobility
KNACT-124A Beginning Strength, Core, and More
KNACT-124B Intermediate Strength, Core, and More
KNDAN-105A Pilates Mat Work I
KNDAN-105B Pilates Mat Work II

Family: Sport specific conditioning

KNACT-150C Advanced Plyometrics and Agility Training for Female Athletes
KNACT-195A Beginning Plyometrics and Agility Training for Female Athletes
KNACT-195B Intermediate Plyometrics and Agility Training for Female Athletes
KNACT-195C Advanced Plyometrics and Agility Training for Female Athletes

Family: Resistance

KNACT-146A Theory and Practice of Strength Training and Fitness I
KNACT-146B Theory and Practice of Strength Training and Fitness II
KNACT-146C Theory and Practice of Strength Training and Fitness III
KNACT-146D Theory and Practice of Strength Training and Fitness IV
KNACT-148A Beginning Power Lifting
KNACT-148B Intermediate Power Lifting

Family: Golf

KNACT-164A Beginning Golf
KNACT-164B Intermediate Golf

Family: Tennis

KNACT-150B Intermediate Tennis
KNACT-166A Beginning Tennis
KNACT-166B Intermediate Tennis

Kinesiology activity

Family: Badminton

KNACT-160A Beginning Badminton
KNACT-160B Intermediate Badminton

Family: Bowling

KNACT-162 Bowling

Family: Basketball

KNACT-170A Beginning Basketball
KNACT-170B Intermediate Basketball

Family: Football

KNACT-172 Flag Football

Family: Lacrosse

KNACT-150D Intermediate Lacrosse
KNACT-174A Beginning Men's Lacrosse
KNACT-174B Intermediate Men's Lacrosse

Family: Soccer

KNACT-176A Beginning Soccer
KNACT-176B Intermediate Soccer
KNACT-178A Beginning Indoor Soccer
KNACT-178B Intermediate Indoor Soccer

Family: Volleyball

KNACT-182A Beginning Volleyball
KNACT-182B Intermediate Volleyball
KNACT-182C Advanced Volleyball
KNACT-184A Beginning Beach Volleyball

KNACT-100A Beginning Swimming

- 1 unit SC
- *CSU GE: E*
 - *54 hours laboratory per term*

This is an activity course designed to teach beginning level skill of swimming. Correct swimming technique for the freestyle and backstroke strokes will be emphasized. 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)

KNACT-100B Intermediate Swimming

- 1 unit SC
- *CSU GE: E*
 - *54 hours laboratory per term*
 - *Advisory: KNACT-100A or equivalent*

This is an activity course designed to teach intermediate level swimming skills. Correct swimming techniques for all four competitive swim strokes (freestyle, backstroke, breaststroke and butterfly) are emphasized. Instruction also includes aquatic rescue techniques and assessment methods for evaluating swimming improvement. CSU, UC (credit limits may apply to UC - see counselor)

KNACT-102A Beginning Aquatic Fitness

- 1 unit SC
- *CSU GE: E*
 - *54 hours laboratory per term*
 - *Advisory: KNACT-100A or equivalent*

This is an activity course designed to introduce students to the development of cardiovascular fitness and muscular strength and endurance through swimming workouts. Freestyle and backstroke will be performed and utilized within both aerobic (long distance) and anaerobic (sprint distance) style fitness programs. CSU, UC (credit limits may apply to UC - see counselor)

KNACT-102B Intermediate Aquatic Fitness

- 1 unit SC
- *CSU GE: E*
 - *54 hours laboratory per term*
 - *Advisory: KNACT-102A or equivalent*

This is an activity course designed to develop an intermediate level of cardiovascular fitness and muscular strength through swimming workouts. All four competitive strokes (freestyle, backstroke, breaststroke and butterfly) will be performed and utilized within both aerobic (long distance) and anaerobic (sprint distance) style fitness programs. Students will improve cardiovascular conditioning, upper and lower body muscular strength and endurance, and core strength. Students will apply their knowledge of swimming fitness assessment and training principles to the development of a personal swimming fitness program. CSU, UC (credit limits may apply to UC - see counselor)

KNACT-110A Beginning Hatha Yoga

- 1 unit SC
- *CSU GE: E*
 - *54 hours laboratory per term*

This is a beginning level 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)

KNACT-110B Intermediate Hatha Yoga

- 1 unit SC
- *CSU GE: E*
 - *54 hours laboratory per term*
 - *Advisory: KNACT-110A or equivalent*

This is an intermediate level 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 challenging yoga experience. Proper posture, relaxation and meditation techniques, as well as principles of healthy living, will be demonstrated and discussed throughout the course. CSU, UC (credit limits may apply to UC - see counselor)

KNACT-110C Advanced Hatha Yoga

1 unit SC

- *CSU GE: E*
- *54 hours laboratory per term*
- *Advisory: KNACT-110B or equivalent*

This is an advanced level activity course that incorporates Hatha Yoga principles and practices with students' physical and emotional needs resulting in a more integrated understanding of the benefits of yoga. Various meditation and yoga styles will be studied, practiced and analyzed. CSU, UC (credit limits may apply to UC - see counselor)

KNACT-120 Physical Fitness

1 unit SC

- *CSU GE: E*
- *54 hours laboratory per term*

This is an activity course designed to improve general physical fitness through participation in a variety of resistance, cardiovascular, core and flexibility activities. Fitness principles utilized for enhancing each of these areas will be addressed. CSU, UC (credit limits may apply to UC - see counselor)

KNACT-122A Beginning Exercise, Balance, and Mobility

1 unit SC

- *CSU GE: E*
- *54 hours laboratory per term*

This is an activity course focusing on beginning elements of guided strength training, core stabilization and balance exercises performed to a specific music cadence and designed to improve muscular strength, muscular endurance, flexibility and neuromuscular control. Basic fitness principles and nutritional/wellness topics will also be discussed. CSU, UC (credit limits may apply to UC - see counselor)

KNACT-122B Intermediate Exercise, Balance, and Mobility

1 unit SC

- *CSU GE: E*
- *54 hours laboratory per term*
- *Advisory: KNACT-122A or equivalent*

This is an activity course focusing on intermediate elements of guided strength training, core stabilization and balance exercises performed to a specific music cadence and designed to improve muscular strength, muscular endurance, flexibility and neuromuscular control. Application of fitness principles and nutritional/wellness concepts to student goals is emphasized. CSU, UC (credit limits may apply to UC - see counselor)

KNACT-124A Beginning Strength, Core, and More

1 unit SC

- *CSU GE: E*
- *54 hours laboratory per term*

This is a beginning level activity course focusing on strengthening muscles of the core region (abdominals, back, and hips). Students perform exercises that are intended to improve overall fitness, enhance joint stability, increase flexibility, enhance postural control, and improve neuromuscular efficiency. A variety of beginning fitness techniques and modalities are utilized. CSU, UC (credit limits may apply to UC - see counselor)

KNACT-124B Intermediate Strength, Core, and More

1 unit SC

- *CSU GE: E*
- *54 hours laboratory per term*
- *Advisory: KNACT-124A or equivalent*

This is an intermediate level activity course focusing on strengthening muscles of the core region (abdominals, back, and hips). Students perform a variety of intermediate level exercise that include multidimensional movements (both static and dynamic) and are intended to further improve overall fitness, enhance joint stability, increase flexibility, enhance postural control, and improve neuromuscular efficiency. CSU, UC (credit limits may apply to UC - see counselor)

KNACT-125 Zumba

1 unit SC

- *CSU GE: E*
- *54 hours laboratory per term*

This is an activity course designed to improve aerobic fitness, muscular endurance, and muscular strength by utilizing Zumba dance fitness routines. Zumba is a fitness program that incorporates international music and dance steps. Flexibility training, core strengthening and topics concerning fitness principles and overall well-being will also be incorporated. CSU, UC (credit limits may apply to UC - see counselor)

KNACT-128A Beginning Cardio Kickboxing

1 unit SC

- *CSU GE: E*
- *54 hours laboratory per term*

This is an activity course that combines fundamental skills and technique 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. Basic flexibility, strength training, focus mitt training and muscular endurance activities may also be incorporated. CSU, UC (credit limits may apply to UC - see counselor)

KNACT-128B Intermediate Cardio Kickboxing

1 unit SC

- CSU GE: E
- 54 hours laboratory per term
- Advisory: KNACT-128A or equivalent

This is an activity course that combines intermediate skills and technique 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)

KNACT-130A Beginning Fitness Walking

1 unit SC

- CSU GE: E
- 54 hours laboratory per term

This is an activity course intended for students at a beginning fitness levels who would like to utilize walking as a fitness-enhancing activity. Introductory technique will be emphasized and basic walking programs will be developed. Walking routes begin on campus and explore 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. CSU, UC (credit limits may apply to UC - see counselor)

KNACT-130B Intermediate Fitness Walking

1 unit SC

- CSU GE: E
- 54 hours laboratory per term
- Advisory: KNACT-130A or equivalent

This is an activity course intended for students at an intermediate fitness level who would like to utilize walking as a fitness-enhancing activity. Intermediate techniques will include distance, hill, backward, and speed walking. Intermediate walking programs will be developed. Walking routes begin on campus and explore nearby parks and trails. Topics to be discussed include: fitness and health assessment, equipment and safety, walking techniques, motivation, nutrition basics, program design, evaluation, Volkssporting and Volksmarching. CSU, UC (credit limits may apply to UC - see counselor)

KNACT-132 Hiking

1 unit SC

- CSU GE: E
- 54 hours laboratory per term

This is an activity course utilizing hiking as a means to improve health and fitness. Hiking and safety skills will be practiced while enjoying the beautiful parks and open spaces of the Bay Area. Hike preparation, map reading, trail marking skills, and the health and fitness benefits of hiking will be addressed. All routes are four to ten miles long at various hiking sites and are often on hilly terrain. CSU, UC (credit limits may apply to UC - see counselor)

KNACT-140 Indoor Cycling

1 unit SC

- CSU GE: E
- 54 hours laboratory per term

This is an activity course using group indoor cycling training to develop cardiovascular fitness. Students will also utilize various strength and flexibility modalities, mental imagery, visualization, nutrition concepts, as well as assessments 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)

KNACT-144A Beginning Strength and Cardio Circuit Training

1 unit SC

- CSU GE: E
- 54 hours laboratory per term

This is an activity course introducing the basic elements of a unique combination of aerobic and resistance training exercises in a total-fitness workout, utilizing cardiovascular fitness, muscular strength, muscular 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)

KNACT-144B Intermediate Strength and Cardio Circuit Training

1 unit SC

- CSU GE: E
- 54 hours laboratory per term
- Advisory: Eligibility for KNACT-144A or equivalent

This is an activity course for intermediate level students that presents a unique combination of aerobic and resistance training exercises in a total-fitness workout, utilizing cardiovascular fitness, muscular strength, muscular 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)

KNACT-146A Theory and Practice of Strength Training and Fitness I

1 unit SC

- CSU GE: E
- 54 hours laboratory per term
- Note: This is an open entry open exit course.

This is an activity course designed to increase muscular strength, muscular endurance, and fitness utilizing introductory resistance techniques and equipment training. Endurance training activities will also be included. Students will be instructed on information pertaining to safety, warm-up, and musculoskeletal anatomy. CSU, UC (credit limits may apply to UC - see counselor)

KNACT-146B Theory and Practice of Strength Training and Fitness II

1 unit SC

- CSU GE: E
- 54 hours laboratory per term
- Advisory: Eligibility for KNACT-146A or equivalent.
- Note: This is an open entry open exit course.

This is an activity course designed to increase muscular strength, muscular endurance, and fitness utilizing beginning level strength training techniques, equipment, and endurance training activities. Information on safety, warm-up, anatomy, and basic program design will also be presented. CSU, UC (credit limits may apply to UC - see counselor)

KNACT-146C Theory and Practice of Strength Training and Fitness III

1 unit SC

- CSU GE: E
- 54 hours laboratory per term
- Advisory: Eligibility for KNACT-146B or equivalent.
- Note: This is an open entry open exit course.

Note: This is an activity course designed to increase muscular strength, muscular endurance, and fitness utilizing intermediate level strength training techniques, equipment, and endurance training activities. Students will work toward independent program design and implementation. CSU, UC (credit limits may apply to UC - see counselor)

KNACT-146D Theory and Practice of Strength Training and Fitness IV

1 unit SC

- CSU GE: E
- 54 hours laboratory per term
- Advisory: Eligibility for KNACT-146C or equivalent
- Note: This is an open entry open exit course.

This is an activity course designed to increase muscular strength, muscular endurance, and fitness utilizing advanced level strength training techniques, equipment, and endurance training activities. Students will be expected to design and implement independent programs. CSU, UC (credit limits may apply to UC - see counselor)

KNACT-148A Beginning Power Training

1 unit SC

- CSU GE: E
- 54 hours laboratory per term

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 concerns will also be discussed. CSU, UC (credit limits may apply to UC - see counselor)

KNACT-148B Intermediate Power Training

1 unit SC

- CSU GE: E
- 54 hours laboratory per term
- Advisory: Eligibility for KNACT-148A or equivalent

This is an activity course designed to teach intermediate elements of power lifting and training. Intermediate-level exercises will be emphasized and program design will be covered. The biomechanics of power training, as well as plyometric training will also be discussed. CSU, UC (credit limits may apply to UC - see counselor)

KNACT-150 Topics in Physical Activity

.3-4 units SC

- CSU GE: E
- Variable hours

This is a supplemental activity course in physical activity 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

KNACT-160A Beginning Badminton

1 unit SC

- CSU GE: E
- 54 hours laboratory per term

This activity course presents beginning badminton techniques and strategies. Topics include the history, rules, etiquette, equipment, and scoring system of badminton. Students will practice basic stroke techniques and footwork skills. Offensive and defensive positions and fundamental strategies for both singles and doubles play are addressed. No previous badminton experience is necessary. CSU, UC (credit limits may apply to UC - see counselor)

KNACT-160B Intermediate Badminton

1 unit SC

- CSU GE: E
- 54 hours laboratory per term

This activity course presents intermediate badminton techniques and strategies and further exploration of the history, rules, etiquette, equipment, and scoring system of badminton. Students will practice intermediate stroke techniques, footwork skills, and knowledge of singles and doubles strategies. Offensive and defensive positions and intermediate tactical strategies for both singles and doubles will also be covered. CSU, UC (credit limits may apply to UC - see counselor)

KNACT-162 Bowling

1 unit SC

- CSU GE: E
- 54 hours laboratory per term
- Note: Mandatory fee required

This is an activity course that focuses on the basic delivery technique, targeting, and strategy of bowling. Additional topics include equipment, rules, etiquette, terminology and scoring. Students will have the opportunity to practice these techniques as well as participate in class competition. CSU, UC (credit limits may apply to UC - see counselor)

KNACT-164A Beginning Golf

1 unit SC

- CSU GE: E
- 54 hours laboratory per term
- Note: Some class meetings will be held at Buchanan Field Golf Course to utilize their practice facilities

This is an activity course designed to introduce the game of golf and 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)

KNACT-164B Intermediate Golf

1 unit SC

- CSU GE: E
- 54 hours laboratory per term
- Advisory: KNACT-164A or equivalent
- Note: Mandatory fee required

This is an activity course focusing on intermediate level golf skills. Topics include the full swing, chipping and putting mechanics, pitching, bunker shots, and uneven lies. Course management strategies and the psychology of golf are also presented. The focus is on playing nine holes of golf. CSU, UC (credit limits may apply to UC - see counselor)

KNACT-166A Beginning Tennis

1 unit SC

- CSU GE: E
- 54 hours laboratory per term

This is an activity course intended to introduce students to the game of tennis. Topics include 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)

KNACT-166B Intermediate Tennis

1 unit SC

- CSU GE: E
- 54 hours laboratory per term

This is an activity course focusing on intermediate level skills and strategies of tennis. The emphasis is on skill development for a higher level of performance and utilization of multi-optional tennis strategies. CSU, UC (Credit limits may apply to UC - see counselor)

KNACT-170A Beginning Basketball

1 unit SC

- CSU GE: E
- 54 hours laboratory per term

This activity course presents beginning basketball techniques and strategies. Topics include beginning-level techniques, rules of the full court game and cardiovascular fitness. CSU, UC (credit limits may apply to UC - see counselor)

KNACT-170B Intermediate Basketball

1 unit SC

- CSU GE: E
- 54 hours laboratory per term

This is an activity course in basketball with an emphasis on intermediate-level techniques, rules of the full court game and cardiovascular conditioning. CSU, UC (credit limits may apply to UC - see counselor)

KNACT-174A Beginning Men's Lacrosse

1 unit SC

- CSU GE: E
- 54 hours laboratory per term

This activity course presents the fundamental skills and strategies of men's lacrosse. This course focuses on the rules, etiquette, safety, considerations of lacrosse and basic lacrosse skills. 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)

KNACT-174B Intermediate Men's Lacrosse

1 unit SC

- CSU GE: E
- 54 hours laboratory per term

This activity course presents intermediate skills and strategies of men's lacrosse with further exploration of application of the rules, etiquette, and safety considerations of lacrosse. Intermediate-level offensive and defensive team strategies are presented during the course. Open to men and women. CSU, UC (credit limits may apply to UC - see counselor)

KNACT-176A Beginning Soccer

1 unit SC

- CSU GE: E
- 54 hours laboratory per term

This activity course presents beginning-level skills and strategies of soccer. Topics include rules, etiquette, safety, and technical soccer skills. Offensive and defensive positions and basic team organization are also addressed. CSU, UC (credit limits may apply to UC - see counselor)

KNACT-176B Intermediate Soccer

- 1 unit SC
 • CSU GE: E
 • 54 hours laboratory per term

This activity course presents intermediate-level soccer techniques and strategies and further exploration of the rules and technical skills. Intermediate-level offensive and defensive team strategies and positioning are also covered. CSU, UC (credit limits may apply to UC - see counselor)

KNACT-178A Beginning Indoor Soccer

- 1 unit SC
 • CSU GE: E
 • 54 hours laboratory per term

This activity course presents beginning-level indoor soccer skills and strategies. Indoor soccer is a scaled-down version of soccer, involving 5-6 players per team and small goals with no goalkeepers. Topics include the beginning-level rules, etiquette, and safety concerns of indoor soccer, as well as practice of the basic technical skills and strategies of the game. CSU, UC (credit limits may apply to UC - see counselor)

KNACT-178B Intermediate Indoor Soccer

- 1 unit SC
 • CSU GE: E
 • 54 hours laboratory per term
 • Advisory: KNACT-178A or Equivalent

This is an activity course emphasizing intermediate-level skills and strategies of indoor soccer. Indoor soccer is a scaled-down version of soccer, involving 5-6 players per team and small goals with no goalkeepers. The rules, etiquette and safety concerns of indoor soccer, deception in dribbling and passing, team defending and attacking concepts will be presented and practiced. CSU, UC (credit limits may apply to UC - see counselor)

KNACT-182A Beginning Volleyball

- 1 unit SC
 • CSU GE: E
 • 54 hours laboratory per term

This is an activity course focused on beginning volleyball knowledge and skills. Topics include rules, etiquette, safety, and technical volleyball skills. Offensive and defensive positions and basic team organization for non-competitive team play are also addressed. CSU, UC (credit limits may apply to UC - see counselor)

KNACT-182B Intermediate Volleyball

- 1 unit SC
 • CSU GE: E
 • 54 hours laboratory per term

This is an activity course focused on intermediate volleyball knowledge and skills. Topics include intermediate-level volleyball skills and the utilization of multi-optional volleyball strategies. CSU, UC (credit limits may apply to UC - see counselor)

KNACT-182C Advanced Volleyball

- 1 unit SC
 • CSU GE: E
 • 54 hours laboratory per term

This is an activity course focused on advanced volleyball knowledge and skills. Topics include analysis, evaluation and performance of complex techniques. Students will also utilize advanced tactical drills and exercises in the development of game strategies and game play. CSU, UC (credit limits may apply to UC - see counselor)

KNACT-184A Beginning Beach Volleyball

- 1 unit SC
 • CSU GE: E
 • 54 hours laboratory per term

This is an activity course focused on beginning beach volleyball knowledge and skills. Topics include rules, etiquette, safety, and technical beach volleyball skills. Offensive and defensive positions and basic team organization for non-competitive team play are also addressed. CSU, UC (Credit limits may apply to UC - see counselor)

KNACT-195A Beginning Plyometrics and Agility Training for Female Athletes

- 1 unit SC
 • CSU GE: E
 • 54 hours laboratory per term
 • Note: This course is open to all students

This activity course presents beginning-level plyometric and agility training for the female athlete, designed to help improve performance and minimize the potential for injury. Beginning-level training will include plyometric techniques, agility drills, flexibility exercises and core strengthening techniques. Fundamental health and nutritional issues specific to the female athlete will also be addressed. CSU, UC (credit limits may apply to UC - see counselor)

KNACT-195B Intermediate Plyometrics and Agility Training for Female Athletes

- 1 unit SC
 • CSU GE: E
 • 54 hours laboratory per term
 • Note: This course is open to all students

This activity course presents intermediate-level plyometric and agility training for the female athlete, designed to further develop neuromuscular control thereby enhancing sport-specific performance and minimizing the potential for injury. Intermediate training will include more complex plyometric techniques, agility drills, flexibility exercises and core strengthening techniques. Further evaluation of health and nutritional issues specific to the female athlete will also be addressed. CSU, UC (credit limits may apply to UC - see counselor)

KNACT-195C Advanced Plyometrics and Agility Training for Female Athletes

1 unit SC

- CSU GE: E
- 54 hours laboratory per term
- Note: This course is open to all students

This activity course presents advanced-level plyometric and agility training for the female athlete, designed to further advanced students' neuromuscular control, thereby enhancing sport-specific performance and minimizing the potential for injury. Students will perform advanced levels of plyometric techniques, agility drills, flexibility exercises and core strengthening techniques. Health and nutritional issues specific to the female athlete will also be discussed. CSU, UC (credit limits may apply to UC - see counselor)

KNACT-298 Independent Study

.5-3 units SC

- Variable hours
- Note: Submission of acceptable educational contract to department and Instruction Office is required.

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. CSU

KNACT-299 Student Instructional Assistant

.5-3 units SC

- 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

KINESIOLOGY COMBATIVE - KNCMB

Christine Worsley, Dean

Kinesiology, Athletics, and Health Sciences Division

Kinesiology Office Building, Room 104

Limitations on enrollment

Effective fall term 2013, changes to the regulations that govern community college enrollments placed limitations on the number of courses that students may take in certain disciplines within the Contra Costa Community College District. The charts below indicate which Diablo Valley College (DVC) courses are assigned to groups of courses ("families") for which limitations have been imposed. Certain courses within certain "families" may be repeated (see catalog description), however, students are limited to four enrollments within the family. Certain DVC courses are equivalent to courses at Los Medanos College and Contra Costa College. An enrollment in an equivalent course at one of those colleges will count toward the allowable four enrollments within the family.

NOTE: Diablo Valley College may offer experimental or topics courses. When appropriate, based on content, such courses will be assigned to a "family" and that enrollment will be counted as an experience within the "family".

KINESIOLOGY

Family: Combatives

- KNCMB-110 Self-Defense
- KNCMB-114 Jujitsu
- KNCMB-118A Beginning Taekwondo
- KNCMB-118B Intermediate Taekwondo
- KNCMB-118C Advanced Taekwondo
- KNCMB-126A Beginning Aikido
- KNCMB-126B Intermediate Aikido
- KNCMB-128 Aikido Weapons-Jo and Bokken
- KNCMB-130 Judo
- KNCMB-134 Karate
- KNCMB-150A Intermediate Taekwondo
- KNCMB-150B Advanced Taekwondo

KNCMB-110 Self-Defense

1 unit SC

- 54 hours laboratory per term

This is an activity course that presents a combination of 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)

KNCMB-114 Jujitsu

1 unit SC

- 54 hours laboratory per term

This is an activity course introducing the history, philosophy, techniques and safety aspects of jujitsu. This Japanese system of unarmed combat teaches students to yield to the opponent's strength to gain a physical advantage. Topics will include jujitsu techniques, as well as cardiovascular and muscular fitness. CSU, UC (credit limits may apply to UC - see counselor)

KNCMB-118A Beginning Taekwondo

1 unit SC

- 54 hours laboratory per term

This is an activity course introducing the basic elements of Taekwondo - the ancient Korean martial art. Emphasis will be placed on developing introductory skills as well as the history and philosophy of Taekwondo. Special attention will also be paid to safety procedures and injury prevention while increasing physical fitness and endurance. CSU, UC (credit limits may apply to UC - see counselor)

KNCMB-118B Intermediate Taekwondo

1 unit SC

- 54 hours laboratory per term

This is an activity course presenting intermediate elements of Taekwondo. Emphasis will be placed on refining basic skills, as well as introducing combination and sparring techniques. Physical fitness and endurance will be developed and special attention will be paid to safety procedures and injury prevention. The history of Taekwondo in the United States and an introduction to board-breaking techniques will be presented. CSU, UC (credit limits may apply to UC - see counselor)

KNCMB-118C Advanced Taekwondo

1 unit SC

- 54 hours laboratory per term

This is an activity course presenting advanced elements of Taekwondo - the ancient Korean martial art. Emphasis will be placed on developing powerful hand and kick striking techniques, as well as competition sparring strategies. Physical fitness and endurance will be developed and special attention will be paid to safety procedures and injury prevention. Preparation for Taekwondo competition will also be addressed. CSU, UC (credit limits may apply to UC - see counselor)

KNCMB-126A Beginning Aikido

1 unit SC

- 54 hours laboratory per term

This is an activity course that presents the history, philosophy, techniques and safety aspects of aikido. This Japanese warrior art is a noncompetitive, non-fighting discipline, comprised of defensive techniques and principles of movement. Emphasis is on fundamental aikido techniques, as well as increasing cardiovascular and muscular fitness. CSU, UC (credit limits may apply to UC - see counselor)

KNCMB-126B Intermediate Aikido

1 unit SC

- Variable hours
- Advisory: KNCMB-126A or equivalent

This is an activity course that focuses on intermediate level aikido practice. Students will explore more complex skills and techniques with increased pace. Emphasis is on the development of concentration skills and cardiovascular and muscular fitness. CSU, UC (credit limits may apply to UC - see counselor)

KNCMB-128 Aikido Weapons - Jo and Bokken

1 unit SC

- 54 hours laboratory per term

This is an activity course that presents the history, philosophy, and safety aspects of Aikido weapons-Jo (wooden staff) and Bokken (wooden sword.) Emphasis is on fundamental aikido weapon techniques, as well as increasing cardiovascular and muscular fitness. CSU, UC (credit limits may apply to UC - see counselor)

KNCMB-130 Judo

1 unit SC

- 54 hours laboratory per term

This is an activity course that presents the history, philosophy, techniques and safety aspects of judo. Judo is a discipline comprised of throws and pins, self-discipline, punctuality, courtesy, and respect. Emphasis is on judo techniques, as well as increasing cardiovascular and muscular fitness. CSU, UC (credit limits may apply to UC - see counselor)

KNCMB-134 Karate

1 unit SC

- 54 hours laboratory per term

This is an activity course that presents the 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. Emphasis is on karate techniques, as well as increasing cardiovascular and muscular fitness. CSU, UC (credit limits may apply to UC - see counselor)

KNCMB-150 Topics in Martial Arts and Combatives

.3-4 units SC

- 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

KINESIOLOGY DANCE – KNDAN

See Dance - DANCE (20-21)

KINESIOLOGY INTERCOLLEGIATE ATHLETICS – KNICA

Christine Worsley, Dean
Kinesiology, Athletics, and Health Sciences Division
Kinesiology Office Building, Room 104

KNICA-098 Intercollegiate Pre-Participation Orientation

- .3 unit P/NP
- *Non degree applicable*
 - *6 hours lecture per term*

This course is designed to prepare new students who intend to try-out/compete for an inter-collegiate athletic team, in the upcoming academic term and season of competition. Students will complete the California Community College Athletic Association's (CCCAA) athletic eligibility requirements, required medical forms and waivers, register for the National Collegiate Athletic Association (NCAA) Clearinghouse, and fulfill other requirements for community college athletic competition.

KNICA-100 Student-Athlete Success I

- 1.5 units SC
- *27 hours lecture per term*

This course is designed to assist student-athletes through the transition to collegiate-level academic achievement and athletic performance. Topics will include, student-athlete academic eligibility requirements, college resources and services, and personal responsibility skills. Students will be actively involved in the evaluation of services and application of skills in order to successfully navigate their first year of the college academic and athletic experience. CSU

KNICA-101 Student-Athlete Success II

- 1.5 units SC
- *27 hours lecture per term*
 - *Prerequisite: KNICA-100 or equivalent*
 -

This course is designed to assist student-athletes toward successful degree completion, transfer, and/or professional employment while competing in intercollegiate athletics. Topics include transfer and athletic eligibility requirements for four year institutions, transfer applications and/or professional employment processes, scholarships and financial aid, leadership skills, and personal responsibility for life success. CSU

KNICA-120 Analysis of the Multiple Aspects of Modern Day Football

- .5-2 units SC
- *Variable hours*
 - *Advisory: Competitive high school football experience or equivalent*

This course provides students the opportunity to review and analyze offensive and defensive schemes of daily practice video and opponent game film. Weekly game plans for offense, defense, and special teams (kicking game) will be presented. CSU, UC (credit limits may apply to UC - see counselor)

KNICA-199 Sport-Specific Athletic Conditioning

- .5-2 units SC
- *May be repeated three times*
 - *Variable hours*

This activity course is designed to increase physical conditioning, skill/technique level, and strategic/tactical knowledge of a specific intercollegiate sport during the off-season. See schedule of classes for sport offerings. CSU, UC (credit limits may apply to UC - see counselor)

KNICA-200 Intercollegiate Baseball, Men

- 3 units SC
- *May be repeated once*
 - *175 hours laboratory per term*
 - *Advisory: Competitive high school baseball experience or equivalent*

This course provides instruction and intercollegiate competition for men's baseball. CSU, UC (credit limits may apply to UC - see counselor)

KNICA-202A Intercollegiate Basketball-A, Men

- 2 units SC
- *May be repeated once*
 - *115 hours laboratory per term*
 - *Advisory: Competitive high school basketball experience or equivalent*
 - *Note: Fall term only*

This course provides instruction and intercollegiate competition in men's basketball. CSU, UC (credit limits may apply to UC - see counselor)

KNICA-202B Intercollegiate Basketball-B, Men

- 1 unit SC
- *May be repeated once*
 - *60 hours laboratory per term*
 - *Prerequisite: KNICA-202A or tryout audition*
 - *Note: Spring term only*

This course provides instruction and intercollegiate competition in men's basketball. CSU, UC (credit limits may apply to UC - see counselor)

KNICA-203A Intercollegiate Basketball-A, Women

2 units SC

- *May be repeated once*
- *115 hours laboratory per term*
- *Advisory: Competitive high school basketball experience or equivalent*
- *Note: Fall term only*

This course provides instruction and intercollegiate competition in women's basketball. CSU, UC (credit limits may apply to UC - see counselor)

KNICA-203B Intercollegiate Basketball-B, Women

1 unit SC

- *May be repeated once*
- *60 hours laboratory per term*
- *Prerequisite: KNICA-203A or tryout audition*
- *Note: Spring term only*

This course provides instruction and intercollegiate competition in women's basketball. CSU, UC (credit limits may apply to UC - see counselor)

KNICA-204 Intercollegiate Cross Country, Men

3 units SC

- *May be repeated once*
- *175 hours laboratory per term*
- *Advisory: Competitive high school cross country experience or equivalent*

This course provides instruction and intercollegiate competition in men's cross country. CSU, UC (credit limits may apply to UC - see counselor)

KNICA-205 Intercollegiate Cross Country, Women

3 units SC

- *May be repeated once*
- *175 hours laboratory per term*
- *Advisory: Competitive high school cross country experience or equivalent*

This course provides instruction and intercollegiate competition in women's cross country. CSU, UC (credit limits may apply to UC - see counselor)

KNICA-206 Intercollegiate Football, Men

3 units SC

- *May be repeated once*
- *175 hours laboratory per term*
- *Advisory: Competitive high school football experience or equivalent*

This course provides instruction and intercollegiate competition in football. CSU, UC (credit limits may apply to UC - see counselor)

KNICA-209 Intercollegiate Soccer, Men

3 units SC

- *May be repeated once*
- *175 hours laboratory per term*
- *Advisory: Competitive High School Soccer Experience or equivalent*

This course provides instruction and inter-collegiate competition in men's soccer. CSU, UC (credit limits may apply to UC - see counselor)

KNICA-210 Intercollegiate Soccer, Women

3 units SC

- *May be repeated once*
- *175 hours laboratory per term*
- *Advisory: Competitive high school soccer experience or equivalent*

This course provides instruction and intercollegiate competition in women's soccer. CSU, UC (credit limits may apply to UC - see counselor)

KNICA-215 Intercollegiate Softball, Women

3 units SC

- *May be repeated once*
- *175 hours laboratory per term*
- *Advisory: Competitive high school softball experience or equivalent*

This course provides instruction and intercollegiate competition in women's softball. CSU, UC (credit limits may apply to UC - see counselor)

KNICA-216 Intercollegiate Swimming and Diving, Men

3 units SC

- *May be repeated once*
- *175 hours laboratory per term*
- *Advisory: Competitive high school swimming/diving experience or equivalent*

This course provides instruction and intercollegiate competition in men's swimming and diving. CSU, UC (credit limits may apply to UC - see counselor)

KNICA-217 Intercollegiate Swimming and Diving, Women

3 units SC

- *May be repeated once*
- *175 hours laboratory per term*
- *Advisory: Competitive high school swimming/diving experience or equivalent*

This course provides instruction and intercollegiate competition in women's swimming and diving. CSU, UC (credit limits may apply to UC - see counselor)

KNICA-218 Intercollegiate Tennis, Men

3 units SC

- *May be repeated once*
- *175 hours laboratory per term*
- *Advisory: Competitive high school tennis experience or equivalent*

This course provides instruction and intercollegiate competition in men's tennis. CSU, UC (credit limits may apply to UC - see counselor)

KNICA-219 Intercollegiate Tennis, Women

3 units SC

- *May be repeated once*
- *175 hours laboratory per term*
- *Advisory: Competitive high school tennis experience or equivalent*

This course provides instruction and intercollegiate competition in women's tennis. CSU, UC (credit limits may apply to UC - see counselor)

KNICA-220 Intercollegiate Track and Field, Men

3 units SC

- *May be repeated once*
- *175 hours laboratory per term*
- *Advisory: Competitive high school track and field experience or equivalent*

This course provides instruction and intercollegiate competition in men's track and field. CSU, UC (credit limits may apply to UC - see counselor)

KNICA-221 Intercollegiate Track and Field, Women

3 units SC

- *May be repeated once*
- *175 hours laboratory per term*
- *Advisory: Competitive high school track and field experience or equivalent*

This course provides instruction and intercollegiate competition in women's track and field. CSU, UC (credit limits may apply to UC - see counselor)

KNICA-223 Intercollegiate Volleyball, Women

3 units SC

- *May be repeated once*
- *175 hours laboratory per term*
- *Advisory: Competitive high school volleyball experience or equivalent*

This course provides Instruction and intercollegiate competition in women's volleyball. CSU, UC (credit limits may apply to UC - see counselor)

KNICA-224 Intercollegiate Water Polo, Men

3 units SC

- *May be repeated once*
- *175 hours laboratory per term*
- *Advisory: Competitive high school water polo experience or equivalent*

This course provides instruction and intercollegiate competition in men's water polo. CSU, UC (credit limits may apply to UC - see counselor)

KNICA-225 Intercollegiate Water Polo, Women

3 units SC

- *May be repeated once*
- *175 hours laboratory per term*
- *Advisory: Competitive high school water polo experience or equivalent*

This course provides instruction and intercollegiate competition in women's water polo. CSU, UC (credit limits may apply to UC - see counselor)

LIBRARY STUDIES – LS

Richard Robison, Dean

Library Division

Library Building, Room 219

LS-121 Information Literacy and Research Skills

1 unit P/NP

- *9 hours lecture/27 hours laboratory per term*
- *Advisory: College-level reading and writing are expected.*

The course presents the research strategies and skills to successfully find, retrieve, evaluate and use information in various formats. Library skills, research methods, and information technology literacy are covered including the ethical and legal aspects of information use and the critical thinking skills necessary to conduct effective college research. CSU, UC

LS-150 Topics in Library Studies

.3-4 units SC

- *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

LIBRARY TECHNOLOGY – LT

Richard Robison, Dean
Library Division
Library Building, Room 219

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, archive technician, and website editor.

Associate in science degree Library technology

Students completing the program will be able to...

- explain library fundamental principles including intellectual freedom, open access, diversity, and patron privacy and confidentiality
- apply knowledge and skills gained through the coursework to perform library technician-level tasks.
- describe the characteristics of libraries and the roles of libraries in a diverse, multicultural, and democratic society, and how these needs can be met.
- apply the basic principles and standardized systems of ordering, cataloging, classifying, processing, and maintaining library materials and resources.
- demonstrate the workplace communication skills necessary to successfully interact with users and staff in the library and other information services.
- identify and use the technologies found in the library and other information services.
- analyze information critically to draw conclusions and/or solve problems when working with patrons, materials, and 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 jobs or businesses requiring information management skills. If you like working with people, books and information, consider a career in library technology.

DVC library technology 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 intended to transfer are advised to select either General Education Option 2 (IGETC) or Option 3 (CSU GE). General Education Option 1 is appropriate for students who do not intend to transfer.

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 general education requirements. Certain courses may satisfy both major and general education requirements; however, the units are only counted once. With department chairperson’s approval, other course substitutions are possible for use in completing the program.

<i>major requirements:</i>		<i>units</i>
LT-101	Foundations of Library and Information Services.....	3
LT-102	Access and Technical Services in Libraries.....	3
LT-104	Introduction to Information Organization and Management	3
LT-105	Reference and Research Services: Tools and Techniques	3
LS-121	Information Literacy and Research Skills.....	1

<i>plus at least 2 units from:</i>		
LT-295	Occupational Work Experience Education in LT.....	2-4
LT-296	Internship in Occupational Work Experience Education in LT	2-4

<i>plus at least 2 units from:</i>		
ENGL-177	Children’s Literature.....	3
LS-150	Topics in Library Studies	0.3-4
LT-106	School Library and Media Services	2
LT-107	Digital Assets: Tools and Methodologies	2
LT-110	Job Search Skills for Library Careers.....	2
LT-111	Storytelling	2
LT-112	Internet Skills for Library Personnel	1
LT-150	Topics in Library Technology.....	0.3-4

<i>plus at least 2 units from:</i>		
ARTDM-105	Introduction to Digital Imaging	3
ARTDM-171	Web Design I	3
BUSMG-121	Practices and Concepts of Supervision.....	3
BUSMG-168	Customer Service	0.5
CIS-100	Microsoft Windows – Comprehensive.....	2
COMSC-101	Computer Literacy	4
ENGL-177	Children’s Literature.....	3
LS-150	Topics in Library Studies	0.3-4
LT-106	School Library and Media Services	2
LT-107	Digital Assets: Tools and Methodologies	2
LT-110	Job Skills for Library Careers	2
LT-111	Storytelling	2
LT-112	Internet Skills for Library Personnel	1
LT-150	Topics in Library Technology.....	0.3-4
LT-295	Occupational Work Experience Education in LT.....	2-4
LT-296	Internship in Occupational Work Experience Education in LT	2-4

total minimum units for the major 19

Notes: maximum number of units applicable to the program units in LT-295 or LT-296 is four. There may be no duplication of course units between groups of restricted electives.

**Certificate of achievement
Library technology**

Students completing the program will be able to...

- A. explain library fundamental principles including intellectual freedom, open access, diversity, and patron privacy and confidentiality.
- B. apply knowledge and skills gained through the coursework to perform library technician-level tasks.
- C. describe the characteristics of libraries and the roles of libraries in a diverse, multicultural, and democratic society, and how these needs can be met.
- D. apply the basic principles and standardized systems of ordering, cataloging, classifying, processing, and maintaining library materials and resources.
- E. demonstrate the workplace communication skills necessary to successfully interact with users and staff in the library and other information services.
- F. identify and use the technologies found in the library and other information services.
- G. analyze information critically to draw conclusions and/or solve problems when working with patrons, materials, and 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 special and corporate libraries, as well as in archives or 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's approval, other course substitutions are possible for use in completing the program.

<i>required courses:</i>	<i>units</i>
LT-101 Foundations of Library and Information Services.....	3
LT-102 Access and Technical Services in Libraries.....	3
LT-104 Introduction to Information Organization and Management	3
LT-105 Reference and Research Services: Tools and Techniques	3
LS-121 Information Literacy and Research Skills.....	1

plus at least 2 units from:

LT-295 Occupational Work Experience Education in LT.....	2-4
LT-296 Internship in Occupational Work Experience Education in LT	2-4

plus at least 2 units from:

ENGL-177 Children's Literature.....	3
LS-150 Topics in Library Studies	0.3-4
LT-106 School Library and Media Services	2
LT-107 Digital Assets: Tools and Methodologies	2
LT-110 Job Skills for Library Careers	2
LT-111 Storytelling	2
LT-112 Internet Skills for Library Personnel	1
LT-150 Topics in Library Technology.....	0.3-4

plus at least 2 units from:

ARTDM-105 Introduction to Digital Imaging	3
ARTDM-171 Web Design I.....	3
BUSMG-121 Practices and Concepts of Supervision.....	3
BUSMG-168 Customer Service	0.5
CIS-100 Microsoft Windows – Comprehensive.....	2
COMSC-101 Computer Literacy	4
ENGL-177 Children's Literature.....	3
LS-150 Topics in Library Studies	0.3-4
LT-106 School Library and Media Services	2
LT-107 Digital Assets: Tools and Methodologies	2
LT-110 Job Skills for Library Careers	2
LT-111 Storytelling	2
LT-112 Internet Skills for Library Personnel	1
LT-150 Topics in Library Technology.....	0.3-4
LT-295 Occupational Work Experience Education in LT.....	2-4
LT-296 Internship in Occupational Work Experience Education in LT	2-4

total minimum required units 19

Notes: maximum number of units applicable to the program units in LT-295 or LT-296 is four. There may be no duplication of course units between groups of restricted electives.

LT-101 Foundations of Library and Information Services

- 3 units LR
- 54 hours lecture per term
 - *Advisory: College-level reading and writing are expected.*

This course provides an introduction and overview of the missions, services, operations, and staffing of libraries and information centers. The tools and terminology of library services, the library technician's role in the delivery of services, and strategies for successful job placement are emphasized. The course also explores current library issues and trends, as well as the relationship of libraries to the communities and populations they serve. CSU

LT-102 Access and Technical Services in Libraries

3 units SC

- 54 hours lecture per term
- *Advisory: College-level reading and writing are expected.*

This course teaches the full array of access and technical services in a variety of library settings and collection formats including online systems and other technology applications. The theory and practice of selecting, acquiring and circulating materials in print and electronic formats is presented. Skills and competencies necessary for providing quality access services, the history of access services, and ethical, legal and policy considerations will be covered. CSU

LT-104 Introduction to Information Organization And Management

3 units SC

- 54 hours lecture per term

This is an introductory course for library paraprofessionals on the basic theories, principles, and procedures of bibliographic control, including subject analysis, metadata schemes, physical processing, and database maintenance. Anglo-American Cataloging Rules, (AACR2), Resource Description and Access (RDA), Library of Congress (LC) and other subject heading systems will be covered. CSU

LT-105 Reference and Research Services: Tools and Techniques

3 units LR

- 54 hours lecture per term
- *Advisory: College-level reading and writing are expected.*

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

LT-106 School Library and Media Services

2 units SC

- 36 hours lecture per term
- *Advisory: College-level reading and writing are expected.*

This course presents the principles and procedures central to the operations of school libraries and media centers with an emphasis on the multi-dimensional role of the library technician. Creating effective learning environments, utilizing technology applications, and applying philosophies of service and programming, as well as collection development, will be explored. CSU

LT-107 Digital Assets: Tools and Methodologies

2 units SC

- 36 hours lecture per term

This course provides an introduction to the basic processes of creating and managing digital assets including assessing materials, managing files for preservation, and using current digitizing software systems. Access issues, metadata schemes, quality control, scanning equipment and other technologies will also be examined. CSU

LT-110 Job Skills for Library Careers

2 units SC

- 36 hours lecture per term

This course presents job search skills for careers in the library and information field. Students explore the range of positions and work environments available; apply strategies for job market research; identify key workplace skills, including soft or transferable skills; write and submit quality applications, resumes, and cover letters; and practice interviewing techniques in both face-to-face and virtual settings. CSU

LT-111 Storytelling

2 units SC

- 36 hours lecture per term
- *Advisory: College-level reading and writing are expected.*
- *Formerly L-111*

This course is an introduction to storytelling in the library, classroom, home, and other settings. Various types, formats, and techniques of storytelling will be explored. Practice in presenting and evaluating a variety of stories will also be included. CSU

LT-112 Internet Skills for Library Personnel

1 unit SC

- 18 hours lecture per term
- *Advisory: College-level reading and writing are expected.*
- *Formerly L-112*

This course presents uses of the Internet in providing online library and information services to the public and library operations. The course is designed for library personnel using the Internet and other information systems for work-related tasks such as reference, cataloging, acquisitions, programming, and other information management activities. Exploration of networking fundamentals, advanced searching techniques, user training and teaching, and evaluation of online resources are included. CSU

LT-150 Topics in Library Technology

.3-4 units SC

- *Variable hours*
- *Advisory: College-level reading and writing are expected.*
- *Formerly L-150*

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

LT-295 Occupational Work Experience Education in LT

2-4 units SC

- *May be repeated eight times*
- *Variable hours*
- *Note: In order to enroll in LT-295, students must be employed, register for the course, complete an online Employment Form, and participate in an orientation. Incomplete grades are not awarded for this course.*

LT-295 is supervised employment that extends classroom learning to the job site and relates to the student's chosen field of study or area of career interest. Under the supervision of a college instructor, students will engage in on-the-job and other learning experiences that contribute to their employability skills and occupational or educational goals. Each unit represents five hours of work per week or 75 hours work per term. Students may earn up to a total of 16 in any combination of WRKX courses. Repetition allowed per Title 5, Section 55253. CSU

LT-296 Internship in Occupational Work Experience Education in LT

2-4 units SC

- *May be repeated eight times*
- *Variable hours*
- *Note: In order to enroll in the LT-296 course, students must be interning or volunteering, register for the course, complete an online Employment Form, and participate in an orientation. Incomplete grades are not awarded for this course.*

LT-296 is a supervised internship in a skilled or professional level assignment in the student's major field of study or area of career interest. Under the supervision of a college instructor, students will engage in on-the-job and other learning experiences that contribute to their employability skills and occupational or educational goals. Internships may be paid, non-paid, or some partial compensation provided. Each unit represents five hours of paid work or four hours of unpaid work per week or 75 hours of paid work or 60 hours of unpaid work per term. Students may earn up to a total of 16 units in any combination of WRKX courses. Repetition allowed per Title 5, Section 55253. CSU

MATHEMATICS – MATH

Despina Prapavessi, Dean
Mathematics and Engineering Division
Mathematics Building, Room 267

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 learning outcomes

Program learning outcomes are subject to change. The most current list of program learning outcomes for each program is published on the DVC website at www.dvc.edu/slo.

Associate in science in mathematics for transfer

Students completing the program will be able to...

- solve problems in differential and integral calculus, both single and multivariable, or linear algebra.
- recognize, explain, and apply basic techniques of mathematical proof.
- utilize knowledge and skills from mathematics to solve mathematical problems from sciences such as physics, chemistry, engineering, computer science, or social science.

The mathematics major is a liberal arts and sciences major for students planning to study mathematics, applied mathematics, or mathematics for secondary school teachers, but also for those pursuing a course of study in physics, chemistry, engineering, computer science, and economics. Mathematics at Diablo Valley College offers a broad range of courses including calculus, differential equations, linear algebra, discrete mathematics and statistics.

The associate in science in mathematics for transfer is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major.

In order to earn the degree, students must:

- Complete 60 CSU-transferable units.
- Complete the California State University-General Education pattern (CSU GE); or the Intersegmental General Education Transfer Curriculum (IGETC) pattern, including the Area 1C requirement for Oral Communication.
- Complete a minimum of 18 units in the major.
- Attain a minimum grade point average (GPA) of 2.0.
- Earn a grade of "C" or higher in all courses required for the major.

Students transferring to a CSU campus that accepts the degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system, or those students who do not intend to transfer.

Some courses in the major satisfy both major and CSUGE/IGETC general education requirements; however, the units are only counted once toward the 60 unit requirement for an associate degree. 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.

<i>major requirements:</i>		<i>units</i>
MATH-192	Analytic Geometry and Calculus I	5
MATH-193	Analytic Geometry and Calculus II	5
MATH-292	Analytic Geometry and Calculus III	5

<i>plus at least 3 units from:</i>		
MATH-194	Linear Algebra	3
MATH-294	Differential Equations	5

<i>plus at least 3 units from any course not used above, or:</i>		
MATH-142	Elementary Statistics with Probability	4
MATH-195	Discrete Mathematics	4
MATH-289	Introduction to Upper Level Mathematics	4
total minimum units for the major		22

MATH-001NC Topics in Mathematics - Noncredit

- 0 units SC
 • Variable hours

This noncredit course in mathematics provides the opportunity to present a variety of topics to meet the needs of basic skills students. Specific topics will be announced in the schedule of classes.

MATH-002NC Fundamental Math Skills for the Statistics Pathway - Noncredit

- 0 units SC
 • 24 hours laboratory per term

This noncredit course focuses on the specific math and study skills necessary for success in transfer-level statistics courses. Through practice and group work, students are prepared to enroll in statistics with confidence.

MATH-003NC Fundamental Math Skills for Business and STEM Pathways - Noncredit

- 0 units SC
 • 24 hours laboratory per term

This noncredit course focuses on the specific math and study skills necessary for success in transfer-level math courses in the Business or STEM pathways. Through practice and group work, students are prepared to enroll in transfer-level math with confidence.

MATH-021 Support for Success in MATH-121 Plane Trigonometry

- 1 unit P/NP
 • Non degree applicable
 • 9 hours lecture/27 hours of laboratory per term
 • Co-requisite: MATH-121 or equivalent
 • Note: This course provides students with support to be successful in MATH-121 Plane Trigonometry. Studies show significantly improved success rates for students who enroll in a support course to accompany their transfer-level math course. This course is a co-requisite to MATH-121 and provides additional support for students who want to feel more confident in their math skills.

This course provides students with academic support to be successful in MATH-121 Plane Trigonometry. Additional practice with math concepts directly relevant to MATH-121 are integrated into instruction, as well as study skills strategies, mindset, and other academic supports.

MATH-035 Support for Success in MATH-135 College Algebra

- 2 units P/NP
 • Non degree applicable
 • 18 hours lecture/54 hours of laboratory per term
 • Co-requisite: MATH-135 or equivalent
 • Note: This course provides students with support to be successful in MATH-135 College Algebra. Studies show significantly improved success rates for students who enroll in a support course to accompany their transfer-level math course. This course is a co-requisite to MATH-135 and provides additional support for students who want to feel more confident in their math skills.

This course provides students with academic support to be successful in MATH-135 College Algebra. Additional practice with math concepts directly relevant to MATH-135 are integrated into instruction, as well as study skills strategies, mindset, and other academic supports.

MATH-040 In-Progress Arithmetic and Basic Algebra Review Self-Paced

- 4 units P/NP
- Non degree applicable
 - 216 hours laboratory per term
 - 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-085SP to receive non-degree applicable credit for mastery of some but not all of the outcomes in MATH-085SP. In order to receive credit for MATH-040, students must enroll in MATH-085SP and make reasonable progress through the content.

MATH-041 In-Progress Beginning and Intermediate Algebra Self-Paced

- 4 units P/NP
- Non degree applicable
 - 216 hours laboratory per term
 - Advisory: MATH-085 or MATH-085SP or beginning algebra 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-119SP to receive non-degree applicable credit for mastery of some but not all of the outcomes in MATH-119SP. In order to receive credit for MATH-041, students must enroll in MATH-119SP and make reasonable progress through the content.

MATH-042 Support for Success in MATH-142 Elementary Statistics W/ Probability

- 1 unit P/NP
- Non degree applicable
 - 9 hours lecture/27 hours of laboratory per term
 - Co-requisite: MATH-142 or equivalent
 - Note: This course provides students with support to be successful in MATH-142 Elementary Statistics with Probability. Studies show significantly improved success rates for students who enroll in a support course to accompany their transfer-level math course. This course is a co-requisite to MATH-142 and provides additional support for students who want to feel more confident in their math skills. Includes use of TI-83/84+ calculators and statistical software.

This course provides students with academic support to be successful in MATH-142 Elementary Statistics with Probability. Additional practice with math concepts directly relevant to MATH-142 are integrated into instruction, as well as study skills strategies, mindset, and other academic supports.

MATH-053 In-Progress College Algebra Self-Paced

- 4 units P/NP
- Non degree applicable
 - 216 hours laboratory per term
 - Advisory: Placement into MATH-135 or MATH-085 or MATH-085SP or beginning algebra 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-054 In-Progress Pre-Calculus Self-Paced

- 5 units P/NP
- Non degree applicable
 - 270 hours laboratory per term
 - Prerequisite: Placement into MATH-191; or MATH-121; or assessment process equivalent
 - Note: Students do not enroll directly in this course. Enrollment is limited to transfer by instructor. A scientific calculator is required.

This course is designed to allow students enrolled in MATH-191SP to receive credit for mastery of some but not all of the outcomes in MATH 191SP. In order to receive credit for MATH 054, students must enroll in MATH-191SP and make reasonable progress through the content.

MATH-077 Summer Bridge to College Math

- 1 unit LR
- Non degree applicable
 - 40 hours laboratory per term
 - Note: This course is part of the EOPS Summer Institute Learning Community and is designed for recent high school graduates. Math/English placement processes are required. Contact the EOPS Summer Institute Coordinator for more information.

This course is designed to help students transition to math in college from high school. Students work with an instructor and web-based software to assess and build math skills in preparation for a college math course.

MATH-080 Topics in Basic Skills Math

- .3-4 units SC
- Non degree applicable
 - Variable hours

This is a supplemental course in mathematics to provide a variety of topics for basic skills students. Specific topics will be announced in the schedule of classes.

MATH-081 Support for Success in Math-181 Finite Math

1 unit P/NP

- Non degree applicable
- 18 hours lecture per term
- Co-requisite: MATH-181 or Equiv.
- Note: This course provides students with support to be successful in MATH-181 Finite Mathematics. Studies show significantly improved success rates for students who enroll in a support course to accompany their transfer-level math course. This course is a co-requisite to MATH-181 and provides additional support for students who want to feel more confident in their math skills. Corequisite: MATH-181 or equivalent

This course provides students with academic support to be successful in MATH-181 Finite Mathematics. Additional practice with math concepts directly relevant to MATH-181 are integrated into instruction, including assistance with study skills strategies as needed.

MATH-085 Arithmetic and Basic Algebra Review

4 units SC

- Non degree applicable
- 54 hours lecture/54 hours laboratory per term
- Note: Studies of student success strongly suggest that degree-bound students should enroll in a math class at higher-level than MATH-085. Go to <https://www.dvc.edu/enrollment/assessment/index.html> and complete the online placement process, then make an appointment with a counselor to discuss placement.

This course is a review of topics of arithmetic and basic algebra. Topics include arithmetic, fractions, percentages, problem solving, solving basic equations, graphing lines, and systems of equations. Students who intend to earn a college degree are strongly discouraged from enrolling in this course if they have successfully completed a course equivalent to high school Algebra I.

MATH-085SP Arithmetic and Basic Algebra Review-Self-Paced

4 units SC

- Non degree applicable
- 216 hours laboratory per term
- Note: Studies of student success strongly suggest that degree-bound students should enroll in a math class at higher-level than MATH-085. Go to <https://www.dvc.edu/enrollment/assessment/index.html> and complete the online placement process, then make an appointment with a counselor to discuss placement. In this computer-assisted, flexibly-paced class, students will utilize an online learning system for their initial instruction, as well as receive assistance during weekly face-to-face meetings. Students will have some flexibility on how much time they take to learn topics and when they take assessments, though minimum requirements and deadlines will apply. The online assignments require computer access and may be completed either on or off campus. The face-to-face meetings will be held in the DVC Math Lab (for lab schedule go to www.dvc.edu/PHCmathlab for Pleasant Hill or www.dvc.edu/SRCmathlab for SRC). Students are encouraged to complete MATH-085SP in one semester, or take up to 2 semesters. MATH-085SP is equivalent to MATH-085; students who have completed MATH-085 will not receive credit for MATH-085SP.

This course is a computer-assisted, flexibly-paced class equivalent to MATH-085. This course is a review of topics of arithmetic and basic algebra. Topics include arithmetic, fractions, percentages, problem solving, solving basic equations, graphing lines, and systems of equations. Students who intend to earn a college degree are strongly discouraged from enrolling in this course if they have successfully completed a course equivalent to high school Algebra I.

MATH-091 Support for Success in MATH-191 Pre-Calculus

1 unit P/NP

- Non degree applicable
- 18 hours lecture per term
- Co-requisite: MATH-191 or equivalent
- Note: This course provides students with support to be successful in MATH-191 Pre-Calculus. Studies show significantly improved success rates for students who enroll in a support course to accompany their transfer-level math course. This course is a co-requisite to MATH-191 and provides additional support for students who want to feel more confident in their math skills.

This course provides students with academic support to be successful in MATH-191 Pre-Calculus. Additional practice with math concepts directly relevant to MATH-191 are integrated into instruction, including assistance with study skills strategies as needed.

MATH-092 Math for Trade Pre-Apprentices

4 units P/NP

- Non degree applicable
- 72 hours lecture per term
- Note: This course is part of the Pre-Apprenticeship program.

This course provides practice in the mathematics needed to pass apprenticeship exams for various trades, as well as the mathematics required by apprentices on the job site. This course offers mathematics instruction contextualized for the building trades.

MATH-094 Statway I

4 units SC

- Non degree applicable
- 54 hours lecture/54 hours laboratory per term
- Note: Graphing calculator, computer, or other technology required.

This is the first semester of a two-semester course that introduces the concepts of probability and statistics with requisite arithmetic and algebraic topics integrated throughout. It is intended for students in humanities or social sciences majors. Topics include data collection, organization and graphical interpretation of data, qualitative and quantitative data sets, measures of central tendency and measures of dispersion, bivariate data and scatter plots, linear functions and their graphs, nonlinear functions and their graphs, and linear and exponential/logarithmic models. Learning strategies for success with an emphasis on study skills, resource acquisition, and maintaining a positive perspective towards learning are also discussed and applied.

MATH-114 Geometry

3 units SC

- DVC GE: IC
- 54 hours lecture per term
- Prerequisite: Placement into MATH-121; or MATH-085 or MATH-085SP or Equiv.

Students will investigate the properties of lines, polygons, and circles using deductive reasoning. Geometric theorems, formulas for perimeter, area, and volume for a variety of plane and solid geometric objects are presented.

MATH-119 Beginning and Intermediate Algebra

4 units SC

- DVC GE: IC
- 54 hours lecture/54 hours laboratory per term
- Advisory: MATH-085 or MATH-085SP or beginning algebra or equivalent.
- Note: Studies of student success strongly suggest that degree-bound students should enroll in a math class at higher-level than MATH-119. Complete the online placement process, then make an appointment with a counselor to discuss placement.

This course is a review of topics in Algebra. Topics include factoring polynomials, fractional equations, inequalities, logarithms, exponentials, and functions. This course is intended for students who have not successfully completed a course equivalent to high school intermediate Algebra and who plan to take MATH-121 Plane Trigonometry or MATH-135 College Algebra.

MATH-119SP Beginning and Intermediate Algebra Self-Paced

4 units SC

- DVC GE: IC
- 216 hours laboratory per term
- Advisory: MATH-085 or MATH-085SP or beginning algebra or equivalent.
- Note: Studies of student success strongly suggest that degree-bound students should enroll in a math class at higher-level than MATH-119. Complete the online placement process, then make an appointment with a counselor to discuss placement. Note: In this computer-assisted, flexibly-paced class, students will utilize an online learning system for their initial instruction, as well as receive assistance during weekly face-to-face meetings. Students will have some flexibility on how much time they take to learn topics and when they take assessments, though minimum requirements and deadlines will apply. The online assignments require computer access and may be completed either on or off campus. The face-to-face meetings will be held in the DVC Math Lab (for lab schedule go to www.dvc.edu/PHCmathlab for Pleasant Hill or www.dvc.edu/SRCmathlab for SRC). Students are encouraged to complete MATH-119SP in one semester, or take up to 2 semesters. MATH-119SP is equivalent to MATH-119; students who have completed MATH-119 will not receive credit for MATH-119SP.

This course is a computer-assisted, flexibly-paced class equivalent to MATH-119. This course is a review of topics in Algebra. Topics include factoring polynomials, fractional equations, inequalities, logarithms, exponentials, and functions. This course is intended for students who have not successfully completed a course equivalent to intermediate Algebra and who plan to take Trigonometry (MATH-121) or College Algebra (MATH-135).

MATH-121 Plane Trigonometry

3 units SC

- CSU GE: B4; DVC GE: IC
- 54 hours lecture per term
- Prerequisite: Placement into MATH-121; or MATH 119; or MATH-119SP; or MATH-021 (may be taken concurrently with MATH-121); or intermediate algebra or equivalent.
- Advisory: High school geometry or equivalent

This course focuses on the theory and applications of trigonometry, including right triangle trigonometry, general angle trigonometry, and trigonometry on the unit circle, as well as trigonometric functions of real numbers. Applications include solutions of right and oblique triangles in problems in surveying, physics, engineering, and navigation. CSU

MATH-124 Mathematics for Liberal Arts

3 units LR

- IGETC: 2A; CSU GE: B4; DVC GE: IB, IC
- 54 hours lecture per term
- Prerequisite: Placement into MATH-124; or MATH-119; or MATH-119SP; or intermediate algebra or equivalent.

This course presents applications of techniques and concepts of intermediate algebra and critical thinking to the solving of contemporary problems in mathematics. Emphasis is placed on statistics, finance, and voting/apportionment. Other topics may include sets, graph theory, exponential functions, logarithmic scales, probability, geometry, or cultural aspects of mathematics. Historical context of some of the great ideas of mathematics will also be explored. CSU, UC

MATH-125 Mathematical Concepts for Elementary School Teachers

3 units SC

- CSU GE: B4; DVC GE: IC
- 54 hours lecture per term
- Prerequisite: Placement into MATH-121 or higher; or MATH-119; or MATH-119SP; or intermediate algebra or equivalent.

This course focuses on the development of quantitative reasoning skills through in-depth, integrated explorations of topics in mathematics, including real number systems and subsystems. Emphasis is on comprehension and analysis of mathematical concepts and applications of logical reasoning. C-ID MATH 120, CSU, UC

MATH-135 College Algebra

4 units LR

- IGETC: 2A; CSU GE: B4; DVC GE: IB, IC
- 72 hours lecture per term
- Prerequisite: Placement into MATH-135 or MATH-119 or MATH-119SP or MATH-035 (may be taken concurrently with MATH-135) or intermediate algebra or equivalent

This course presents a study of functions and their graphs, including polynomial, rational, radical, exponential, absolute value, logarithmic and inverse functions. Other topics include systems of equations, theory of polynomial equations, analytic geometry, and inequalities. CSU, UC (credit limits may apply to UC - see counselor)

MATH-135SP College Algebra - Self-Paced

4 units LR

- IGETC: 2A; CSU GE: B4; DVC GE: IB, IC
- 216 hours laboratory per term
- Prerequisite: Placement into MATH-135 or MATH-119 or MATH-119SP or intermediate algebra or equivalent
- Note: In this computer-assisted, flexibly-paced class, students will utilize an online learning system for their initial instruction, as well as receive assistance during weekly face-to-face meetings. Students will have some flexibility on how much time they take to learn topics and when they take assessments, though minimum requirements and deadlines will apply. The online laboratories require computer access and may be completed either on or off campus. The face-to-face meetings will be held in the DVC Math Lab (for lab schedule go to www.dvc.edu/PHCmathlab for Pleasant Hill or www.dvc.edu/SRCmathlab for SRC). Students are encouraged to complete MATH-135SP in one semester, or take up to 2 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, flexibly-paced class, equivalent to MATH-135. This course presents a study of functions and their graphs, including polynomial, rational, radical, exponential, absolute value, logarithmic and inverse functions. Other topics include systems of equations, theory of polynomial equations, analytic geometry, and inequalities. CSU, UC (credit limits may apply to UC - see counselor)

MATH-140 Tutor Training

1 unit LR

- 10 hours lecture/17 hours laboratory/7 hours laboratory by arrangement per term
- Prerequisite: MATH-142; or MATH-144; or MATH-182; or MATH-191; or placement into MATH-192 or equivalent
- Advisory: College-level reading and writing are expected.

This course presents the basic principles and methods of tutoring, including the tutoring sequence, leading and probing questions, communication skills, and learning theory. Topics include the application of tutoring techniques to specific areas of mathematics including algebra, trigonometry, and pre-calculus. Students will receive instruction to help tutees with special needs. CSU

MATH-142 Elementary Statistics with Probability

4 units LR

- IGETC: 2A; CSU GE: B4; DVC GE: IB, IC
- 72 hours lecture per term
- Prerequisite: Placement into MATH-142; or MATH 119; or MATH-119SP; or MATH-042 (may be taken concurrently with MATH-142); or intermediate algebra. Or Equiv.
- Note: Graphing calculator, computer, or other technology 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. C-ID MATH 110, CSU, UC (credit limits may apply to UC - see counselor)

MATH-144 Statway II

4 units LR

- IGETC: 2A; CSU GE: B4; DVC GE: IB, IC
- 54 hours lecture/54 hours laboratory per term
- Prerequisite: MATH-094 or equivalent
- Note: Graphing calculator, computer, or other technology required.

This is the second semester of a two-semester course that introduces the concepts of probability and statistics with requisite arithmetic and algebraic topics integrated throughout. It is intended for students in humanities or social sciences majors. Topics include sampling distributions, the Central Limit theorem, confidence intervals and hypothesis testing for means and proportions, chi square tests and mathematical modeling. Learning strategies for success with an emphasis on study skills, resource acquisition, and maintaining a positive perspective towards learning are also discussed and applied. C-ID Math 110, CSU, UC (credit limits may apply to UC - see counselor)

MATH-150 Topics in Mathematics

.3-4 units SC

- Variable hours

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

MATH-181 Finite Mathematics

3 units LR

- IGETC: 2A; CSU GE: B4; DVC GE: IB, IC
- 54 hours lecture per term
- Prerequisite: Placement into MATH-181; or MATH-119; or MATH-119SP; or MATH-081 (may be taken concurrently with MATH-181); or intermediate algebra or equivalent.
- Note: TI-83 or TI-84 graphing calculator required.

This course applies intermediate algebra and critical thinking to the solution of 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, and finance. Students will use a graphing calculator or computer software to manipulate matrices. C-ID MATH 130, CSU, UC

MATH-182 Calculus for Management, Life Science and Social Science I

4 units LR

- IGETC: 2A; CSU GE: B4; DVC GE: IB, IC
- 72 hours lecture per term
- Prerequisite: Placement into MATH-182; or MATH-135; or MATH-135SP; or MATH-191; or MATH-191SP; or assessment process or equivalent.
- Advisory: College-level reading and writing are expected.

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. C-ID MATH 140, CSU, UC (credit limits may apply to UC - see counselor)

MATH-183 Calculus for Management, Life Science, and Social Science II

4 units LR

- IGETC: 2A; CSU GE: B4; DVC GE: IB, IC
- 72 hours lecture per term
- Prerequisite: MATH-182 or equivalent
- Advisory: MATH-121 or equivalent; College-level reading and writing are expected.

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

5 units LR

- IGETC: 2A; CSU GE: B4; DVC GE: IB, IC
- 90 hours lecture per term
- Prerequisite: Placement into MATH-191; or MATH-121; or equivalent.
- Note: This course has a technology requirement. See individual instructor for further information.

This course is an in-depth treatment of functions and their graphs, including polynomial, rational, logarithmic, exponential and trigonometric functions. Nonlinear systems, vectors and complex numbers are also covered. Use of a graphing calculator or a computer algebra system is required.

C-ID MATH 155, CSU, UC (credit limits may apply to UC - see counselor)

MATH-191SP Pre-Calculus - Self Paced

5 units SC

- IGETC: 2A; CSU GE: B4; DVC GE: IB, IC
- 270 hours laboratory per term
- Prerequisite: Placement into MATH-191; or MATH-121; or equivalent
- Note: Credit by examination option available. Note: In this computer-assisted, flexibly-paced class, students will utilize an online learning system for their initial instruction, as well as receive assistance during weekly face-to-face meetings. Students will have some flexibility on how much time they take to learn topics and when they take assessments, though minimum requirements and deadlines will apply. The online labs require computer access and may be completed either on or off campus. The face-to-face meetings will be held in the DVC Math Lab (for lab schedule go to www.dvc.edu/PHCmathlab for Pleasant Hill or www.dvc.edu/SRCmathlab for SRC). Students are encouraged to complete MATH 191SP in one semester, or take up to 2 semesters. Students who have successfully completed MATH-191 will not receive credit for MATH -191SP.

This course is a computer-assisted, flexibly-paced class equivalent to MATH-191. This course is an in-depth treatment of functions and their graphs, including polynomial, rational, logarithmic, exponential and trigonometric functions. Nonlinear systems, vectors and complex numbers are also covered. Use of a graphing calculator or a computer algebra system is required. C-ID MATH 155, CSU, UC (credit limits may apply to UC - see counselor)

MATH-192 Analytic Geometry and Calculus I

5 units LR

- IGETC: 2A; CSU GE: B4; DVC GE: IB, IC
- 90 hours lecture per term
- Prerequisite: Placement into MATH-192; or MATH-191; or MATH-191SP; or assessment process or equivalent.
- Advisory: College-level reading and writing are expected.

This course presents 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. C-ID MATH 210, CSU, UC (credit limits may apply to UC - see counselor)

MATH-193 Analytic Geometry and Calculus II

5 units LR

- IGETC: 2A; CSU GE: B4; DVC GE: IB, IC
- 90 hours lecture per term
- Prerequisite: MATH-192 or equivalent
- Advisory: College-level reading and writing are expected.

This course is a continuation of MATH-192. Techniques and applications of integration in geometry, science and engineering will be explored. Work with algebraic and transcendental functions will be continued. Other topics will include numerical methods in evaluation of the integral, infinite series, solving differential equations, applications of differential equations, polar coordinates, parametric equations and conic sections. C-ID MATH 220, CSU, UC (credit limits may apply to UC - see counselor)

MATH-194 Linear Algebra

3 units LR

- IGETC: 2A; CSU GE: B4; DVC GE: IB, IC
- 54 hours lecture per term
- Prerequisite: MATH-193 or equivalent
- Advisory: College-level reading and writing are expected.

This course is an introduction to linear algebra, covering vector spaces, matrices, determinants, bases, and linear transformations. Techniques for solving systems of equations using matrices, and applications of linear transformations are covered. C-ID MATH 250, CSU, UC

MATH-195 Discrete Mathematics

4 units LR

- IGETC: 2A; CSU GE: B4; DVC GE: IB, IC
- 72 hours lecture per term
- MATH-193 (may be taken concurrently) or equivalent
- Prerequisite: MATH-193 or equivalent
- Advisory: College-level reading and writing are expected.

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-289 Introduction to Upper Division Mathematics

4 units SC

- 72 hours lecture per term
- Prerequisite: MATH-193 or equivalent.
- Advisory: College-level reading and writing are expected.

This course is designed for students who intend to transfer to a four-year college or university and study upper-division mathematics. Topics include number theory, set theory, and methods of proof including induction, direct and indirect proof as well as other topics from upper-division mathematics including abstract algebra. CSU, UC

MATH-292 Analytic Geometry and Calculus III

5 units LR

- *IGETC: 2A; CSU GE: B4; DVC GE: IB, IC*
- *90 hours lecture per term*
- *Prerequisite: MATH-193 or equivalent*

This course is a continuation of MATH-193. Topics include limits, parametric equations, vector-valued functions, analytic geometry of three dimensions, partial derivatives, multiple integrals, and Green's, Stokes' and the Divergence theorems. C-ID MATH 230, CSU, UC

MATH-294 Differential Equations

5 units LR

- *IGETC: 2A; CSU GE: B4; DVC GE: IB, IC*
- *90 hours lecture per term*
- *Prerequisite: MATH-292 or equivalent*
- *Advisory: MATH-194 or equivalent (may be taken concurrently)*
- *Note: TI-83 or TI-84 graphing calculator required.*

This course presents an introduction to the theory and applications of ordinary differential equations and an introduction to partial differential equations. C-ID MATH 240, CSU, UC

MATH-298 Independent Study

.5-3 units SC

- *Variable hours*
- *Note: Submission of acceptable educational contract to department and Instruction Office is required.*

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. CSU

MATH-299 Student Instructional Assistant

.5-3 units SC

- *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

Janette Funaro, Dean

Arts and Communication Division

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 learning outcomes

Program learning outcomes are subject to change. The most current list of program learning outcomes for each program is published on the DVC website at www.dvc.edu/slo.

Associate in arts degree

Music

Students completing the program will be able to...

- perform music with technical facility and artistry on his/her voice or choice of instrument as a soloist and as a member of an ensemble.
- demonstrate practical musical literacy, both theoretical and historical.
- listen to music with practical awareness, theoretical, critical, and historical.

The associate in arts degree in music offers students the opportunity to attain the basic skills and knowledge needed as preparation for careers in music and further undergraduate study. The music major is a two-year program of transferable courses open to all students. Required courses include applied music, theory and musicianship, piano proficiency, and ensemble. The choice of ensemble performance courses and literature courses enables the student to customize his/her own needs and/or special interests

This degree provides students with the foundations for a broad range of musical specializations such as instrumental performance, vocal performance, jazz performance, composition, theory, musicology, ethnomusicology, music education, and music industry. Music faculty and staff are dedicated to assisting students in exploring performance and teaching opportunities, and transfer to four-year institutions of higher learning.

The DVC music major is intended for transfer. Students who intend to transfer to a four-year baccalaureate program should consult with a counselor regarding specific major preparation requirements at the transfer institution of their choice. Students may not take a pass/no pass option for major courses. Students who intend to transfer are advised to select General Education Option 2 (IGETC) or Option 3 (CSU GE). Option 1 (DVC General Education) is not generally advised.

Students must complete each of the courses required for the major with a "C" grade or higher. Certain courses may satisfy both major and general education requirements; however, the units are only counted once.

major requirements: units

applied music

a minimum of 2 times for a total of 2 units

MUSIC-100 Applied Music.....1

theory and musicianship

MUSIC-122* Theory and Musicianship I.....4

MUSIC-123* Theory and Musicianship II.....4

MUSIC-222 Theory and Musicianship III.....4

MUSIC-223 Theory and Musicianship IV.....4

piano proficiency

MUSIC-150 Beginning Piano I 1*

MUSIC-151 Beginning Piano II 1*

large ensemble

plus a minimum of 4 units from:

MUSIC-135 Vocal Jazz Ensemble1

MUSIC-136 Jazz Ensemble1

MUSIC-137 Jazz Combos1

MUSIC-140 Wind Ensemble1

MUSIC-162 Concert Choir.....1

MUSIC-166 Chamber Singers 1-2

MUSIC-180 Diablo Valley Masterworks Chorale.....1

MUSIC-236 Night Jazz Band1

MUSIC-240 Symphonic Band.....1

MUSIC-290 Philharmonic Orchestra1

total minimum units for the major 24

*Credit by examination available

recommended courses:

music literature

MUSIC-110 Music Appreciation3

MUSIC-112 America's Music - A Multicultural
Perspective.....3

MUSIC-114 World Music3

MUSIC-117 History of Rock and R&B3

MUSIC-118 History of Jazz.....3

MUSIC-119 The History and Culture of Hip Hop Music.....3

Associate in arts in music for transfer

Students completing the program will be able to...

- perform music with technical facility and artistry on his/her voice or choice of instrument as a soloist and as a member of an ensemble.
- demonstrate practical musical literacy, both theoretical and historical.
- listen to music with practical awareness, theoretical, critical, and historical.

The associate in arts degree in music for transfer major at Diablo Valley College (DVC) offers students the opportunity to attain the basic skills and knowledge needed as preparation for careers in music and further undergraduate study. Required courses include applied music, theory and musicianship, and ensemble. The choice of ensemble performance and choice of voice or specific instrument in applied music enables the student to customize his/her own needs and/or special interests. This degree provides students with the foundations for a broad range of musical specializations such as instrumental performance, vocal performance, jazz performance, composition, theory, musicology, ethnomusicology, music education, and music industry. Music faculty and staff are dedicated to assisting students in exploring performance and teaching opportunities, and transfer to baccalaureate programs in Music.

The associate in arts in music for transfer is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major.

In order to earn the degree, students must:

- Complete 60 CSU-transferable units.
- Complete the California State University-General Education pattern (CSU GE); or the Intersegmental General Education Transfer Curriculum (IGETC) pattern, including the Area 1C requirement for Oral Communication.
- Complete a minimum of 18 units in the major.
- Attain a minimum grade point average (GPA) of 2.0.
- Earn a grade of "C" or higher in all courses required for the major.

Students transferring to a CSU campus that accepts the degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system, or those students who do not intend to transfer.

Some courses in the major satisfy both major and CSU GE/IGETC general education requirements; however, the units are only counted once toward the 60 unit requirement for an associate degree. 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.

Music

<i>major requirements:</i>	<i>units</i>
MUSIC-100 Applied Music.....	1*
MUSIC-122 Theory and Musicianship I.....	4
MUSIC-123 Theory and Musicianship II.....	4
MUSIC-222 Theory and Musicianship III.....	4
MUSIC-223 Theory and Musicianship IV.....	4

<i>plus at least 4 units from:</i>	
MUSIC-135 Vocal Jazz Ensemble	1
MUSIC-136 Jazz Ensemble	1
MUSIC-137 Jazz Combos	1-2
MUSIC-140 Wind Ensemble	1
MUSIC-162 Concert Choir.....	1
MUSIC-166 Chamber Singers	1-2
MUSIC-240 Symphonic Band.....	1
MUSIC-290 Philharmonic Orchestra	1

total minimum units for the major 24

**must be taken 4 times (total 4 units)*

Limitations on enrollment

Effective fall term 2013, changes to the regulations that govern community college enrollments placed limitations on the number of courses that students may take in certain disciplines within the Contra Costa Community College District. The charts below indicate which Diablo Valley College (DVC) courses are assigned to groups of courses ("families") for which limitations have been imposed. Certain courses within certain "families" may be repeated (see catalog description), however, students are limited to four enrollments within the family. Certain DVC courses are equivalent to courses at Los Medanos College and Contra Costa College. An enrollment in an equivalent course at one of those colleges will count toward the allowable four enrollments within the family.

NOTE: Diablo Valley College may offer experimental or topics courses. When appropriate, based on content, such courses will be assigned to a "family" and that enrollment will be counted as an experience within the "family".

MUSIC

Family: Applied music

MUSIC-100 Applied Music

Family: Repertoire/literature

MUSIC-255 Piano Repertoire Master Class

Family: Class piano

MUSIC-150 Beginning Piano I
MUSIC-151 Beginning Piano II
MUSIC-250 Intermediate Piano I
MUSIC-251 Intermediate Piano II

Family: Class classical guitar

MUSIC-101 Beginning Guitar
MUSIC-102 Intermediate Guitar
MUSIC-160 Beginning Guitar I
MUSIC-161 Beginning Guitar II
MUSIC-262 Intermediate Guitar I

Family: Solo improvisation

MUSIC-127 Jazz Theory and Improvisation
MUSIC-128 Jazz Theory and Improvisation II
MUSIC-152 Jazz Piano
MUSIC-171 Jazz and Popular Solo Voice
MUSIC-190JA Jazz Theory and Improvisation II

Family: Pedagogy

MUSIC-256 Pedagogy for Studio Music Teachers

Family: Class vocal study

MUSIC-133 Opera Theater
MUSIC-170 Applied Voice Training
MUSIC-179 Intermediate Applied Voice

Family: Classical large ensembles - Orchestra

MUSIC-180 Diablo Valley Masterworks Chorale
MUSIC-290 Philharmonic Orchestra

Family: Classical large ensembles - Choir

MUSIC-162 Concert Choir

Family: Classical large ensembles - Band

MUSIC-240 Symphonic Band

Family: Classical chamber ensembles

MUSIC-103 Guitar Ensemble
MUSIC-104 Advanced Guitar Ensemble
MUSIC-140 Wind Ensemble
MUSIC-142 Woodwind Ensemble
MUSIC-144 Brass Ensemble
MUSIC-166 Chamber Singers
MUSIC-168 Percussion Ensemble
MUSIC-176 String Ensemble
MUSIC-252 Piano Ensemble

Family: Classical large ensembles - Jazz, pop, rock

MUSIC-136 Jazz Ensemble
MUSIC-236 Night Jazz Band

Family: Ensembles - Jazz, pop, rock

MUSIC-108 Rock Theory and Improvisation I
MUSIC-130 Jazz Workshop
MUSIC-135 Vocal Jazz Ensemble
MUSIC-137 Jazz Combos
MUSIC-190RT Rock Theory and Improvisation II
MUSIC-190SM Soul Music of the 1962-1980 Era
MUSIC-208 Rock Theory and Improvisation II

Family: Musical theater

MUSIC-134 Musical Theater Workshop
MUSIC-190SH Show Choir

Family: Performance

MUSIC-109 Live Music Production and Stagecraft I
MUSIC-190LP Live Production Techniques
MUSIC-209 Live Music Production and Stagecraft II

MUSIC-100 Applied Music

1 unit LR

- *May be repeated three times*
- *80 hours laboratory by arrangement per term*
- *Limitations on enrollment: Audition required. Specific days and times are announced in the Schedule of Classes. Students must have the ability to read written music at sight, and play one's instrument or sing with an accomplished level of technical facility, intonation, rhythmic accuracy, tone production, phrasing, and expression.*
- *Note: This course is limited to students majoring in music and intending to complete the A.A. or A.A.T. in Music, and must therefore be concurrently enrolled in one of the ensemble courses listed in the degree requirements (A.A. or A.A.T.) and in a theory and musicianship class (MUSIC-122, 123, 222, 223).*

This course consists of individualized study of the appropriate techniques and repertoire for the specific instrument or voice being studied. The emphasis is on the progressive development of skills needed for solo performance. Achievement is evaluated through a juried performance. Students receive six hours of lessons from an instructor scheduled throughout the semester. Students are required to practice at least 3.5 hours per week during scheduled supervised practice hours in the department practice rooms. Students will meet an additional 24 hours during the semester for group discussion and performances. C-ID MUS 160, CSU, UC

MUSIC-103 Guitar Ensemble

1 unit SC

- *May be repeated three times*
- *60 hours laboratory per term*
- *Limitations on enrollment: Audition required. Specific days and times are announced in the Schedule of Classes.*
- *Note: Students must provide an acoustic six-string guitar for use in the course.*

This course focuses on the study, rehearsal, and public performance of literature for guitar ensemble, with an emphasis on the development of skills needed to perform within a guitar ensemble. Different literature will be studied each semester so that different technical and artistic issues are addressed. C-ID MUS 185, CSU, UC

MUSIC-104 Advanced Guitar Ensemble

1 unit SC

- *May be repeated three times*
- *60 hours laboratory per term*
- *Advisory: MUSIC-103 or equivalent*
- *Note: Students 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 and emphasis is placed on individual practice, listening, performance, and being an active part of the ensemble experience. CSU, UC

MUSIC-108 Rock Theory and Improvisation I

1 unit SC

- *60 hours laboratory per term*

This course presents the basic study and performance of historical Blues, including Funk, Soul, R&B, Country, and Rock. Both theoretical and performance aspects will be covered. Small bands (guitar, bass, drums, keyboards, horns, and vocals) will be formed for class performances. Guest artists and industry experts will be featured each term. CSU, UC

MUSIC-109 Live Music Production and Stagecraft I

1 unit SC

- *60 hours laboratory per term*

This course provides the beginning musician with basic live-show production experience. Practical applications of stage processes from load-in to load-out, including basic stagecraft, live sound, and light engineering will be presented. Guest artists and industry experts will be featured each term. CSU, UC

MUSIC-110 Music Appreciation

3 units SC

- *IGETC: 3A; CSU GE: C1; DVC GE: III*
- *54 hours lecture per term*

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. Comparison of Western musical traditions with those of other cultures will be included. C-ID MUS 100, CSU, UC

MUSIC-112 America's Music- A Multicultural Perspective

3 units SC

- *IGETC: 3A; CSU GE: C1; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course presents the diverse musics and traditions of the Americas. Cultural contributions and influences of major ethnic groups are examined through the idea that music and culture are intertwined. Topics include historical, religious, political, and social contexts for musical development and experience. The course is an introduction to the field of ethnomusicology. CSU, UC

MUSIC-114 World Music

3 units SC

- *IGETC: 3A; CSU GE: C1; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course presents a survey of world music and introduces the field of ethnomusicology. The cultural contributions and influences of music and traditions in the Americas, Asia, the Middle East, Africa, Oceania, and Europe are emphasized. 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 are explored through three primary lenses: sound, concept, and behavior. CSU, UC

MUSIC-115 Music of the Middle East/North Africa And South Asia

3 units SC

- *IGETC: 3A; CSU GE: C1; DVC GE: III*
- *54 hours lecture per term*

This course is a survey of music cultures in the Middle East/North Africa and South Asia. Students will study traditional and popular musical traditions in rural, urban, and diaspora communities. Local, national, and global contexts for music are presented. CSU, UC

MUSIC-117 History of Rock and R&B

3 units SC

- *IGETC: 3A; CSU GE: C1; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

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, Rhythm and Blues (R&B), and folk music. CSU, UC

MUSIC-118 History of Jazz

3 units SC

- *IGETC: 3A; CSU GE: C1; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course presents the history of jazz music from African retentions, ragtime, stride, dixieland, swing, bebop, and cool, to various contemporary jazz and fusion art forms. It includes a study of the cultural 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

MUSIC-119 The History and Culture of Hip Hop Music

3 units SC

- *IGETC: 3A; CSU GE: C1; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course presents the development of hip hop as a musical style and cultural movement. Students will examine key figures in hip hop, institutions, and social settings through readings, electronic media, videos, and hands-on projects. Students will also investigate how hip hop culture is not only a source of entertainment, but also a medium that analyzes and/or provides commentary regarding social, economic, political and cultural issues dealing with identity, cultural genocide, misogyny, racism, classism, materialism, freedom of speech and sexuality. CSU, UC

MUSIC-121 Introduction to Music Composition

3 units SC

- *36 hours lecture/18 hours laboratory/36 hours laboratory by arrangement per term*
- *Advisory: MUSIC-122 or equivalent*

This course presents an introduction to basic techniques for music composition. Listening, reading, discussion, and composing exercises will focus students' awareness on the diversity of aesthetics, styles, and techniques that exist today. CSU, UC

MUSIC-122 Theory and Musicianship I

4 units SC

- *CSU GE: C1*
- *54 hours lecture/54 hours laboratory per term*
- *Note: Credit by examination option available*

This course is a study of the fundamental concepts of Western music theory. These concepts are applicable to both classical and popular styles. The study addresses notation, fundamental theoretical concepts, their relationship to the evolution of musical aesthetics in Western culture, musicianship skills including sight singing, rhythmic training, ear training, dictation, and keyboard realization, and basic composition. C-ID MUS 120, MUS 125, CSU, UC

MUSIC-123 Theory and Musicianship II

4 units SC

- *54 hours lecture/54 hours laboratory per term*
- *Prerequisite: MUSIC-122 or equivalent*
- *Note: Credit by examination option available*

This course is a study of harmony and voice leading in the Western Common Practice and is continuation of Music-122. Topics include diatonic functionality, four-part voice leading, simple musical structures, harmonic and formal analysis, and musicianship skills including sight singing, rhythmic training, dictation, and keyboard realization. C-ID MUS 130, MUS 135, CSU, UC

MUSIC-127 Jazz Theory and Improvisation I

2 units SC

- 18 hours lecture/36 hours laboratory/18 hours laboratory by arrangement per term
- Advisory: MUSIC 122 or equivalent

This is an introductory course to the study of jazz theory with special emphasis upon spontaneous improvisation in the jazz tradition. Students will perform in class. CSU, UC

MUSIC-128 Jazz Theory and Improvisation II

2 units SC

- 18 hours lecture/36 hours laboratory/18 hours laboratory by arrangement per term
- Advisory: MUSIC-127 or equivalent

This is an intermediate course for the study of jazz theory with special emphasis on spontaneous improvisation in the jazz tradition. Students will perform in class. CSU, UC

MUSIC-129 Counterpoint

3 units SC

- 36 hours lecture/18 hours laboratory/36 hours laboratory by arrangement per term
- Advisory: MUSIC-122 or equivalent

This course presents the study of composition practices of the 16th Century with emphasis on species counterpoint. Students will analyze and compose Motets, Masses, Fugues, and other musical forms using imitative techniques. CSU, UC

MUSIC-130 Jazz Workshop

1 unit SC

- May be repeated three times
- 72 hours laboratory per term
- Limitations on enrollment: Audition required. Specific days and times are announced in the Schedule of Classes.

This course focuses on the study of performance in a jazz ensemble both as a soloist and a member of a section. Skills addressed include intonation, rhythmic accuracy, tone, blend, balance, dynamic control, style-specific articulation, phrasing, expression, sight-reading, improvisation and practicing. A variety of styles will be studied including Medium Swing, Latin and Fusion. Public performance is included. Literature studied will vary each semester. CSU, UC

MUSIC-131 World Music Repertoire

1 unit SC

- 72 hours laboratory per term

This class provides an opportunity for students to study and perform a wide range of solo and ensemble world music repertoire. Students are coached by faculty in technique, interpretation, and presentation in a master class format. Students will produce in-class and public performances during the course. Different world musics will be studied in alternation each semester, and may include Gamalan, West African drumming, Taiko, Mariachi, etc. CSU, UC

MUSIC-133 Opera Theater

1 unit SC

- May be repeated three times
- 54 hours laboratory per term
- Limitations on Enrollment: Audition required. Specific days and times are announced in the Schedule of Classes.

This course provides training and experience for vocalists in the production and presentation of opera including comprehensive rehearsal and performance. Students will be assigned chorus and/or solo parts to perform on their own. All students will be given the opportunity to learn applicable elements of stagecraft and opera performance. CSU, UC

MUSIC-134 Musical Theater Workshop

1 unit SC

- May be repeated three times
- 72 hours laboratory per term
- Limitation on Enrollment: Audition required. Specific days and times are announced in the Schedule of Classes.

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
- 72 hours laboratory per term
- Limitations on Enrollment: Audition required. Specific days and times are announced in the Schedule of Classes.

This course focuses on the study, rehearsal, and public performance of standard vocal jazz ensemble literature for mixed voices. New literature will be studied each semester to address a variety of technical and artistic issues. C-ID MUS 180, CSU, UC

MUSIC-136 Jazz Ensemble

1 unit SC

- May be repeated three times
- 72 hours laboratory per term
- Audition required. Specific days and times are announced in the Schedule of Classes.
- Prerequisite: Audition

This course is a study of performance in a jazz ensemble both as a soloist and a member of a section. Skills addressed include section and ensemble intonation, rhythmic accuracy, tone, blend, balance, style-specific articulation, phrasing, expression, and improvisation. A variety of styles will be studied including ballad, shuffle and funk. Public performance is included. Literature studied will vary each semester. C-ID MUS 180, CSU, UC

MUSIC-137 Jazz Combos

1-2 units SC

- *May be repeated three times*
- *Variable hours*
- *Limitation on Enrollment: Audition required. Specific days and times are announced in the Schedule of Classes.*

This advanced course is made up of small instrumental and/or vocal jazz combos that rehearse and perform a variety of jazz styles. Students will improvise, sight read, and perform in a variety of small group settings, which may include off-campus venues, concerts, and festivals. CSU, UC, C-ID MUS-185

MUSIC-140 Wind Ensemble

1 unit LR

- *May be repeated three times*
- *54 hours laboratory per term*
- *Limitations on Enrollment: Audition required. Specific days and times are announced in the Schedule of Classes.*

This course focuses on the study, rehearsal and public performance of literature for wind ensemble, with an emphasis on the development of skills needed to perform in a wind ensemble. Different literature will be studied each semester so that different technical and artistic issues are addressed. C-ID MUS 180, CSU, UC

MUSIC-142 Woodwind Ensemble

1 unit SC

- *May be repeated three times*
- *54 hours laboratory per term*
- *Limitations on Enrollment: Audition required. Specific days and times are announced in the Schedule of Classes.*

This course focuses on the study, rehearsal, and public performance of literature for woodwind ensemble, with and emphasis on the development of skills needed to perform within a woodwind ensemble. Different literature will be studied each semester so that different technical and artistic issues are addressed. C-ID MUS 185, CSU, UC

MUSIC-144 Brass Ensemble

1 unit LR

- *May be repeated three times*
- *72 hours laboratory per term*
- *Limitations on Enrollment: Audition required. Specific days and times are announced in the Schedule of Classes.*

This course focuses on the study, rehearsal, and public performance of literature for brass ensemble, with and emphasis on the development of skills needed to perform within a brass ensemble. Different literature will be studied each semester so that different technical and artistic issues are addressed. C-ID MUS 185, CSU, UC

MUSIC-150 Beginning Piano I

1 unit SC

- *54 hours laboratory per term*
- *Note: Credit by examination option available*

This course provides group instruction in piano for students with no prior keyboard experience. Ensemble and solo works, basic rhythm, and fundamental keyboard and music theory skills based on major and minor five-note patterns will be covered. Attention is given to the student's individual needs, goals, and abilities. C-ID MUS 170, CSU, UC

MUSIC-151 Beginning Piano II

1 unit SC

- *54 hours laboratory per term*
- *Advisory: MUSIC-150 or equivalent*
- *Note: Credit by examination option available*

This course provides group instruction in piano. Ensemble and solo works beyond the five-finger position will be covered. Classical and popular music will be emphasized. CSU, UC

MUSIC-152 Jazz Piano

1 unit SC

- *72 hours laboratory per term*
- *Advisory: MUSIC-151 or equivalent*

This course provides study in the theory and practice of jazz piano through learning chords, voicings, improvisational techniques, and various idiomatic styles. CSU, UC

MUSIC-160 Beginning Guitar I

1 unit SC

- *54 hours laboratory per term*
- *Note: Students must provide an acoustic six-string guitar for use in the course.*
- *Formerly MUSIC-101 (20-21).*

This course provides beginning six-string guitar instruction in both popular and classical styles. First position keys and chords, transposition, various strums and styles, finger-picking accompaniments, tablature, chord symbols, and note reading are presented. No previous musical experience is necessary. CSU, UC

MUSIC-161 Beginning Guitar II

1 unit SC

- *54 hours laboratory per term*
- *Advisory: MUSIC-160 or Equiv.*
- *Note: Students must provide an acoustic six-string guitar for use in the course.*

This course provides continuing beginning six-string guitar instruction in both popular and classical styles. First position extended chords, chord substitutions, 5th and 6th string root bar chords, transposition, additional strums, styles, and accompaniment are presented. CSU, UC

MUSIC-162 Concert Choir

1 unit SC

- *May be repeated three times*
- *72 hours laboratory per term*
- *Limitation on enrollment: Audition required. Specific days and times are announced in the Schedule of Classes.*

This course presents the study, rehearsal and public performance of standard choral literature for mixed voices. New literature will be studied each term. C-ID MUS 180, CSU, UC

MUSIC-166 Chamber Singers

1-2 units SC

- *May be repeated three times*
- *54 hours laboratory/54 hours laboratory by arrangement per term*
- *Limitation: Audition required. Specific days and times are announced in the Schedule of Classes.*

Students will study and perform Renaissance through 21st century chamber choir literature including music influenced by non-Western cultures. C-ID MUS 180, CSU, UC

MUSIC-168 Percussion Ensemble

1 unit SC

- *May be repeated three times*
- *72 hours laboratory per term*
- *Prerequisite: Audition*

This performance ensemble focuses on the sight-reading, rehearsal and performance of percussion ensemble literature. Each member of the group will become a better musician through individual practice and performance, listening and being an active part of the ensemble experience. CSU, UC

MUSIC-170 Applied Voice Training

1 unit SC

- *54 hours laboratory per term*

This course presents the fundamentals of vocal tone production. Students will practice tone production, breath control, and vocal placement. Emphasis is placed on song interpretation and vocal pedagogy. CSU, UC

MUSIC-171 Jazz and Popular Solo Voice

1 unit SC

- *54 hours laboratory 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-176 String Ensemble

1 unit SC

- *May be repeated three times*
- *72 hours laboratory per term*
- *Limitation: Audition required. Specific days and times are announced in the Schedule of Classes.*

In this course students study, rehearse, and publicly perform the music for or with string ensemble. New literature will be studied each term so that different technical and artistic issues are addressed. CSU, UC

MUSIC-179 Intermediate Applied Voice

1 unit SC

- *54 hours laboratory per term*
- *Limitations on enrollment: Audition required. Specific days and times are announced in the Schedule of Classes.*
- *Advisory: MUSIC-170 or MUSIC-171 or equivalent*

This course is a continued study of the fundamentals of vocal tone production, breathing, and vocal placement. Emphasis will be placed on song interpretation and vocal pedagogy. CSU, UC

MUSIC-180 Diablo Valley Masterworks Choral

1 unit SC

- *May be repeated three times*
- *72 hours laboratory per term*
- *Limitation: Audition required. Specific days and times are announced in the Schedule of Classes.*

This course presents the study and performance of major works of the chorus and orchestra literature, along with practical experience in the operation of a community chorus. New literature is studied each term. CSU, UC

MUSIC-185 Pop and Rock Repertoire

1 unit SC

- *60 hours laboratory per term*

This class provides an opportunity for students to study and perform a wide range of solo and ensemble Pop and Rock repertoire. Students are coached by faculty in technique, interpretation, and presentation in a master class format. Students will produce in-class and public performances during the course. Different repertoire will be studied each semester, including the latest covers. CSU, UC

MUSIC-186 R&B, Hip Hop, and Funk Repertoire

1 unit SC

- *60 hours laboratory per term*

This class provides an opportunity for students to study and perform a wide range of solo and ensemble R&B, Hip Hop, and Funk repertoire. Students are coached by faculty in technique, interpretation, and presentation in a master class format. Students will produce in-class and public performances during the course. Different repertoire will be studied each semester, including the latest covers. CSU, UC

MUSIC-187 Country, Bluegrass, and Folk Repertoire

- 1 unit SC
 • 60 hours laboratory per term

This class provides an opportunity for students to study and perform a wide range of solo and ensemble Country, Bluegrass, and Folk repertoire. Students are coached by faculty in technique, interpretation, and presentation in a master class format. Students will produce in-class and public performances during the course. Different repertoire will be studied each semester, including the latest covers. CSU, UC

MUSIC-190 Topics in Music

- .3-4 units SC
 • 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-208 Rock Theory and Improvisation II

- 1 unit SC
 • 60 hours laboratory per term
 • Advisory: MUSIC-108 or equivalent

This course presents the intermediate study and performance of historical Rock, including Funk, Soul, R&B, and Country. Both theoretical and performance aspects will be covered. Large bands (guitars, bass, drums, percussion, keyboards, horns, and multi vocals) will be formed for class performances. Guest artists and industry experts will be featured each term. CSU, UC

MUSIC-209 Live Music Production and Stagecraft II

- 1 unit SC
 • 60 hours laboratory per term
 • Advisory: MUSIC-109 or equivalent

This course provides the intermediate musician with professional level live-show production experience. Practical applications of stage processes from load-in to load-out, including professional level stagecraft, live sound, and light engineering will be presented. Guest artists and industry experts will be featured each term. CSU, UC

MUSIC-221 Advanced Music Composition

- 3 units SC
 • 36 hours lecture/18 hours laboratory/36 hours laboratory by arrangement per term
 • Prerequisite: MUSIC-121 or equivalent
 • Advisory: MUSIC-122 or equivalent

This course is a continuation of MUSIC-121. Advanced exercises in listening, reading, and composing are aimed at expanding the students' awareness of the diversity of modern aesthetics, styles, and techniques. CSU, UC

MUSIC-222 Theory and Musicianship III

- 4 units SC
 • 54 hours lecture/54 hours laboratory per term
 • Prerequisite: MUSIC-123 or Equivalent.

This course presents the study of harmony and voice-leading in the Western Common Practice. Topics include sequences, melodic and rhythmic figuration, leading-tone 7th chords, mixture, applied dominants and modulation, four-part voice leading, large formal structures, harmonic and formal analysis, and musicianship skills including sight singing, rhythmic training, ear training, dictation, and keyboard realization. C-ID MUS 140, MUS 145, CSU, UC

MUSIC-223 Theory and Musicianship IV

- 4 units SC
 • 54 hours lecture/54 hours laboratory per term
 • Prerequisite: MUSIC-222 or equivalent

This course is a study of chromatic harmony, 20th century harmonic practices, large musical structures, harmonic, structural, and stylistic analysis, and musicianship skills including sight singing, rhythmic training, ear training, dictation, and keyboard realization of chromatic and 20th century materials. C-ID MUS 150, MUS 155, CSU, UC

MUSIC-236 Night Jazz Band

- 1 unit SC
 • May be repeated three times
 • 72 hours laboratory per term
 • Limitation on enrollment: Audition required. Specific days and times are announced in the Schedule of Classes.

This course presents the study of big band jazz for performance in classroom and community settings. A variety of styles will be studied including Swing, Hip-Hop, Afro-Cuban, and Be Bop. Community outreach and public performances at jazz clubs, community events and other venues will be emphasized. Occasionally, guest artists will be featured. New literature will be studied each semester. CSU, UC

MUSIC-240 Symphonic Band

- 1 unit LR
 • May be repeated three times
 • 72 hours laboratory per term
 • Limitation on enrollment: Audition required. Specific days and times are announced in the Schedule of Classes.

This course presents the study, rehearsal, and public performance of symphonic band literature, with an emphasis on the development of skills needed to perform within a symphonic band. New literature will be studied each term so that different technical and artistic issues are addressed. C-ID MUS 180, CSU, UC

MUSIC-250 Intermediate Piano I

1 unit SC

- 54 hours laboratory per term
- Advisory: MUSIC-151 or equivalent

This course is first in a sequence of courses presenting group study of piano at the intermediate level. The development of technical and interpretive skills essential for playing early-intermediate keyboard music in Period-specific styles will be emphasized. Methods of preparation based on an understanding of period/composer-specific performance practice will be addressed. CSU, UC

MUSIC-251 Intermediate Piano II

1 unit SC

- 72 hours laboratory per term
- Advisory: MUSIC-250 or equivalent

This course is for the continued group study of intermediate piano beyond MUSIC-250. The class emphasizes the development of technical and interpretive skills essential for playing intermediate keyboard music in Baroque, Classical, Romantic, Impressionist and Contemporary Period styles with attention to interpretation and technique. CSU, UC

MUSIC-252 Piano Ensemble

1 unit SC

- May be repeated three times
- 72 hours laboratory per term
- Limitation on Enrollment: Audition required. Specific days and times are announced in the Schedule of Classes.

This course focuses on the study, rehearsal, and public performance of literature for piano ensemble (piano 4-hands, piano 8-hands, chamber music with piano, instrumental sonatas, voice and piano) with an emphasis on the development of skills needed to perform within a piano ensemble. Different literature will be studied each semester so that different technical and artistic issues are addressed. Pianists, instrumentalists, and vocalists are encouraged to audition. CSU, UC

MUSIC-255 Piano Repertoire Master Class

1 unit SC

- May be repeated three times
- 72 hours laboratory per term
- Limitation on enrollment: Audition required. Specific days and times are announced in the Schedule of Classes.

This class provides a weekly forum for pianists to perform solo repertoire and includes constructive comments and direction in a master class format. Students will produce four in-class and two public performances during the course. New keyboard works from the Baroque, Classical, Romantic, and Contemporary Period repertory will be studied each semester. CSU, UC

MUSIC-256 Pedagogy for Studio Music Teachers

1 unit SC

- 72 hours laboratory per term

This class presents a practical study of pedagogy for the private music studio. The course is designed for current and aspiring studio music teachers of keyboard and instrumental students. 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 populations. CSU

MUSIC-262 Intermediate Guitar I

1 unit SC

- 60 hours laboratory per term
- Advisory: MUSIC 160 or equivalent
- Note: Students must provide an acoustic six-string guitar for use in the course
- Formerly MUSIC-102 (20-21).

This course provides instruction in intermediate six-string guitar skills. Intermediate-level classical and popular repertoire will be studied. Intermediate level right-hand techniques, basic voicings, position playing, style-specific performance practices, and approaches to learning solo guitar repertoire will be presented. CSU, UC

MUSIC-263 Intermediate Guitar II

1 unit SC

- 60 hours laboratory per term
- Advisory: MUSIC-262 or equivalent
- Note: Students must provide an acoustic six-string guitar for use in the course.

This course provides continuing intermediate instruction in six-string guitar skills. Playing in the upper positions, alternate tunings, harmonics, percussion techniques, ornaments, swing, jazz chords and voicing, Flamenco voicings, and more bar chords will be presented. CSU, UC

MUSIC-290 Philharmonic Orchestra

1 unit SC

- May be repeated three times
- 72 hours laboratory per term
- Limitation on Enrollment: Audition required. Specific days and times are announced in the Schedule of Classes.

In this course students will study, rehearse, and publicly perform the standard Western classical orchestral literature along with new orchestral compositions. New literature will be studied each term so that a variety of technical and artistic issues are addressed. C-ID MUS 180, CSU, UC

MUSIC-298 Independent Study

- .5-3 units SC
- Variable hours
- Note: Submission of acceptable educational contract to department and Instruction Office is required.

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. CSU

MUSIC-299 Student Instructional Assistant

- .5-3 units SC
- 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

**Associate in science degree
Audio visual technology**

Students completing the program will be able to...

- A. analyze and describe the science and technology for basic audio, visual, and audiovisual systems integration.
- B. set up and test an audio, video, and audiovisual network.
- C. describe and explain the components of sound and hearing, and vision and light, as they pertain to human perception and venue limitations.
- D. display proper customer service and professional behavior.

The audiovisual technician associate in science degree is designed to prepare students for the Certified Technology Specialist (CTS) certification exam administered by AVIXA International and entry-level jobs in the audiovisual industry. Audiovisual (AV) technicians set up and operate audio and video equipment including microphones, sound speakers, video screens, projectors, video monitors, recording equipment, connecting wires and cables, sound and mixing boards, and related electronic equipment for concerts, sports events, meetings and conventions, presentations, and news conferences. AV systems facilitate essential communications and often require connectivity with various types of networks, requiring AV technicians to work with information technology (IT) teams to set up and maintain that connectivity. This aspect of audiovisual technology is evolving, influencing industry demand. Degree-seeking students complete general education requirements that help students “think and communicate clearly and effectively both orally and in writing; to use mathematics; to understand the modes of inquiry of the major disciplines; to be aware of other cultures and times; to achieve insights gained through experience in thinking about ethical problems; and to develop the capacity for self-understanding”. (Title 5, section 55061)

To earn an associate in science degree in audio visual technology, students must complete each course used to meet a major requirement with a “C” grade or higher and complete all general education requirements as listed in the catalog. Certain courses may satisfy both major and general education requirements; however the units are only counted once.

<i>required courses:</i>		<i>units</i>
MUSX-100	AV Essentials: Systems and Analysis	3
MUSX-101	AV Essentials: Management and Solutions	3
MUSX-120	Live Sound	3
MUSX-124	Introduction to Music Production and Multi-Track Recording	3
FTVE-120	Introduction to TV Studio Production	3
FTVE-160	Introduction to Film Production	3
CNT-103	Voice, Video and Network Cabling	2

<i>plus at least 2 units from:</i>	
MUSX-296	Internship in Occupational Work Experience Education in MUSX
	2-4

total minimum units for the major 22

MUSIC INDUSTRY STUDIES – MUSX

Janette Funaro, Dean
Arts and Communication Division

Possible career opportunities

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, sound technician, and tour coordinator. Many careers require more than two years of study.

**Associate in arts degree
Commercial music - Media composition**

Students completing this program will be able to...

- A. produce recorded music projects.
- B. demonstrate professional behaviors required in the music industry.
- C. apply vocabulary and demonstrate processes used in the protection of intellectual property rights.
- D. demonstrate practical musical literacy, both theoretical and historical.
- E. mix live performances in a variety of genres.
- F. create a portfolio of original compositions for various ensembles/media.

The commercial music – media composition associate in art degree is composed of core music and technology courses that provide both a conceptual foundation in music theory and a technical foundation in a digital audio workstation to record, sequence, and mix music. Graduates of the commercial music – media composition program are prepared for many facets of the music and entertainment industries. Students create a portfolio of diverse compositions that demonstrate competency for such careers as film composer, music editor, film arranger, orchestrator, and more. Graduates can also transfer to four-year universities to prepare for careers at major and independent record labels, motion picture studios, music production companies, music publishing companies, and music libraries.

To earn an associate in art degree, students must complete each course used to meet a major requirement with a “C” grade or higher and complete all general education requirements as listed in the catalog. Certain courses may satisfy both major and general education requirements; however the units are only counted once.

<i>required courses:</i>	<i>units</i>
MUSIC-122 Theory and Musicianship I.....	4
MUSX-120 Live Sound.....	3
MUSX-124 Introduction to Music Production and Multi-Track Recording.....	3
MUSX-172 Introduction to Electronic Music and MIDI.....	3
MUSX-174 Introduction to Music Technology and Pro Tools	3
MUSX-181 Introduction to the Music Industry	3
MUSX-182 Songwriting I.....	3

<i>plus at least 14 units from::</i>	
MUSIC-121 Introduction to Music Composition	3
MUSIC-123 Theory and Musicianship II.....	4
MUSIC-127 Jazz Theory and Improvisation.....	2
MUSIC-129 Counterpoint	3
MUSIC-150 Beginning Piano I	1
MUSIC-176 String Ensemble	1
MUSIC-221 Advanced Music Composition.....	3
MUSX-178 Music and Sound for Visual Media.....	3
MUSX-221 Orchestration and Arranging for Digital Instruments.....	3
total minimum units for the major	36

<i>recommended GE elective (DVC GE Area III)</i>	
MUSX-110 History of Electronic Music	3

**Associate in arts degree
Commercial music - Performance**

Students completing this program will be able to...

- A. produce recorded music projects.
- B. demonstrate professional behaviors required in the music industry.
- C. apply vocabulary and demonstrate processes used in the protection of intellectual property rights.
- D. demonstrate practical musical literacy, both theoretical and historical.
- E. mix live performances in a variety of genres.
- F. utilize basic ensemble skills by performing in an ensemble.

The commercial music – performance associate in art degree consists of comprehensive curriculum that provides students with a solid foundation in music theory, composition, performance, technology, production, and business. This degree offers a unique blend of the art of music and the discipline of business. Students can participate in traditional music courses such as individual applied music lessons and performing ensembles, while immersing themselves in music technology. Graduates of the commercial music – performance degree program may move into all facets of the music and entertainment industries. Graduates may also transfer to four-year universities, which can prepare them for careers at major and independent record labels, motion picture studios, music production companies, music publishing companies, music libraries, artist management companies, music promotion companies, or as performing artists.

To earn an associate in art degree, students must complete each course used to meet a major requirement with a “C” grade or higher and complete all general education requirements as listed in the catalog. Certain courses may satisfy both major and general education requirements; however the units are only counted once.

<i>required courses:</i>	<i>units</i>
MUSIC-122 Theory and Musicianship I.....	4
MUSX-120 Live Sound.....	3
MUSX-124 Introduction to Music Production and Multi-Track Recording.....	3
MUSX-172 Introduction to Electronic Music and MIDI.....	3
MUSX-174 Introduction to Music Technology and Pro Tools	3
MUSX-181 Introduction to the Music Industry	3
MUSX-182 Songwriting I.....	3

<i>plus at least 14 units from::</i>	
MUSIC-100 Applied Music.....	1
MUSIC-103 Guitar Ensemble.....	1
MUSIC-108 Rock Theory and Improvisation I.....	1
MUSIC-109 Live Music Production and Stagecraft I	1
MUSIC-127 Jazz Theory and Improvisation I.....	2
MUSIC-128 Jazz Theory and Improvisation II.....	2
MUSIC-135 Vocal Jazz Ensemble	1
MUSIC-136 Jazz Ensemble	1
MUSIC-137 Jazz Combos	1
MUSIC-150 Beginning Piano I	1
MUSIC-151 Beginning Piano II	1
MUSIC-152 Jazz Piano	1
MUSIC-160 Beginning Guitar I	1

Music industry studies

MUSIC-162	Concert Choir.....	1
MUSIC-166	Chamber Singers.....	1
MUSIC-168	Percussion Ensemble.....	1
MUSIC-170	Applied Voice Training.....	1
MUSIC-171	Jazz and Popular Voice.....	1
MUSIC-179	Intermediate Applied Voice.....	1
MUSIC-208	Rock Theory and Improvisation II.....	1
MUSIC-209	Live Music Production and Stagecraft II.....	1
MUSIC-250	Intermediate Piano I.....	1
MUSIC-251	Intermediate Piano II.....	1
MUSIC-256	Pedagogy for Studio Music Teachers.....	1
MUSX-183	Artist Development in the Music Industry.....	3
MUSX-282	Songwriting II.....	3
total minimum units for the major		36

recommended GE elective (DVC GE Area III)

MUSIC-114	World Music.....	3
MUSIC-117	History of Rock and R&B.....	3
MUSIC-118	History of Jazz.....	3
MUSIC-119	The History and Culture of Hip Hop Music.....	3
MUSX-110	History of Electronic Music.....	3

Associate in arts degree Commercial music - Technology and production

Students completing this program will be able to...

- produce recorded music projects.
- demonstrate professional behaviors required in the music industry.
- apply vocabulary and demonstrate processes used in the protection of intellectual property rights.
- demonstrate practical musical literacy, both theoretical and historical.
- mix live performances in a variety of genres.
- create, arrange, and produce advanced recorded music projects utilizing a digital audio workstation that is MIDI capable.

The commercial music – technology and production associate in art degree begins with a set of core music and technology courses to provide both the conceptual foundation in music theory and the technical foundation in a digital audio workstation to record, sequence, and mix music. Graduates of the commercial music – technology and production program move into all facets of the music and entertainment industries. Graduates prepare a portfolio of work to demonstrate competencies for work as an AV technician, music engineer, music producer, music editor, film composer, and more. Graduates may also transfer to four-year universities, which can prepare them for successful careers at media venues, major and independent record labels, motion picture studios, music production companies, music publishing companies, and music libraries.

To earn an associate in art degree, students must complete each course used to meet a major requirement with a “C” grade or higher and complete all general education requirements as listed in the catalog. Certain courses may satisfy both major and general education requirements; however the units are only counted once.

<i>required courses:</i>		<i>units</i>
MUSIC-122	Theory and Musicianship I.....	4
MUSX-120	Live Sound.....	3
MUSX-124	Introduction to Music Production and Multi-Track Recording.....	3
MUSX-172	Introduction to Electronic Music and MIDI.....	3
MUSX-174	Introduction to Music Technology and Pro Tools.....	3
MUSX-181	Introduction to the Music Industry.....	3
MUSX-182	Songwriting I.....	3

plus at least 14 units from:

		<i>units</i>
MUSIC-117	History of Rock and R&B.....	3
MUSIC-150	Beginning Piano I.....	1
MUSIC-151	Beginning Piano II.....	1
MUSX-100	Audio and Visual Technology.....	3
MUSX-175	Advanced Pro Tools.....	3
MUSX-176	Introduction to Ableton Live.....	3
MUSX-177	Introduction to Logic Pro.....	3

total minimum units for the major 36

recommended GE elective (DVC GE Area III)

MUSX-110	History of Electronic Music.....	3
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Associate in arts degree Music industry entrepreneurship

Students completing this program will be able to...

- describe the principles of copyrights, publishing, licensing, and royalties as they relate to the music industry.
- describe the entrepreneurial process including how to develop successful business ideas and turn them into new entrepreneurial ventures.
- create, arrange, and produce recorded music projects.
- practice team cooperation and creative thinking skills in performance of audio visual (AV) installations.

DVC’s Music Industry Entrepreneurship degree begins with a well-rounded set of music technology and industry courses to provide the technical foundation to produce and present music. Students are required to complete electives in small business, entrepreneurship, and marketing. The degree also allows each student to steer their path towards their interest area(s) in music industry studies. Graduates of the Music Industry Entrepreneurship program can move into all facets of the music and entertainment industries.

Graduates may also transfer to four-year universities, which can prepare them for successful careers in the music industry. Students who intend to transfer to a four-year baccalaureate program should consult with a counselor regarding specific major preparation requirements at the transfer institution of their choice. Students who intend to transfer are advised to select General Education Option 2 (IGETC) or Option 3 (CSU GE).

Students must complete each of the courses required for the major with a “C” grade or higher. Certain courses may satisfy both major and general education requirements; however, the units are only counted once.

<i>required courses:</i>		<i>units</i>
MUSX-100	Audio and Visual Technology.....	3
MUSX-172	Introduction to Electronic Music and MIDI.....	3
MUSX-174	Introduction to Music Technology and Pro Tools.....	3
MUSX-181	Introduction to the Music Industry.....	3

plus at least 3 units from:

BUS-109	Introduction to Business	3
BUSMG-191	Small Business Management	3
BUSMG-192	Entrepreneurship and Venture Management	3

plus at least 3 units from:

BUSMK-259	Digital Marketing Fundamentals	3
BUSMK-260	Social Media Marketing	3

plus at least 6 units from:

MUSIC-121	Introduction to Music Composition	3
MUSX-101	Audio and Visual Production	3
MUSX-120	Live Sound	3
MUSX-124	Introduction to Music Production and Multi-Track Recording	3
MUSX-125	Advanced Music Production and Multi-Track Recording	3
MUSX-173	Advanced Electronic Music	3
MUSX-175	Advanced Pro Tools	3
MUSX-176	Introduction to Ableton Live	3
MUSX-177	Introduction to Logic Pro	3
MUSX-178	Music and Sound for Film, Games, and Digital Media	3
MUSX-182	Songwriting I	3
MUSX-183	Artist Development in the Music Industry	3
MUSX-270	Advanced Digital Audio Techniques	3
MUSX-282	Songwriting II	3
MUSX-296	Internship in Occupational Work Experience Education in MUSX	2-4
total minimum required units		24

**Associate in arts degree
Music industry studies**

Students completing the program will be able to...

- A. produce recorded music projects.
- B. demonstrate professional behaviors required in the music industry.
- C. apply vocabulary and demonstrate processes that are used in the protection of intellectual property rights.

This associate in arts 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.

The DVC music industry studies major is not intended for transfer. Option 1 (DVC General Education) is advised for students who do not intend to transfer. Students may not take a pass/no pass option for major courses. Students who intend to transfer to a four-year baccalaureate program should consult with a counselor regarding specific major preparation requirements at the transfer institution of their choice. Students who intend to transfer are advised to select General Education Option 2 (IGETC) or Option 3 (CSU GE).

Students must complete each of the courses required for the major with a "C" grade or higher. Certain courses may satisfy both major and general education requirements; however, the units are only counted once.

major requirements:

MUSX-172	Introduction to Electronic Music and MIDI	3
MUSX-173	Advanced Electronic Music	3
MUSX-174	Introduction to Music Technology and Pro Tools	3
MUSX-175	Advanced Pro Tools	3
MUSX-181	Introduction to the Music Industry	3

plus at least 9 units from:

MUSIC-121	Introduction to Music Composition	3
MUSX-100	Audio and Visual Technology	3
MUSX-101	Audio and Visual Production	3
MUSX-110	History of Electronic Music	3
MUSX-120	Live Sound	3
MUSX-124	Introduction to Music Production and Multi-Track Recording	3
MUSX-125	Advanced Music Production and Multi-Track Recording	3
MUSX-176	Introduction to Ableton Live	3
MUSX-177	Introduction to Logic Pro	3
MUSX-178	Music and Sound for Film, Games, and Digital Media	3
MUSX-182	Songwriting I	3
MUSX-183	Artist Development in the Music Industry	3
MUSX-221	Orchestration and Arranging for Digital Instruments	3
MUSX-270	Advanced Digital Audio Techniques	3
MUSX-282	Songwriting II	3
MUSX-296	Internship in Occupational Work Experience Education in MUSX	2-4
total minimum units for the major		24

**Associate in arts degree
Audio visual technology**

Students completing this program will be able to...

- A. analyze and describe the science and technology for basic audio, visual, and audiovisual systems integration.
- B. set up and test an audio, video, and audiovisual network.
- C. describe and explain the components of sound and hearing, and vision and light as they pertain to human perception and venue limitations.
- D. display proper customer service and professional behavior.

The audiovisual technician associate in science degree is designed to prepare students for the Certified Technology Specialist (CTS) certification exam administered by AVIXA International and entry-level jobs in the audiovisual industry. Audiovisual (AV) technicians set up and operate audio and video equipment including microphones, sound speakers, video screens, projectors, video monitors, recording equipment, connecting wires and cables, sound and mixing boards, and related electronic equipment for concerts, sports events, meetings and conventions, presentations, and news conferences. AV systems facilitate essential communications and often require connectivity with various types of networks, requiring AV technicians to work with information technology teams to set up and maintain that connectivity. This aspect of audiovisual technology is evolving, influencing industry demand. Degree-seeking students complete general education requirements that help students “think and communicate clearly and effectively both orally and in writing; to use mathematics; to understand the modes of inquiry of the major disciplines; to be aware of other cultures and times; to achieve insights gained through experience in thinking about ethical problems; and to develop the capacity for self-understanding”. (Title 5, section 55061)

To earn an associate in science degree in audio visual technology, students must complete each course used to meet a major requirement with a “C” grade or higher and complete all general education requirements as listed in the catalog. Certain courses may satisfy both major and general education requirements; however the units are only counted once.

<i>required courses:</i>		<i>units</i>
MUSX-100	Audio and Visual Technology.....	3
MUSX-101	Audio and Visual Production	3
MUSX-120	Live Sound.....	3
MUSX-124	Introduction to Music Production and Multi-Track Recording.....	3
FTVE-120	Introduction to TV Studio Production.....	3
FTVE-160	Introduction to Film Production	3
CNT-103	Voice, Video, and Network Cabling	2

<i>plus at least 2 units from:</i>		
MUSX-296	Internship in Occupational Work Experience Education in MUSX	
	2-4	
total minimum required units		22

**Certificate of achievement
Audio visual technology**

Students completing this program will be able to...

- A. analyze and describe the science and technology for basic audio, visual, and audiovisual systems integration.
- B. set up and test an audio, video, and audiovisual network.
- C. describe and explain the components of sound and hearing, and vision and light, as they pertain to human perception and venue limitations.
- D. display proper customer service and professional behavior.

The audiovisual technician certificate of achievement is designed to prepare students for the Certified Technology Specialist (CTS) certification exam administered by AVIXA International and entry-level jobs in the audiovisual industry. Audiovisual (AV) technicians set up and operate audio and video equipment including microphones, sound speakers, video screens, projectors, video monitors, recording equipment, connecting wires and cables, sound and mixing boards, and related electronic equipment for concerts, sports events, meetings and conventions, presentations, and news conferences. AV systems facilitate essential communications and often require connectivity with various types of networks, requiring AV technicians to work with information technology (IT) teams to set up and maintain that connectivity. This aspect of audiovisual technology is evolving and is influencing changes in the industry.

To earn the certificate of achievement, students must complete each of the required courses with a “C” grade or higher.

<i>required courses:</i>		<i>units</i>
MUSX-100	Audio and Visual Technology.....	3
MUSX-101	Audio and Visual Production	3
MUSX-120	Live Sound.....	3
MUSX-124	Introduction to Music Production and Multi-Track Recording.....	3
FTVE-120	Introduction to TV Studio Production.....	3
FTVE-160	Introduction to Film Production	3
CNT-103	Voice, Video and Network Cabling	2

<i>plus at least 2 units from:</i>		
MUSX-296	Internship in Occupational Work Experience Education in MUSX	
	2-4	
total minimum required units		22

**Certificate of achievement
Commercial music - Media composition**

Students completing this program will be able to...

- A. produce recorded music projects.
- B. demonstrate professional behaviors required in the music industry.
- C. apply vocabulary and demonstrate processes used in the protection of intellectual property rights.
- D. demonstrate practical musical literacy, both theoretical and historical.
- E. mix live performances in a variety of genres.
- F. create a portfolio of original compositions for various ensembles/media.

The commercial music – media composition certificate of achievement is composed of core music and technology courses that provide both a conceptual foundation in music theory and a technical foundation in a digital audio workstation to record, sequence, and mix music. Graduates of the commercial music – media composition program are prepared for many facets of the music and entertainment industries. Students create a portfolio of diverse compositions that demonstrate competency for such careers as film composer, music editor, film arranger, orchestrator, and more.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a “C” grade or higher.

<i>required courses:</i>	<i>units</i>
MUSIC-122 Theory and Musicianship I.....	4
MUSX-120 Live Sound.....	3
MUSX-124 Introduction to Music Production and Multi-Track Recording.....	3
MUSX-172 Introduction to Electronic Music and MIDI.....	3
MUSX-174 Introduction to Music Technology and Pro Tools	3
MUSX-181 Introduction to the Music Industry	3
MUSX-182 Songwriting I.....	3

<i>plus at least 14 units from::</i>	
MUSIC-121 Introduction to Music Composition	3
MUSIC-123 Theory and Musicianship II.....	4
MUSIC-127 Jazz Theory and Improvisation I.....	2
MUSIC-129 Counterpoint	3
MUSIC-150 Beginning Piano I	1
MUSIC-176 String Ensemble	1
MUSIC-221 Advanced Music Composition.....	3
MUSX-178 Music and Sound for Visual Media.....	3
MUSX-221 Orchestration and Arranging for Digital Instruments	3
total minimum required units.....	36

**Certificate of achievement
Commercial music - Performance**

Students completing this program will be able to...

- A. produce recorded music projects.
- B. demonstrate professional behaviors required in the music industry.
- C. apply vocabulary and demonstrate processes used in the protection of intellectual property rights.
- D. demonstrate practical musical literacy, both theoretical and historical.
- E. mix live performances in a variety of genres.
- F. utilize basic ensemble skills by performing in an ensemble.

The commercial music – performance certificate of achievement consists of comprehensive curriculum that provides students with a solid foundation in music theory, composition, performance, technology, production, and business. This program offers a unique blend of the art of music and the discipline of business. Students can participate in traditional music courses such as individual applied music lessons and performing ensembles, while immersing themselves in music technology. Graduates of the commercial music – performance may move into all facets of the music and entertainment industries.

To earn the certificate of achievement, students must complete each course used to meet a certificate requirement with a “C” grade or higher.

<i>required courses:</i>	<i>units</i>
MUSIC-122 Theory and Musicianship I.....	4
MUSX-120 Live Sound.....	3
MUSX-124 Introduction to Music Production and Multi-Track Recording.....	3
MUSX-172 Introduction to Electronic Music and MIDI.....	3
MUSX-174 Introduction to Music Technology and Pro Tools	3
MUSX-181 Introduction to the Music Industry	3
MUSX-182 Songwriting I.....	3

<i>plus at least 14 units from::</i>	
MUSIC-100 Applied Music.....	1
MUSIC-103 Guitar Ensemble.....	1
MUSIC-108 Rock Theory and Improvisation I.....	1
MUSIC-109 Live Music Production and Stagecraft I	1
MUSIC-127 Jazz Theory and Improvisation I.....	2
MUSIC-128 Jazz Theory and Improvisation II.....	2
MUSIC-135 Vocal Jazz Ensemble	1
MUSIC-136 Jazz Ensemble	1
MUSIC-137 Jazz Combos	1
MUSIC-150 Beginning Piano I	1
MUSIC-151 Beginning Piano II	1
MUSIC-152 Jazz Piano	1
MUSIC-160 Beginning Guitar I	1
MUSIC-162 Concert Choir.....	1
MUSIC-166 Chamber Singers	1
MUSIC-168 Percussion Ensemble.....	1
MUSIC-170 Applied Voice Training.....	1
MUSIC-171 Jazz and Popular Voice.....	1
MUSIC-179 Intermediate Applied Voice.....	1
MUSIC-208 Rock Theory and Improvisation II.....	1
MUSIC-209 Live Music Production and Stagecraft II	1
MUSIC-250 Intermediate Piano I	1

MUSIC-251	Intermediate Piano II	1
MUSIC-256	Pedagogy for Studio Music Teachers.....	1
MUSX-183	Artist Development in the Music Industry	3
MUSX-282	Songwriting II	3
total minimum required units		36

**Certificate of achievement
Commercial music - Technology and production**

Students completing this program will be able to...

- A. produce recorded music projects.
- B. demonstrate professional behaviors required in the music industry.
- C. apply vocabulary and demonstrate processes used in the protection of intellectual property rights.
- D. demonstrate practical musical literacy, both theoretical and historical.
- E. mix live performances in a variety of genres.
- F. create, arrange, and produce advanced recorded music projects utilizing a digital audio workstation that is MIDI capable.

The commercial music – technology and production certificate of achievement begins with a set of core music and technology courses to provide both the conceptual foundation in music theory and the technical foundation in a digital audio workstation to record, sequence, and mix music. Graduates of the commercial music – technology and production move into all facets of the music and entertainment industries. Graduates prepare a portfolio of work to demonstrate competencies for work as an AV technician, music engineer, music producer, music editor, film composer, and more.

To earn a certificate of achievement, students must complete each course used to meet a certificate requirement with a “C” grade or higher.

<i>required courses:</i>		<i>units</i>
MUSIC-122	Theory and Musicianship I	4
MUSX-120	Live Sound	3
MUSX-124	Introduction to Music Production and Multi-Track Recording.....	3
MUSX-172	Introduction to Electronic Music and MIDI.....	3
MUSX-174	Introduction to Music Technology and Pro Tools	3
MUSX-181	Introduction to the Music Industry	3
MUSX-182	Songwriting I.....	3

<i>plus at least 14 units from::</i>		
MUSIC -117	History of Rock and R&B	3
MUSIC-150	Beginning Piano I	1
MUSIC-151	Beginning Piano II	1
MUSX-100	Audio and Visual Technology.....	3
MUSX-175	Advanced Pro Tools	3
MUSX-176	Introduction to Ableton Live.....	3
MUSX-177	Introduction to Logic Pro	3
total minimum required units		36

**Certificate of achievement
Music industry entrepreneurship**

Students completing this program will be able to...

- A. describe the principles of copyrights, publishing, licensing, and royalties as they relate to the music industry.
- B. describe the entrepreneurial process including how to develop successful business ideas and turn them into new entrepreneurial ventures.
- C. create, arrange, and produce recorded music projects.
- D. practice team cooperation and creative thinking skills in performance of audio visual (AV) installations.

DVC’s Music Industry Entrepreneurship certificate begins with a well-rounded set of music technology and industry courses to provide the technical foundation to produce and present music. Students are required to complete electives in small business, entrepreneurship, and marketing. The certificate also allows each student to steer their path towards their interest area(s) in music industry studies. Graduates of the Music Industry Entrepreneurship program can move into all facets of the music and entertainment industries.

To earn a certificate of achievement, students must complete each course used to meet a major requirement with a “C” grade or higher.

<i>required courses:</i>		<i>units</i>
MUSX-100	Audio and Visual Technology	3
MUSX-172	Introduction to Electronic Music and MIDI.....	3
MUSX-174	Introduction to Music Technology and Pro Tools.....	3
MUSX-181	Introduction to the Music Industry	3

<i>plus at least 3 units from:</i>		
BUS-109	Introduction to Business	3
BUSMG-191	Small Business Management	3
BUSMG-192	Entrepreneurship and Venture Management	3

<i>plus at least 3 units from:</i>		
BUSMK-259	Digital Marketing Fundamentals.....	3
BUSMK-260	Social Media Marketing	3

<i>plus at least 6 units from:</i>		
MUSIC-121	Introduction to Music Composition.....	3
MUSX-101	Audio and Visual Production.....	3
MUSX-120	Live Sound	3
MUSX-124	Introduction to Music Production and Multi-Track Recording	3
MUSX-125	Advanced Music Production and Multi-Track Recording	3
MUSX-173	Advanced Electronic Music	3
MUSX-175	Advanced Pro Tools.....	3
MUSX-176	Introduction to Ableton Live.....	3
MUSX-177	Introduction to Logic Pro.....	3
MUSX-178	Music and Sound for Film, Games, and Digital Media.....	3
MUSX-182	Songwriting I.....	3
MUSX-183	Artist Development in the Music Industry	3
MUSX-270	Advanced Digital Audio Techniques	3
MUSX-282	Songwriting II.....	3
MUSX-296	Internship in Occupational Work Experience Education in MUSX.....	2-4

total minimum required units..... 24

**Certificate of achievement
Music industry studies**

Students completing the program will be able to...

- A. produce recorded music projects.
- B. demonstrate professional behaviors required in the music industry.
- C. apply vocabulary and demonstrate processes that are used in the protection of intellectual property rights.

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.

<i>required courses:</i>	<i>units</i>
MUSX-172 Introduction to Electronic Music and MIDI.....	3
MUSX-173 Advanced Electronic Music	3
MUSX-174 Introduction to Music Technology and Pro Tools.....	3
MUSX-175 Advanced Pro Tools	3
MUSX-181 Introduction to the Music Industry.....	3

<i>plus at least 9 units from:</i>	
MUSIC-121 Introduction to Music Composition	3
MUSX-100 Audio and Visual Technology.....	3
MUSX-101 Audio and Visual Production	3
MUSX-110 History of Electronic Music.....	3
MUSX-120 Live Sound.....	3
MUSX-124 Introduction to Music Production and Multi-Track Recording.....	3
MUSX-125 Advanced Music Production and Multi-Track Recording	3
MUSX-176 Introduction to Ableton Live.....	3
MUSX-177 Introduction to Logic Pro	3
MUSX-178 Music and Sound for Film, Games, and Media.....	3
MUSX-182 Songwriting I	3
MUSX-183 Artist Development in the Music Industry	3
MUSX-221 Orchestration and Arranging for Digital Instruments.....	3
MUSX-270 Advanced Digital Audio Techniques.....	3
MUSX-282 Songwriting II	3
MUSX-296 Internship in Occupational Work Experience Education in MUSX	2-4
total minimum required units	24

MUSX-100 Audio and Visual Technology

- 3 units SC
- 36 hours lecture/18 hours laboratory/36 hours laboratory by arrangement per term
 - Note: MUSX-100 and 101 may be taken in any order.

This course, along with MUSX-101, present the essentials for AV (Audio Visual) technology. Topics will include the fundamentals of analog signals, digital signals, audio systems and preparation for AV technician certification. CSU

MUSX-101 Audio and Visual Production

- 3 units SC
- 36 hours lecture/18 hours laboratory/36 hours laboratory by arrangement per term
 - Note: MUSX-100 and 101 may be taken in any order.

This course, along with MUSX-100, present the essentials for AV (Audio Visual) technology. Topics will include networks, signal management, control systems, electrical systems, and radio waves. This course prepares students for AV technician certification. CSU

MUSX-110 History of Electronic Music

- 3 units SC
- IGETC: 3A; CSU GE: C1; DVC GE: III
 - 54 hours lecture/18 hours laboratory by arrangement per term

This course presents an overview of the history of electronic music from the late 19th century through the 1960s. Topics include electronic musical instruments, electronic musical technology, new musical styles, the introduction of the synthesizer, and the rise of mainstream electronic music. In addition, students will analyze historically significant works from the experimental art music of the mid-20th century through the popular forms of the 1960s. CSU, UC

MUSX-120 Live Sound

- 3 units SC
- 36 hours lecture/18 hours laboratory/36 hours laboratory by arrangement per term

This course is an overview of live concert sound reinforcement. Topics include basic sound system theory and its application. It also covers individual sound system component operation, including microphones, mixers, effects, power amplifiers, and speaker systems. This course offers opportunities for hands-on experiences in troubleshooting, sound checking, and mixing sound for live performance applications. C-ID CMUS 120X, CSU

MUSX-124 Introduction to Music Production and Multi-Track Recording

3 units SC

- 36 hours lecture/18 hours laboratory/36 hours laboratory by arrangement per term

This course is designed to give the music student a working knowledge of the principles and techniques of multi-track 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. C-ID CMUS 130X, CSU

MUSX-125 Advanced Music Production and Multi-Track Recording

3 units SC

- 36 hours lecture/18 hours laboratory/36 hours laboratory by arrangement per term
- Advisory: MUSX-124 or equivalent

This course extends basic practical music production and multi-track recording skills to include complex projects, integration of acoustic and digital recording elements, and use of current computer software in the mixing process. CSU

MUSX-150 Topics in Music Industry Studies

.3-4 units SC

- Variable hours

A supplemental course in music industry studies designed to provide a study of current concepts and problems in music industry studies. Specific topics to be announced in the schedule of classes. CSU

MUSX-172 Introduction to Electronic Music and MIDI

3 units SC

- 36 hours lecture/18 hours laboratory/36 hours laboratory by arrangement per term
- Note: Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

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. C-ID CMUS 110X, CSU

MUSX-173 Advanced Electronic Music

3 units SC

- 36 hours lecture/18 hours laboratory/36 hours laboratory by arrangement per term
- Advisory: MUSX-172 or equivalent
- Note: Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This advanced course builds upon the knowledge and technical skills developed in MUSX-172 Introduction to Electronic Music and Musical Instrument Digital Interface (MIDI). The integration of MIDI and digital audio recording environments will be studied as well as the development of 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

MUSX-174 Introduction to Music Technology and Pro Tools

3 units SC

- 36 hours lecture/18 hours laboratory/36 hours laboratory by arrangement per term
- Note: Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This introductory course examines the terminology, equipment, techniques, and concepts related to music technology. Topics include principals and practices of sound, MIDI, synthesis, notation, and audio recording utilizing hardware and software platforms. Foundational skills to function within the Pro Tools audio production environment are also covered. C-ID: CMUS 100X, CSU

MUSX-175 Advanced Pro Tools

3 units SC

- 36 hours lecture/18 hours laboratory/36 hours laboratory by arrangement per term
- Advisory: MUSX-174 or equivalent
- Note: Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This is an advanced course 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

MUSX-176 Introduction to Ableton Live

3 units SC

- 36 hours lecture/18 hours laboratory/36 hours laboratory by arrangement per term

This course presents skills used within the music production software Ableton Live. Topics will include music sequencing, digital audio recording, software synthesis, sampling, Musical Instrument Digital Interface (MIDI), MIDI mapping, virtual effects, automation, signal flow, and mixing. CSU

MUSX-177 Introduction to Logic Pro

3 units SC

- 36 hours lecture/18 hours laboratory/36 hours laboratory by arrangement per term
- Note: Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This course presents skills used within the music production software Logic Pro X. Topics include music sequencing, digital audio recording, software synthesis, sampling, Musical Instrument Digital Interface (MIDI), MIDI mapping, virtual effects, automation, signal flow and mixing. CSU

MUSX-178 Music and Sound for Film, Games, and Digital Media

3 units SC

- 36 hours lecture/18 hours laboratory/36 hours laboratory by arrangement per term
- Advisory: MUSIC-174 or MUSX-174 or equivalent
- Note: Students may petition to repeat this course when software or hardware is changed. Only the first course completed will be applied toward a degree or certificate requirement. Units for both courses will apply towards the 60 units required for the degree.

This class examines the topic of sound for picture through a combination of lecture and hands-on experience with a Digital Audio Workstation that is video capable. Students will develop the skill set needed to create soundtracks for film, television, commercials, and video games. Students will learn the three layers of sound for picture: dialog, music, and sound effects including Foley and ambiance. Each of these layers will be discussed and worked on in depth through lab projects. CSU

MUSX-181 Introduction to the Music Industry

3 units SC

- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This course presents an introduction to the music industry, including its evolution, corporate structure, and legal practices. Topics include record production, music publishing, marketing, use of music in film, television, and advertising, touring, development and implementation of business plan, and career strategies. C-ID: CMUS 140X, CSU

MUSX-182 Songwriting I

3 units SC

- 54 hours lecture per term

In this course, students will study the process of songwriting. Songs will be analyzed in terms of chord structure, form, rhythm, melody, harmony, and lyrics. Original compositions and performances will be expected from all students. C-ID CMUS 150X, CSU

MUSX-183 Artist Development in the Music Industry

3 units SC

- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This course presents the skills and techniques utilized by music industry professionals responsible for the identification, development, and promotion of successful artists. Tools such as identifying talent, building an artist development team, networking, and structuring a cohesive development plan are explored. Career options, such as artist management, Artists and Repertoire (A&R), sync and licensing, public relations, and social network promotions will be reviewed. This course is also designed to assist the do it yourself (DIY) musician in developing the skills and techniques used in self-management. CSU

MUSX-221 Orchestration and Arranging for Digital Instruments

3 units SC

- 36 hours lecture/18 hours laboratory/36 hours laboratory by arrangement per term
- Advisory: MUSIC-121 or equivalent, MUSIC-122 or equivalent

This course presents the study of production concepts and arranging techniques for a variety of digital instrument sounds. Students will participate in listening, reading, discussion, and arranging exercises to help develop professional-sounding digital arrangements. CSU

MUSX-270 Advanced Digital Audio Techniques

3 units SC

- 36 hours lecture/18 hours laboratory/36 hours laboratory by arrangement per term
- Advisory: MUSX-174, MUSX-175, MUSX-176, MUSX-177 Or Equiv.

This course provides students the opportunity to learn advanced digital audio techniques utilizing various digital audio software. Topics will include audio manipulation, digital signal processing, mixing, vocal effect chains, programming drums, drum mixing, sampling, loops, and advanced MIDI. CSU

MUSX-282 Songwriting II

3 units SC

- 54 hours lecture per term
- Advisory: MUSX-182 or equivalent

This course presents the continued study of the structural, rhythmic, melodic, harmonic, and lyrical components of a song. Original compositions and performances are required of all students. CSU

MUSX-295 Occupational Work Experience Education in MUSX

2-4 units SC

- May be repeated eight times
- Variable hours
- Note: In order to enroll in MUSX-295, students must be employed, register for the course, complete an online Employment Form, and participate in an orientation. Incomplete grades are not awarded for this course.

MUSX-295 is supervised employment that extends classroom learning to the job site and relates to the student's chosen field of study or area of career interest. Under the supervision of a college instructor, students will engage in on-the-job and other learning experiences that contribute to their employability skills and occupational or educational goals. Each unit represents five hours of work per week or 75 hours work per term. Students may earn up to a total of 16 in any combination of WRKX courses. Repetition allowed per Title 5, Section 55253. CSU

MUSX-296 Internship in Occupational Work Experience Education in MUSX

2-4 units SC

- May be repeated eight times
- Variable hours
- Note: In order to enroll in the MUSX-296 course, students must be interning or volunteering, register for the course, complete an online Employment Form, and participate in an orientation. Incomplete grades are not awarded for this course.

MUSX-296 is a supervised internship in a skilled or professional level assignment in the student's major field of study or area of career interest. Under the supervision of a college instructor, students will engage in on-the-job and other learning experiences that contribute to their employability skills and occupational or educational goals. Internships may be paid, non-paid, or some partial compensation provided. Each unit represents five hours of paid work or four hours of unpaid work per week or 75 hours of paid work or 60 hours of unpaid work per term. Students may earn up to a total of 16 units in any combination of WRKX courses. Repetition allowed per Title 5, Section 55253. CSU

NATURAL SCIENCE

See Biological science - BIOSC

NUTRITION – NUTRI

Diablo Valley College is approved by the California Board of Registered Nurses for continuing education credits (Provider #CEP 7992). Nutrition courses that can be used are NUTRI-115 and 160.

Christine Worsley, Dean

Kinesiology, Athletics, and Health Sciences Division

Kinesiology Office Building, Room 1

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.

Associate in science in nutrition and dietetics for transfer

Students completing the program will be able to...

- analyze data and critique information in the nutritional sciences.
- identify nutrition-related chronic diseases by applying knowledge of nutrient functions, food sources and physiologic systems.
- explain how genetics and life style factors affect nutritional and health status.
- assess a diet for nutrient adequacy using a current computerized dietary analysis database.

The associate in science in nutrition and dietetics for transfer offers students basic knowledge in microbiology, human anatomy and physiology, chemistry and nutrition. It is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major. In order to earn the degree, students must complete 60 required term units of CSU-transferable coursework with a minimum GPA of 2.0. Students transferring to a CSU campus that accepts the degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to university or college that is not part of the CSU system, or those students who do not intend to transfer.

Students with degrees in nutrition and dietetics find employment within a wide range of organizations, such as medical facilities, research labs, government agencies, universities, pharmaceutical companies, and the food industry. This degree is also an excellent preparation for students planning to continue training in medicine, public health and/or other allied health sciences.

The associate in science in nutrition for transfer is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major.

In order to earn the degree, students must:

- Complete 60 CSU-transferable units.
- Complete the California State University-General Education pattern (CSU GE); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern, including the Area 1C requirement for Oral Communication.
- Complete a minimum of 18 units in the major.
- Attain a minimum grade point average (GPA) of 2.0.
- Earn a grade of "C" or higher in all courses required for the major.

Students transferring to a CSU campus that accepts the degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system, or those students who do not intend to transfer.

Some courses in the major satisfy both major and CSUGE/IGETC general education requirements; however, the units are only counted once toward the 60 unit requirement for an associate degree. 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.

<i>major requirements:</i>		<i>units</i>
CHEM-120	General College Chemistry I.....	5
NUTRI-160	Nutrition: Science and Applications	3
PSYCH-101	Introduction to Psychology.....	3

<i>plus at least 4 units from:</i>	
BIOSC-119	Fundamentals of Microbiology
BIOSC-146	Principles of Microbiology

<i>plus at least 8 units from:</i>	
BIOSC-139	Human Anatomy.....
or	
BIOSC-140	Human Physiology
BUS-240	Business Statistics.....
or	
MATH-142	Elementary Statistics with Probability
or	
MATH-144	Statway II.....
CHEM-121	General College Chemistry II.....
CHEM-226	Organic Chemistry I

<i>plus at least 3 units from:</i>		
ANTHR-130	Cultural Anthropology	
CULN-120	Fundamentals of Cuisine	
NUTRI-130	Food and Nutrition: Cross Cultural Perspectives.....	
SOCIO-120	Introduction to Sociology.....	
total minimum units for the major		26

Certificate of achievement Nutrition, health, and wellness

Students completing the program will be able to...

- A. summarize the basic functions, food sources, digestion and absorption of the major nutrients.
- B. analyze a menu and its preparation for nutritional adequacy and food sanitation practices.
- C. describe the nutritional requirements and health concerns of each phase of the life span.
- D. summarize the impact of food choices on exercise performance, as well as an expression of cultural, socioeconomic and geographical diversity.
- E. compare and contrast career opportunities within the nutrition, health, and wellness professions.

This certificate of achievement in nutrition, health and wellness is designed to address the increasing societal interest in personal nutrition, health, and wellness. The wellness mindset has permeated all aspects of everyday life - from eating organic foods to using natural cleaning products to ending the day with meditation - and has emerged as one of the preeminent wellness trends of the new century. Rising health care costs and concerns with quality of life and longevity are also spurring individuals to learn more about what they can do to ensure a healthy body.

The certificate of achievement in nutrition, health and wellness may also serve as a supplementary skill set for individuals in various fields such as early childhood education, health education, fitness instruction, massage therapy, chiropractic medicine, nursing, and allied health occupations or individuals interested in entry-level employment in health and wellness programs such as Women, Infants, and Children (WIC) supplemental nutrition programs, Head Start programs, senior nutrition services and home delivered meal programs, Cal Fresh program, or other community agencies. Additionally, students completing the program will be able to provide advice on weight control and physical performance improvement while working under the supervision of other nutrition and fitness professionals. Such employment can encompass weight control clinics, health spas, corporate fitness and wellness centers, and gyms with a nutrition program.

The program primarily aims to provide the individual with the knowledge to maximize his or her own health and wellness. It may provide preparation for entry into certain nutrition, health and wellness-related jobs that do not require degrees or licensure. Certain required courses provide prerequisite preparation for advanced professional programs should students decide to pursue an associate or bachelor's degree.

Nutrition

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.

required courses:	units
NUTRI-100 Introduction to the Nutrition Professions	1
NUTRI-120 Sports Nutrition: Fueling the Athlete.....	3
NUTRI-130 Food and Nutrition: Cross Cultural Perspectives.....	3
NUTRI-160 Nutrition: Science and Applications	3
NUTRI-170 Nutrition: Across the Lifespan	3
PH-124 Health and Wellness.....	3

plus at least 2 units from:

CULN-153 Safety and Sanitation.....	2
PSYCH-101 Introduction to Psychology	3
total minimum required units	18

NUTRI-100 Introduction to the Nutrition Professions

- 1 unit SC
 • 18 hours lecture per term

This course is designed to assist students in making educational and career decisions for a wide spectrum of nutrition-related occupations. It provides an overview of nutrition-related careers and their respective career paths, educational and skill requirements, professional responsibilities, and certification and licensing requirements. Skills required by nutrition-related careers, such as emphasizing personal attributes, demonstrating professionalism, engaging in teamwork, and building communication skills will be covered. CSU

NUTRI-115 Nutrition and Health: Personal Applications

- 3 units SC
 • CSU GE: E
 • 54 hours lecture per term

This course is an introduction to nutrition designed for a variety of students. The focus is on 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, personal nutrition assessments and diet planning. CSU, UC (credit limits may apply to UC - see counselor)

NUTRI-120 Sports Nutrition: Fueling the Athlete

- 3 units SC
 • 54 hours lecture per term
 • Advisory: College-level reading and writing are expected.

This course presents the integration of the principles of nutrition and physical exercise in order to optimize physical fitness and athletic performance for various stages of the life span. Topics include the nutritional needs of athletes regarding macro and micro nutrient intakes, hydration, pre-, during, and post workout planning, body composition, eating disorders, and the specific nutritional, psychological, and sociological influences for different types of athletes. CSU

NUTRI-130 Food and Nutrition: Cross Cultural Perspectives

- 3 units LR
 • IGETC: 4; CSU GE: D, E; DVC GE: IV
 • 54 hours lecture per term
 • Advisory: College-level reading and writing are expected.

This course examines the regional, ethnic, cultural, gender, religious, historical, and social influences on food patterns, cuisines, and health and healing, as well as how food is viewed as an expression of cultural diversity. Students will explore traditional foods of geographic areas and cultures. The geographic factors in food availability, global food issues, dietary habits, and socioeconomic influences on food culture, and nutrition problems of various ethnic groups will also be examined. The course also addresses nutrition consequences of ethnic food choices and sanitation and safety practices. CSU, UC

NUTRI-150 Topics in Nutrition

- .3-4 units SC
 • Variable hours

This course will supplement topics in the nutritional sciences, dietetics, food service and food technology. Specific topics will be announced in the schedule of classes. CSU

NUTRI-160 Nutrition: Science and Applications

- 3 units SC
 • CSU GE: E
 • 54 hours lecture per term
 • Advisory: College-level reading and writing are expected.

This course covers scientific concepts of nutrition related to the function of nutrients in basic life processes and current health issues with emphasis on individual needs. Course content is appropriate for majors in Dental Hygiene, Nutritional Science, Nursing and Health Science. C-ID NUTR 110, CSU, UC (credit limits may apply to UC - see counselor)

NUTRI-170 Nutrition: Across the Life Span

3 units SC

- CSU GE: E
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected. NUTRI-160 or equivalent

This course examines the nutritional needs during an individual's life span from conception to death. Emphasis will be placed on the biological, psychological, and environmental influences on eating habits and nutrient intake, including the impact on skill level development and identification of risk factors that can lead to potential health problems. Nutrition assessment and management with diet planning at every stage of the life span is included. CSU, UC (credit limits may apply to UC - see counselor)

NUTRI-299 Student Instructional Assistant

.5-3 units SC

- 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

OCEAN-101 Fundamentals of Oceanography

3 units SC

- IGETC: 5A; CSU GE: B1; DVC GE: II
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.
- Note: This course does not include a laboratory. Students requiring or wanting a laboratory to accompany this course should enroll in OCEAN 102. Students who have successfully completed OCEAN-102 should not enroll in OCEAN-101. Students who have successfully completed OCEAN-102 will not receive credit for OCEAN-101.

This course is an introduction to the geological, chemical, physical and biological aspects of the world's oceans and interactions of these different aspects. Topics include the history of oceanography; historic and modern oceanographic instruments; plate tectonics and marine geology; the marine-land interface; ecological problems of the local bay, estuary, delta and state-wide water resources; the oceans' roles as a dominant influence on the earth, its climate, and the lives of its inhabitants; food, drug, and mineral energy resources from the sea; global and local ocean resource management, aquacultural techniques and practices; preservation of marine environments; and the deep sea, its properties, animals and their adaptations. CSU, UC (credit limits may apply to UC - see counselor)

OCEAN-102 Fundamentals of Oceanography with Laboratory

4 units SC

- IGETC: 5A, 5C; CSU GE: B1, B3; DVC GE: II
- 54 hours lecture/54 hours laboratory per term
- Advisory: College-level reading and writing are expected.
- Note: Students who have successfully completed OCEAN-101 should not enroll in OCEAN-102. Students who have successfully completed OCEAN-101 will not receive credit for OCEAN-102.

This course is an introduction to the geological, chemical, physical and biological aspects of the world's oceans and the interactions of these different aspects. Topics include: the history of oceanography; historic and modern oceanographic instruments; plate tectonics and marine geology; the marine-land interface; ecological problems of the local bay, estuary, delta and state-wide water resources; the oceans' roles as a dominant influence on the earth, its climate, and the lives of its inhabitants; food, drug, mineral and energy resources from the sea; global and local ocean resource management, aquacultural techniques and practices; preservation of marine environments; and the deep sea, its properties, animals and their adaptations. In the laboratory, students will explore the role of the oceanographer as they learn about methods for collecting data and analyze data collected from ocean environments. CSU, UC (credit limits may apply to UC - see counselor)

OCEANOGRAPHY – OCEAN

Charles Ramos, Dean

Sciences Division

Physical Sciences Building, Room 263

Possible career opportunities

The diverse range of subjects examined and the multidisciplinary 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-150 Topics in Oceanography

.3-4 units SC

- *Variable hours*

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

- *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

PERSIAN – PERSN

Janette Funaro, Dean

Arts and Communication Division

Possible career opportunities

The study of Persian can open up opportunities in communications, foreign trade and banking, transportation, government, the Foreign Service, tourism, library services, teaching, professional translating, journalism, and all levels of education, including university teaching. Most foreign language careers require more than two years of study.

PERSN-120 First Term Persian

5 units SC

- *IGETC: 6A*
- *90 hours lecture per term*
- *Note: This course is equivalent to two years of high school study.*

This course provides an introduction to the Persian language and the culture of Persian-speaking countries. Topics include the four language skills: speaking, listening, reading, and writing. Emphasis is placed on active use of the language in class as well as basic communicative functions and structures. CSU, UC

PERSN-121 Second Term Persian

5 units SC

- *IGETC: 3B, 6A; CSU GE: C2; DVC GE: III*
- *90 hours lecture per term*
- *Prerequisite: PERSN-120 or two years of high school study or equivalent*
- *Note: Students may meet equivalency in a variety of ways. Students should seek assistance at Admissions and Records.*

This is the second course in a sequence of Persian language courses. Topics will include understanding, speaking, reading and writing of the Persian language. The course will continue to expand vocabulary, communicative functions and structures and further examine the cultures of the Persian-speaking countries. CSU, UC

PERSN-150 Topics in Persian

.3-4 units SC

- *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-299 Student Instructional Assistant

.5-3 units SC

- *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

PHILOSOPHY – PHILO

Janette Funaro, Dean

Arts and Communication Division

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, environmental ethics, law, politics and information technology. Most career options will require an advanced degree.

**Associate in arts degree
Philosophy**

Students completing the program will be able to...

- A. use their critical thinking skills to analyze and evaluate both formally and informally, arguments and positions taken regarding various philosophical topics.
- B. compare and contrast various philosophical perspectives, both historically and in the context of larger philosophical texts.
- C. recognize and explain the integration of philosophical perspectives and ideas in selected cultural, historical, and thematic contexts.
- D. demonstrate their ability to articulate clearly in oral and written form an objective analysis of major works from the various philosophic and religious literatures.
- E. explicate the historical development of major philosophical ideas and arguments within the western intellectual tradition

The Philosophy Department views critical thinking and reflection about distinctively human issues to be central to human existence and well-being. Students able to think and articulate viewpoints clearly and in an informed fashion not only enhance their own life, but contribute significantly to interpersonal relationships and social existence, including in the realm of political, economic, cultural, and social institutions.

The program prepares students with effective thinking and communication skills, which are useful in many fields including business, sales, writing, teaching, legal profession, political campaigning, news reporting, and other fields in which critical thinking and eloquent articulation of viewpoints is required.

Although this program is not designed as a transfer program, selected courses in the program do meet general education and lower division requirements for the bachelor of arts degree at many California State University and University of California campuses. Consult with department faculty and the counseling department for more information. DVC philosophy students who intend to transfer must consult with a program adviser or counselor to ensure that the requirements for transfer to the baccalaureate institution of their choice are met.

Students who intend to transfer area advised to select either General Education Option 2 (IGETC) or Option 3 (CSU GE). 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 philosophy, students must complete five core courses (15 units total) supplemented by a set of restricted electives from which students select one course (3 units). Students must complete each course used to meet a major requirement with a grade of "C" or higher and also maintain an overall GPA of 2.5 or higher in the coursework required for the major. Certain courses may satisfy both major and general education requirements; however, the units are only counted once.

<i>major requirements:</i>	<i>units</i>
PHILO-120 Introduction to Philosophy	3
PHILO-122 Introduction to Ethics	3
PHILO-130* Logic and Critical Thinking	3
PHILO-224 History of Western Philosophy: Pre-Socratic to Medieval Period	3
PHILO-225 History of Western Philosophy: Descartes to Present	3
 <i>plus at least 3 units from:</i>	
PHILO-140 Introduction to Judeo-Christian Tradition	3
PHILO-141 Introduction to the Philosophy of Religion	3
PHILO-145 Introduction to Asian Philosophy	3
PHILO-160 Introduction to Social and Political Philosophy	3
PHILO-220 Comparative Religion	3
total minimum units for the major	18

**This course has a prerequisite of ENGL-122/122A.*

Associate in arts in philosophy for transfer

Students completing the program will be able to...

- A. use their critical thinking skills to analyze and evaluate both formally and informally, arguments and positions taken regarding various philosophical topics.
- B. compare and contrast various philosophical perspectives, both historically and in the context of larger philosophical texts.
- C. recognize and explain the integration of philosophical perspectives and ideas in selected cultural, historical, and thematic contexts.
- D. demonstrate their ability to articulate clearly in oral and written form an objective analysis of major works from the various philosophic and religious literatures.
- E. explicate the historical development of major philosophical ideas and arguments within the western intellectual tradition.

The humanities and philosophy department views critical thinking and reflection about distinctively human issues to be central to human existence and well-being. Students who are able to think and articulate viewpoints clearly and in an informed fashion not only enhance their own lives, but contribute significantly to interpersonal relationships and social existence, including in the realm of political, economic, cultural, and social institutions.

The associate in arts in philosophy for transfer is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major. The associate in arts in philosophy for transfer is consistent with the mission of the community college to assist students in achieving a seamless transfer to the CSU system.

Philosophy

In order to earn the degree, students must:

- Complete 60 CSU-transferable units.
- Complete the California State University-General Education-Breadth pattern (CSU GE-Breadth); or the Intersegmental General Education Transfer Curriculum (IGETC) pattern, including the Area 1C requirement for Oral Communication.
- Complete a minimum of 18 units in the major.
- Attain a minimum grade point average (GPA) of 2.0.
- Earn a grade of “C” or higher in all courses required for the major.

Students transferring to a CSU campus that accepts the degree will be required to complete no more than 60 units after transfer to earn a bachelor’s degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system, or those students who do not intend to transfer.

Students must complete each course used to meet a major requirement with a “C” grade or higher. Some courses in the major satisfy both major and CSUGE/IGETC general education requirements; however, the units are only counted once toward the 60 unit requirement for an associate degree. 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:

<i>at least 3 units from:</i>		<i>units</i>
PHILO-120	Introduction to Philosophy.....	3
PHILO-122	Introduction to Ethics.....	3
<i>plus at least 3 units from:</i>		
PHILO-130*	Logic and Critical Thinking	3
PHILO-170	Symbolic Logic.....	3
<i>plus at least 3 units from any course above not already used or:</i>		
PHILO-224	History of Western Philosophy: Pre-Socratic to Medieval Period	3
PHILO-225	History of Western Philosophy: Descartes to Present	3
<i>plus at least 6 units from any course above not already used or:</i>		
PHILO-141	Introduction to the Philosophy of Religion	3
<i>plus at least 3 units from any course above not already used or:</i>		
PHILO-140	Introduction to Judeo-Christian Tradition	3
PHILO-145	Introduction to Asian Philosophy.....	3
PHILO-160	Introduction to Social and Political Philosophy.....	3
PHILO-220	Comparative Religions.....	3
total minimum units for the major		18

*This course has a prerequisite of ENGL-122/122A.

Certificate of achievement Philosophy

Students completing the program will be able to...

- A. use their critical thinking skills to analyze and evaluate both formally and informally, arguments and positions taken regarding various philosophical topics.
- B. compare and contrast various philosophical perspectives, both historically and in the context of larger philosophical texts.
- C. recognize and explain the integration of philosophical perspectives and ideas in selected cultural, historical, and thematic contexts.
- D. demonstrate their ability to articulate clearly in oral and written form an objective analysis of major works from the various philosophic and religious literatures.

To earn a certificate of achievement in philosophy, students must complete four core courses (12 units). The certificate program courses also count towards the “major” that is required for the associate in arts degree in philosophy.

<i>required courses:</i>	<i>units</i>
PHILO-120 Introduction to Philosophy.....	3
PHILO-122 Introduction to Ethics.....	3
PHILO-130* Logic and Critical Thinking	3
PHILO-224 History of Western Philosophy: Pre-Socratic to Medieval Period	3
total minimum required units	12

*This course has a prerequisite of ENGL-122/122A.

PHILO-120 Introduction to Philosophy

- 3 units SC
- IGETC: 3B; CSU GE: C2; DVC GE: III
 - 54 hours lecture per term
 - Advisory: College-level reading and writing are expected.

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. C-ID PHIL 100, CSU, UC

PHILO-122 Introduction to Ethics

- 3 units SC
- IGETC: 3B; CSU GE: C2; DVC GE: III
 - 54 hours lecture per term
 - Advisory: College-level reading and writing are expected.

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. C-ID PHIL 120, CSU, UC

PHILO-130 Logic and Critical Thinking

3 units SC

- *IGETC: 1B; CSU GE: A3; DVC GE: IB*
- *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 uses of language, formal and informal fallacies, syllogistic argument forms, and scientific method will be examined. Additional emphasis is placed on developing the ability to integrate the principles of critical thinking with the techniques of effective written argument. C-ID PHIL 110, CSU, UC

PHILO-140 Introduction to Judeo-Christian Tradition

3 units SC

- *IGETC: 3B; CSU GE: C2; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course presents 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

- *IGETC: 3B; CSU GE: C2; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course presents an introduction to the nature of religion. Emphasis is placed on the analysis of central themes including revelation, faith, and miracles and issues such as the problem of evil, and the relationship between religion and science. CSU, UC

PHILO-145 Introduction to Asian Philosophy

3 units SC

- *IGETC: 3B; CSU GE: C2; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course presents an introduction to the major philosophies of Asia. Topics include the primary philosophies of India, China, and Japan. Emphasis will be on the metaphysical, epistemological, and ethical traditions in India, China, and Japan. 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-160 Introduction to Social and Political Philosophy

3 units SC

- *IGETC: 3B; CSU GE: C2; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: PHILO-120 or equivalent*

This course is an introduction to the major authors, central issues, and political and philosophical perspectives as presented through classical and contemporary reading selections. Philosophers studied include Plato, Aristotle, Hobbes, Locke, Mill, Rawls, Nozick, and Arendt. Topics include the nature of democracy, fascism, justice, rights, law, liberty, political authority, political principles, and consequences, with an emphasis on understanding these political theories as normative rather than descriptive. Critical analysis of each perspective in political philosophy will be engaged. CSU, UC

PHILO-170 Symbolic Logic

3 units SC

- *CSU GE: A3; DVC GE: IB*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected. PHILO-130 or equivalents*

This course introduces the principles of valid deductive reasoning and includes a study of formal techniques of sentential and predicate logic. The use of truth-tables for propositional connectives and interpretations for statements of first-order logic using mathematical theory is presented. The conclusion of the course will engage students in issues such as the completeness of propositional calculus, "fuzzy logic," and deontic logic. C-ID PHIL 210, CSU, UC

PHILO-220 Comparative Religion

3 units SC

- *IGETC: 3B; CSU GE: C2; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

In this course, religious belief, experience, and ethical teachings of living religions of the world are examined, discussed and compared. Religions, which may be discussed, include Hinduism, Jainism, Buddhism, Sikhism, Zoroastrianism, Judaism, Christianity, and Islam. CSU, UC

PHILO-224 History of Western Philosophy: Pre-Socratic to Medieval Period

3 units SC

- *IGETC: 3B; CSU GE: C2; DVC GE: III*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course examines ancient philosophy with emphasis on the development of Greek philosophy from the Pre-Socratics through Aristotle and may also include Hellenistic, Roman, medieval or non-western thinkers. C-ID PHIL 130, CSU, UC

**PHILO-225 History of Western Philosophy:
Descartes to Present**

- 3 units SC
- *IGETC: 3B; CSU GE: C2; DVC GE: III*
 - *54 hours lecture per term*
 - *Advisory: College-level reading and writing are expected.*

This course examines continental rationalism (Descartes, Spinoza, and Leibniz), British empiricism (Locke, Berkeley, and Hume), Kant, 19th century and 20th century philosophy. C-ID PHIL 140, CSU, UC

PHILO-298 Independent Study

- .5-3 units SC
- *Variable hours*
 - *Note: Submission of acceptable educational contract to department and Instruction Office is required.*

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. CSU

PHILO-299 Student Instructional Assistant

- .5-3 units SC
- *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

PHYSICAL SCIENCE – PHYSC

Charles Ramos, Dean
Sciences Division
Physical Sciences Building, Room 263

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
- *IGETC: 5A; CSU GE: B1; DVC GE: II*
 - *54 hours lecture per term*
 - *Prerequisite: Placement into MATH-121 or higher or MATH-085 or MATH 085SP or beginning algebra or equivalent*
 - *Advisory: College-level reading and writing are expected.*

This course is an overview of the physical sciences of astronomy, physics, chemistry, and earth science. The principles studied will be used to explain current knowledge of the universe and our physical environment. CSU, UC (credit limits may apply to UC - see counselor)

PHYSC-298 Independent Study

- .5-3 units SC
- *Variable hours*
 - *Note: Submission of acceptable educational contract to department and Instruction Office is required.*

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. CSU

PHYSICS – PHYS

Charles Ramos, Dean
 Sciences Division
 Physical Sciences Building, Room 263

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.

Associate in science in physics for transfer

Students completing the program will be able to...

- solve problems in mechanics, including mechanical waves and fluids, using calculus.
- solve problems in thermodynamics using calculus.
- solve problems in electromagnetism using calculus.
- solve problems in optics using calculus.
- solve problems in special relativity using calculus.
- solve problems in quantum physics, including its applications, using calculus and differential equations.

The associate in science in physics for transfer is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major.

In order to earn the degree, students must:

- Complete 60 CSU-transferable units.
- Complete the California State University-General Education pattern (CSU GE); or the Intersegmental General Education Transfer Curriculum (IGETC) pattern, including the Area 1C requirement for Oral Communication.
- Complete a minimum of 18 units in the major.
- Attain a minimum grade point average (GPA) of 2.0.
- Earn a grade of "C" or higher in all courses required for the major.

Students transferring to a CSU campus that accepts the degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system, or those students who do not intend to transfer.

Some courses in the major satisfy both major and CSU GE/IGETC general education requirements; however, the units are only counted once toward the 60 unit requirement for an associate degree. 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.

<i>major requirements:</i>		<i>units</i>
MATH-192	Analytic Geometry and Calculus I	5
MATH-193	Analytic Geometry and Calculus II	5
MATH-292	Analytic Geometry and Calculus III	5
PHYS-130	Physics for Scientists and Engineers A: Mechanics and Wave Motion.....	4
PHYS-230	Physics for Scientists and Engineers B: Heat and Electro-Magnetism.....	4
PHYS-231	Physics for Scientists and Engineers C: Optics and Modern Physics.....	4
total minimum units for the major		27

PHYS-110 Elementary Physics

3 units LR

- IGETC: 5A; CSU GE: B1; DVC GE: II
- 54 hours lecture per term
- Prerequisite: Placement into MATH-121 or higher or MATH-119 or MATH 119SP or intermediate algebra or equivalent
- Advisory: Concurrent enrollment in PHYS-111 and College-level reading and writing are expected.
- Note: Students specifically interested in focusing on modern physics should take PHYS-113. Students who have successfully completed PHYS-112 should not enroll in PHYS-110. Students who have successfully completed PHYS-112 will not receive credit for PHYS-110.

This course provides an overview of physics. Forces, motion, heat, electricity and magnetism, optics, and modern physics will be discussed. This course emphasizes topics in classical physics. CSU, UC (credit limits may apply to UC - see counselor)

PHYS-111 Physics Laboratory

1 unit LR

- IGETC: 5C; CSU GE: B3
- 54 hours laboratory per term
- Prerequisite: PHYS-110 or equivalent (may be taken concurrently)
- Advisory: College-level reading and writing are expected.
- Note: Students who have successfully completed PHYS-112 should not enroll in PHYS-111. Students who have successfully completed PHYS-112 will not receive credit for PHYS-111.

This laboratory course will include measurement and analysis of mechanical, thermal, electrical, and optical phenomena. CSU, UC (credit limits may apply to UC - see counselor)

PHYS-112 Elementary Physics with Laboratory

4 units LR

- 54 hours lecture/54 hours laboratory per term
- Prerequisite: Placement into MATH-121 or higher or MATH-119 or MATH 119SP or intermediate algebra or equivalent
- Note: Students specifically interested in focusing on modern physics should take PHYS-113. Students who have successfully completed PHYS-110 should not enroll in PHYS-112. Students who have successfully completed PHYS-110 will not receive credit for PHYS-112.

This course provides an overview of physics. Forces, motion, heat, electricity and magnetism, optics, and modern physics are discussed. This course emphasizes topics in classical physics and includes 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

- IGETC: 5A; CSU GE: B1; DVC GE: II
- 54 hours lecture per term
- Prerequisite: Placement into MATH-121 or higher; or MATH-119 or MATH-119SP; or intermediate algebra or equivalent

This course is an introduction to the ideas of modern physics. Topics will include 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

- IGETC: 5A, 5C; CSU GE: B1, B3; DVC GE: II
- 54 hours lecture/72 hours laboratory per term
- Prerequisite: MATH-121 or equivalent
- Advisory: College-level reading and writing are expected.

This course is the first semester of a two-semester sequence (PHYS-120 and PHYS-121) designed for majors other than engineering and physical sciences such as life science and allied health majors among others. It includes an algebra-based lecture and laboratory study of mechanics, heat and sound. C-ID PHYS 105, PHYS-120+PHYS-121 = C-ID PHYS 100S, CSU, UC (credit limits may apply to UC - see counselor)

PHYS-121 General College Physics II

4 units LR

- IGETC: 5A, 5C; CSU GE: B1, B3; DVC GE: II
- 54 hours lecture/72 hours laboratory per term
- Prerequisite: PHYS-120 or equivalent

This course is the second semester of a two-semester sequence (PHYS-120 and PHYS-121) designed for majors other than engineering and physical sciences such as life science and allied health majors among others. It includes an algebra-based lecture and laboratory study of electricity, magnetism, light and modern physics. C-ID PHYS 110, PHYS-120+PHYS-121 = C-ID PHYS 100S, 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
- Advisory: College-level reading and writing are expected.
- Note: The calculus component may be required for certain transfer majors

In this course, students will apply calculus techniques to the topics learned in PHYS-120 General College Physics I. 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
- Advisory: College-level reading and writing are expected.
- Note: The calculus component may be required for certain transfer majors

In this course, students will apply calculus techniques to the physics topics learned in PHYS-121 General College Physics II. CSU, UC (credit limits may apply to UC - see counselor)

PHYS-129 Introductory Physics for Engineers

4 units LR

- IGETC: 5A, 5C; CSU GE: B1, B3; DVC GE: II
- 54 hours lecture/72 hours laboratory per term
- Co-requisite: MATH-192 or equivalent (may be taken previously)
- Advisory: College-level reading and writing are expected.
- 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

This course is designed for engineering, physics, and chemistry majors. The student will be introduced to basic vocabulary and techniques of studying physics. It presents 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 be presented. 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

- IGETC: 5A, 5C; CSU GE: B1, B3; DVC GE: II
- 54 hours lecture/72 hours laboratory per term
- Prerequisite: PHYS-110 and PHYS-111 combined or PHYS-112 or PHYS-120 or PHYS-129 or one year high school physics or equivalent
- Co-requisite: MATH-193 (may be taken previously) or equivalent
- Advisory: College-level reading and writing are expected.
- Note: PHYS-129 is strongly advised for students who have not yet completed an equivalent prerequisite or for students who completed the prerequisite more than a year ago.

This course is designed for engineering and physical science majors such as physics, chemistry, and geology. 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 are presented. C-ID PHYS 205 C-ID PHYS 200 S, CSU, UC (credit limits may apply to UC - see counselor)

PHYS-150 Topics in Physics

.3-4 units SC

- 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

- IGETC: 5A, 5C; CSU GE: B1, B3; DVC GE: II
- 54 hours lecture/72 hours laboratory per term
- Prerequisite: PHYS-130 or equivalent; MATH-292 (may be taken concurrently) or equivalent
- Advisory: College-level reading and writing are expected.

This course is a continuation of PHYS-130 and presents the study of thermodynamics, electricity, and magnetism. Topics include temperature, heat the first and second laws of thermodynamics, kinetic theory of gases, electric field and electric potential of charges, capacitance, magnetic field of moving charges, current, voltage, resistance, induced electric and magnetic fields, Maxwell's equations and plane electromagnetic waves. C-ID PHYS 210, PHYS-130+PHYS-230+PHYS-231 = C-ID PHYS 200 S, 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

- IGETC: 5A, 5C; CSU GE: B1, B3; DVC GE: II
- 54 hours lecture/72 hours laboratory per term
- Prerequisite: PHYS-230 or equivalent; MATH-294 (may be taken concurrently) or equivalent
- Advisory: College-level reading and writing are expected.

This course is a continuation of PHYS-130 and PHYS-230 and presents the study of optics and modern physics. Topics include geometric and wave optics, special relativity, quantum physics, atomic and molecular physics, condensed matter physics, and nuclear physics. C-ID PHYS 215, PHYS-130+PHYS-230+PHYS-231 = C-ID PHYS 200 S, CSU, UC (credit limits may apply to UC - see counselor)

PHYS-299 Student Instructional Assistant

.5-3 units SC

- 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

PLUMBING – PLUMB

Despina Prapavessi, Dean
Mathematics and Engineering Division
Mathematics Building, Room 267

Possible career opportunities

In collaboration with Plumbers and Steamfitters Union Local 159 email: info@plumbers159.org and Plumbers-Steamfitters-Refrigeration Union Local 342 www.ua342.org, DVC offers two five-year apprenticeship programs: steamfitting and plumbing. Apprenticeship is training that is designed to prepare an individual for a career in the skilled crafts and trades. Apprentices develop technical skills, experience the sharing of assignments and see how technical tasks relate specifically with theoretical knowledge and interpretation. Apprentices earn a wage while learning. Enrollment in this program is restricted. You must be registered as an apprentice with the State of California to participate in the program and accepted into the apprenticeship program by our Union partners.

Physics

Plumbers-Steamfitters-Refrigeration Union Local 342,
Joint Apprenticeship and Journeymen Training Office

935 Detroit Avenue
Concord, CA 94518-2501
925-686-0730

Plumbers and Steamfitters Local 159
1308 Roman Way
Martinez, CA 94553
800-443-0220 or
925-229-0883
email: info@plumbers159.org

Associate in science degree Plumbing

Students completing the program will be able to...

- discuss the role the plumber plays in a safe work site.
- apply mathematical formulae used in plumbing.
- demonstrate knowledge of the hazards of cross connection in the potable water system.
- use the proper method to install medical gas piping.
- explain the responsibilities of the many agencies, departments, and specific districts that require variances or permits for construction.
- demonstrate advanced worksite operations including T-drilling, hot taps, and freeze pipe installation.

Upon successful completion of the program, the student will have the necessary knowledge and skill for a career in residential, commercial, and industrial plumbing. Reading of blueprints, layout, estimating, installation of piping systems and fixtures, repair of supply and waste water systems are just some of the skills that will be mastered during this program.

A student is eligible for graduation with an associate in science degree after the satisfactory completion of a minimum of 60 units.

To earn an associate in science degree with a major in plumbing, students must complete each course used to meet a major requirements with a "C" grade or higher and complete general education requirements as listed in the catalog. Degree requirements can be completed by attending classes in the day, the evening, or both. Certain courses may satisfy both major and general education requirements; however, the units are only counted once. General Education Option 1 (DVC General Education) is appropriate for students who do not intend to transfer. DVC Plumbing 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 GE).

major requirements:

units

complete at least 30 units from:

PLUMB-110	OSHA-CPR.....	1.5-2.5
PLUMB-111	Trade Mathematics.....	1.5-2.5
PLUMB-112	Water Supply Systems.....	1.5-2.5
PLUMB-113	Sewage Disposal.....	1.5-2.5
PLUMB-114	Plumbing System Service and Repair.....	1.5-2.5
PLUMB-115	Construction Management in Plumbing.....	1.5-3
PLUMB-116	Medical Gas and Vacuum Systems.....	1.5-2.5
PLUMB-117	Related Science in the Piping Trades.....	1.5-2.5
PLUMB-118	Beginning Drawing and Plan Reading for the Piping Trades.....	1.5-2.5
PLUMB-119	Advanced Drawing in the Piping Trades.....	1.5-2.5
PLUMB-120	Plumbing Tool Workshop I.....	1.5-2.5
PLUMB-121	Plumbing Tool Workshop II.....	1.5-2.5
PLUMB-122	Plumbing Code I.....	1.5-2.5
PLUMB-123	Plumbing Code II.....	1.5-2.5
PLUMB-124	Welding for Plumbers.....	1.5-2.5
PLUMB-125	Electricity for Plumbing.....	1.5-2.5
PLUMB-126	Gas Installation in Plumbing.....	1.5-2.5
PLUMB-127	Backflow Prevention.....	1.5-2.5
PLUMB-128	Plumbing Fixtures.....	1.5-2.5
PLUMB-129	Certification Preparation.....	1.5-2.5

total minimum units for the major 30

Certificate of achievement Plumbing

Students completing the program will be able to...

- discuss the role the plumber plays in a safe work site.
- apply mathematical formulae used in plumbing.
- demonstrate knowledge of the hazards of cross connection in the potable water system.
- use the proper method to install medical gas piping.
- explain the responsibilities of the many agencies, departments, and specific districts that require variances or permits for construction.
- demonstrate advanced worksite operations including T-drilling, hot taps, and freeze pipe installation.

required courses:

units

complete at least 28 units from:

PLUMB-112	Water Supply Systems.....	1.5-2.5
PLUMB-113	Sewage Disposal.....	1.5-2.5
PLUMB-114	Plumbing System Service and Repair.....	1.5-2.5
PLUMB-115	Construction Management in Plumbing.....	1.5-3
PLUMB-116	Medical Gas and Vacuum Systems.....	1.5-2.5
PLUMB-117	Related Science in the Piping Trades.....	1.5-2.5
PLUMB-118	Beginning Drawing and Plan Reading for the Piping Trades.....	1.5-2.5
PLUMB-119	Advanced Drawing in the Piping Trades.....	1.5-2.5
PLUMB-120	Plumbing Tool Workshop I.....	1.5-2.5
PLUMB-121	Plumbing Tool Workshop II.....	1.5-2.5
PLUMB-122	Plumbing Code I.....	1.5-2.5
PLUMB-123	Plumbing Code II.....	1.5-2.5
PLUMB-124	Welding for Plumbers.....	1.5-2.5
PLUMB-125	Electricity for Plumbing.....	1.5-2.5
PLUMB-126	Gas Installation in Plumbing.....	1.5-2.5
PLUMB-127	Backflow Prevention.....	1.5-2.5
PLUMB-128	Plumbing Fixtures.....	1.5-2.5
PLUMB-129	Certification Preparation.....	1.5-2.5

total minimum required units 28

**Certificate of accomplishment
Plumbing**

Students completing the program will be able to...

- A. discuss the role the plumber plays in a safe work site.
- B. apply mathematical formulae used in plumbing.
- C. demonstrate knowledge of the hazards of cross connection in the potable water system.
- D. use the proper method to install medical gas piping.

required courses: units

complete at least 10 units from:

PLUMB-110	OSHA-CPR.....	1.5-2.5
PLUMB-111	Trade Mathematics	1.5-2.5
PLUMB-112	Water Supply Systems.....	1.5-2.5
PLUMB-113	Sewage Disposal.....	1.5-2.5
PLUMB-114	Plumbing System Service and Repair	1.5-2.5
PLUMB-115	Construction Management in Plumbing.....	1.5-3
PLUMB-116	Medical Gas and Vacuum Systems.....	1.5-2.5
total minimum required units		10

PLUMB-110 OSHA-CPR

1.5-2.5 units LR

- Variable hours
- Note: This program is sponsored by the United Association of Union Plumbers, Fitters, Welders, and Service Technicians 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.

This course covers the regulations governed by OSHA 30 that provide and recognize safe work practices. The student will receive certification in Cardio-Pulmonary Resuscitation and First Aid.

PLUMB-111 Trade Mathematics

1.5-2.5 units LR

- Variable hours
- Note: This program is sponsored by the United Association of Union Plumbers, Fitters, Welders, and Service Technicians 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.

This course covers the approaches to mathematical problem solving used in pipe fitting and plumbing.

PLUMB-112 Water Supply Systems

1.5-2.5 units LR

- Variable hours
- Note: This program is sponsored by the United Association of Journeymen and Apprentices of the Plumbing and Pipefitting Industry of the United States and Canada and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the union local responsible for the section.

This course presents an introduction to the principles and methods of water distribution and treatment regarding water supply systems.

PLUMB-113 Sewage Disposal

1.5-2.5 units LR

- Variable hours
- Note: This program is sponsored by the United Association of Journeymen and Apprentices of the Plumbing and Pipefitting Industry of the United States and Canada and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the union local responsible for the section.

The course introduces the principles and methods of sewage disposal for residential and commercial buildings.

PLUMB-114 Plumbing System Service and Repair

1.5-2.5 units LR

- Variable hours
- Note: This program is sponsored by the United Association of Journeymen and Apprentices of the Plumbing and Pipefitting Industry of the United States and Canada and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the union local responsible for the section.

This course presents an introduction to the planning, troubleshooting, and repair of plumbing systems.

PLUMB-115 Construction Management in Plumbing

1.5-3 unitsLR

- 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 course offers an introduction to construction management in plumbing. Topics include administrative procedures, plans and specifications, scheduling, permits, variances, and forms of communication.

PLUMB-116 Medical Gas and Vacuum 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.

This course covers the requirements and standards of medical gas and vacuum system installation and maintenance.

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.

This course covers the scientific and mechanical principles that are basic to the work of the piping industry. An overview of hydraulic and pneumatic systems as well as industrial plumbing and piping systems and materials will be covered.

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.

This course covers the interpretation of drawings and sketches associated with piping installation. An introduction to basic drawing and drafting methods, technical symbols, and notation will be covered in orthographic and isometric drawing views.

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.

In this course students will interpret, coordinate and make drawings and sketches associated with piping installation.

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.

This course covers the practical and theoretical aspects of plumbing tool processes. Topics include the proper use of basic trade tools for processes such as soldering, brazing, threading pipes, and installing drainage. Safe work practices will be emphasized.

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.

This course covers the practical and theoretical aspects of plumbing tool processes. Topics will include the proper use and of advanced trade tools for processes such as T-drilling, hot taps, and freeze pipe installation. Safe work practices will be emphasized.

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.

This course presents articles 100-900 of the Uniform Plumbing Code.

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.

This course presents articles 901-1622 of the Uniform Plumbing Code.

PLUMB-124 Welding for Plumbers

1.5-2.5 units LR

- Variable hours
- Note: This program is sponsored by the United Association of Journeymen and Apprentices of the Plumbing and Pipefitting Industry of the United States and Canada and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the union local responsible for the section.

This course presents the techniques and methods of welding for plumbers. Standard safety practices from the Occupational Safety and Health Administration (OSHA), American National Standards Institute (ANSI), and Compliance, Safety, Accountability (CSA) are emphasized.

PLUMB-125 Electricity for Plumbing

1.5-2.5 units LR

- Variable hours
- Note: This program is sponsored by the United Association of Journeymen and Apprentices of the Plumbing and Pipefitting Industry of the United States and Canada and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the union local responsible for the section.

This course introduces the specialized knowledge and techniques required for the effective operation and function of electrical systems for plumbing applications.

PLUMB-126 Gas Installation in Plumbing

1.5-2.5 units LR

- Variable hours
- Note: This program is sponsored by the United Association of Journeymen and Apprentices of the Plumbing and Pipefitting Industry of the United States and Canada and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the union local responsible for the section.

This course presents the principles and installation methods of gas piping systems. Safety practices are emphasized.

PLUMB-127 Backflow Prevention

1.5-2.5 units LR

- Variable hours
- Note: This program is sponsored by the United Association of Journeymen and Apprentices of the Plumbing and Pipefitting Industry of the United States and Canada and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the union local responsible for the section.

This course presents the approved methods and appropriate devices to ensure backflow and cross-connection are eliminated.

PLUMB-128 Plumbing Fixtures

1.5-2.5 units LR

- Variable hours
- Note: This program is sponsored by the United Association of Journeymen and Apprentices of the Plumbing and Pipefitting Industry of the United States and Canada and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the union local responsible for the section.

This course presents modern plumbing fixtures and appliances. Topics include proper selection, installation, and maintenance.

PLUMB-129 Certification Preparation

1.5-2.5 units LR

- Variable hours
- Note: This program is sponsored by the United Association of Journeymen and Apprentices of the Plumbing and Pipefitting Industry of the United States and Canada and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the union local responsible for the section.

This course presents the information necessary to sit for the state plumbing certification examination. The course will expand upon information presented in other plumbing courses within the program to emphasize knowledge required for passing this exam.

PLUMB-130 Green Awareness

1.5-2.5 units LR

- Variable hours
- Note: This program is sponsored by the United Association of Journeymen and Apprentices of the Plumbing and Pipefitting Industry of the United States and Canada and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the union local responsible for the section.

The course provides an overview of “green” concepts as applied to mechanical systems and high-efficiency plumbing technologies that support water conservation.

PLUMB-131 Blueprint Reading for Plumbing

1.5-2.5 units LR

- Variable hours
- Note: This program is sponsored by the United Association of Journeymen and Apprentices of the Plumbing and Pipefitting Industry of the United States and Canada and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the union local responsible for the section.

This course introduces the interpretation of blueprints, specifications, and other construction documents for the plumbing industry.

PLUMB-150 Topics in Plumbing

.3-4 units SC

- *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.

PLUMB-298 Independent Study

.5-3 units SC

- *Variable hours*
- *Note: Submission of acceptable educational contract to department and Instruction Office is required.*

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment.

PLUMB-299 Student Instructional Assistant

.5-3 units SC

- *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.

POLITICAL SCIENCE – POLSC

Obed Vazquez, Dean
Social Sciences Division
Faculty Office Building, Room 136

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.

Associate in arts in political science for transfer

Students completing the program will be able to...

- recognize political values embedded in systems of political thought.
- describe the basic structures and procedures of American government.
- describe the relative impact of federal, state and local governments on the inhabitants of California.
- describe the content and origins of several world philosophies.
- demonstrate an understanding of fundamental political concepts.
- recognize and discuss various elements of power in political activity.

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.

The associate in arts in political science for transfer is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major.

In order to earn the degree, students must:

- Complete 60 CSU-transferable units.
- Complete the California State University-General Education pattern (CSU GE); or the Intersegmental General Education Transfer Curriculum (IGETC) pattern, including the Area 1C requirement for Oral Communication.
- Complete a minimum of 18 units in the major.
- Attain a minimum grade point average (GPA) of 2.0.
- Earn a grade of "C" or higher in all courses required for the major.

Students transferring to a CSU campus that accepts the degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system, or those students who do not intend to transfer.

Some courses in the major satisfy both major and CSU GE/IGETC general education requirements; however, the units are only counted once toward the 60 unit requirement for an associate degree. 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:
units

complete at least 3 units from:

POLSC-121	Introduction to U.S. Government.....	3
POLSC-122	Latinx Politics and American Government.....	3
POLSC-123	Black Politics and American Government.....	3

plus at least 9 units from:

BUS-240	Business Statistics.....	3
or		
MATH-142	Elementary Statistics with Probability.....	4
or		
MATH-144	Statway II.....	4
POLSC-120	Introduction to Politics.....	3
POLSC-210	Political Ideology.....	3
POLSC-220	Comparative Politics.....	3
POLSC-240	Political Theory.....	3
POLSC-250	International Relations.....	3
plus at least 6 units from any course not used above or:		
ANTHR-130	Cultural Anthropology.....	3
ECON-220	Principles of Macroeconomics.....	3
ECON-221	Principles of Microeconomics.....	3
HIST-140	History of Western Civilization to the Renaissance.....	3
HIST-141	History of Western Civilization since the Renaissance.....	3
POLSC-127	Introduction to Law and Democracy.....	3
POLSC-151	California Politics.....	3
POLSC-252	Model United Nations.....	3
SOCSC-101	Introduction to Social Justice.....	3

total minimum units for the major 18

POLSC-120 Introduction to Politics

3 units SC

- *IGETC: 4; CSU GE: D; DVC GE: IV*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course presents an introduction to key concepts of politics, the state, and relations between the state and individual as applied to the United States political system. Comparison of the United States system with other political systems will also be discussed. C-ID POLS 150, CSU, UC

POLSC-121 Introduction to United States Government

3 units SC

- *IGETC: 4; CSU GE: D; DVC GE: IV*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

The course presents a survey of the American political framework and process. Students will examine the structure of the U.S. Constitution 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. C-ID POLS 110, CSU, UC

POLSC-122 Latinx Politics and American Government

3 units SC

- *IGETC: 4; CSU GE: D; DVC GE: IV*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course provides an introduction to United States and California governments from the history and experiences of the Latinx population. Students will analyze the U.S. and California Constitutions as well the legislative, executive, and judicial branches of governance. Emphasis will be on Latinx political participation, social justice movements and their influence upon U.S. institutions at the local, state, and federal levels. Public policy issues including political economy, naturalization, immigration, health care, naturalization, immigration, health care, education and criminal justice will also be examined. C-ID POLS-110, CSU, UC

POLSC-123 Black Politics and American Government

3 units SC

- *IGETC: 4; CSU GE: D; DVC GE: IV*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course provides an introduction to United States and California governments from the history and experiences of African Americans. Students will analyze the U.S. and California Constitutions as well the legislative, executive, and judicial branches of governance. Focusing on African-American and Black political participation, Civil Rights and social justice movements, this course will highlight the influence of Black Americans upon United States institutions at the local, state and federal levels. Public policy issues including mass incarceration, education, political economy, health-care, and the legacy of slavery will also be examined. C-ID POLS 110, CSU, UC

POLSC-127 Introduction to Law and Democracy

3 units SC

- *IGETC: 4; CSU GE: D; DVC GE: IV*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course is an introduction to legal concepts in American democracy and contemporary issues: Theories of historical social injustice and movements; examination of law, social justice, democracy, government, civil rights, civil liberties, and citizenship. C-ID LPPS 110, CSU, UC

POLSC-151 California Politics

3 units SC

- *IGETC: 4; CSU GE: D; DVC GE: IV*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course provides 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, UC

POLSC-155 Topics in Political Science

.3-4 units SC

- *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-210 Political Ideology

3 units SC

- *IGETC: 4; CSU GE: D; DVC GE: IV*
- *54 hours lecture per term*

This course presents a comparative, conceptual, and historical analysis of competing ideological approaches to government. Emphasis is placed on the theories, values, and assumptions that make up a political ideology and the effect of such theories on a political system. Contemporary political ideological movements are explored. C-ID POLS 120, CSU, UC

POLSC-220 Comparative Politics

3 units SC

- *IGETC: 4; CSU GE: D; DVC GE: IV*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course presents a comparative analysis of the political systems of selected foreign states. The origins and nature of politics, philosophies, and cultures and their expression in political institutions and processes are investigated. C-ID POLS 130, CSU, UC

POLSC-240 Political Theory

3 units SC

- *IGETC: 4; CSU GE: D; DVC GE: IV*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course will present a survey of selected political theories, concepts and issues from Plato to the present. Students will explore theoretical approaches used to explain, instruct, and justify the distribution of political power in societies. C-ID POLS 120, CSU, UC

POLSC-250 International Relations

3 units SC

- *IGETC: 4; CSU GE: D; DVC GE: IV*
- *54 hours lecture per term*

This course is an introduction to various aspects of international relations and politics. Topics include 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. C-ID POLS 140, CSU, UC

POLSC-252 Model United Nations

3 units LR

- *IGETC: 4; CSU GE: D; DVC GE: IV*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course introduces students to the theory and practice of international diplomacy and intergovernmental organizations (IGOs.) Focus is placed on history, structures and functions of the United Nations (UN), international bargaining and diplomacy, conflict resolution, and parliamentary procedures. Model UN will examine United States foreign and domestic policies related to the UN. Students will organize meetings modeled after the UN General Assembly, the Security Council and other organs of the UN as well as its specialized agencies and major IGOs. CSU, UC

POLSC-298 Independent Study

.5-3 units SC

- *Variable hours*
- *Note: Submission of acceptable educational contract to department and Instruction Office is required.*

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. CSU

POLSC-299 Student Instructional Assistant

.5-3 units SC

- *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

PSYCHOLOGY – PSYCH

Obed Vazquez, Dean
Social Sciences Division
Faculty Office Building, Room 136

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 psychotherapist, school psychologist, college professor, researcher, counselor and administrator. Most career options require more than two years of college study.

Associate in arts in psychology for transfer Students completing the program will be able to...

- identify the major theoretical orientations in psychology and demonstrate knowledge of basic psychological concepts regarding behavior and mental processes.
- demonstrate knowledge of research methods, ethical considerations in conducting research, and effective user of the American Psychological Association (APA) style in presenting information.
- utilize critical thinking skills to analyze, evaluate, and make decisions concerning complex contemporary issues in psychology.
- recognize the complexity of social, cultural, and international diversity.
- apply psychological principles to the development of interpersonal, occupational, and social skills, and life-long personal growth.
- 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.
- correctly apply statistical concepts to organize and understand data from psychological research.
- demonstrate an understanding of biological processes underlying behavior and experience.

The associate in arts in psychology for transfer 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 meets lower division requirements for transfer to the CSU system baccalaureate degree programs in psychology and fulfills lower division general education requirements for transfer to the CSU system.

Psychology includes a variety of sub-fields, including clinical, counseling, developmental, forensic, social, cognitive, biological, and personality psychology. Most career options require more than two years of college study. The associate in arts in psychology for transfer degree provides preparation for transfer to psychology programs at baccalaureate-granting institutions. Transferring, completion of a bachelor's degree, and graduate studies in psychology can lead to careers as psychotherapists, college professors, scientific researchers, administrators, and business consultants.

The associate in arts in psychology for transfer is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major.

In order to earn the degree, students must:

- Complete 60 CSU-transferable units.
- Complete the California State University-General Education pattern (CSU GE); or the Intersegmental General Education Transfer Curriculum (IGETC) pattern, including the Area 1C requirement for Oral Communication.
- Complete a minimum of 18 units in the major.
- Attain a minimum grade point average (GPA) of 2.0.
- Earn a grade of "C" or higher in all courses required for the major.

Students transferring to a CSU campus that accepts the degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system, or those students who do not intend to transfer.

Some courses in the major satisfy both major and CSUGE/IGETC general education requirements; however, the units are only counted once toward the 60 unit requirement for an associate degree. 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.

<i>major requirements:</i>	<i>units</i>
PSYCH-101 Introduction to Psychology	3
PSYCH-215 Introduction to Research Methods in Psychology	3
<i>at least 3 units from:</i>	
BUS-240 Business Statistics	3
MATH-142 Elementary Statistics with Probability	4
PSYCH-214 Introduction to Statistics for Psychology	4
<i>complete at least 3 units from:</i>	
BIOSC-102 Fundamentals of Biological Science with Laboratory	4
BIOSC-117 Human Biology with Laboratory	4
PSYCH-130 Introduction to Biological Psychology	3

Psychology

complete at least 3 units from:

PSYCH-145 Critical Thinking in Psychology.....	3
PSYCH-200 Life Span Development.....	3
PSYCH-225 Social Psychology.....	3

complete at least 3 units from:

PSYCH-122 Psychology in Modern Life.....	3
PSYCH-140 Psychology of African-Americans in a Multicultural Society	3
PSYCH-141 Psychology of Latinos/Chicanos in the U.S.	3
PSYCH-160 Psychology of Women	3
PSYCH-190 Psychology of Adolescence.....	3
PSYCH-195 Psychology of Adult Development and Aging.....	3
PSYCH-220 Psychology of Personality: Personal, Social, Cultural Differences.....	3
PSYCH-230 Abnormal Psychology	3
PSYCH-240 Transpersonal Psychology.....	3

total minimum units for the major 18

PSYCH-101 Introduction to Psychology

3 units SC

- IGETC: 4; CSU GE: D; DVC GE: IV
- 54 hours lecture per term
- Credit for prior learning available: Advanced Placement (AP). Transfer limitations may apply, see a counselor.
- Advisory: College-level reading and writing are expected.

This course 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, psychological disorders and therapeutic approaches, social psychology, research findings, and applied psychology. C-ID PSY 110, CSU, UC

PSYCH-122 Psychology in Modern Life

3 units SC

- IGETC: 4; CSU GE: D, E; DVC GE: IV
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This course examines the psychological, physiological, and cultural factors involved in personality development, and interpersonal relationships. The relevance of psychology to social processes is also examined. This course is designed with an applied focus for students interested in how psychology is used in everyday life and is related to other social sciences. The course surveys different psychological perspectives and theoretical foundations and how these are applied across a person's life taking into account the influence of factors such as culture, gender, ethnicity, historical cohort, and socio-economic status. C-ID PSY 115, CSU, UC

PSYCH-130 Introduction to Biological Psychology

3 units SC

- IGETC: 4; CSU GE: D; DVC GE: IV
- 54 hours lecture per term
- Prerequisite: PSYCH-101 or equivalent
- Advisory: College-level reading and writing are expected.

This course explores the biological bases of behavior, emotions, and psychological processes. Brain-behavior relationships underlying psychological processes such as sensation, perception, learning, memory, emotions, and psychological disorders will be examined. Historical contributions, prominent theories and models, current research principles and ethical standards in research will be addressed. C-ID PSY 150, CSU, UC

PSYCH-140 Psychology of African-Americans in a Multicultural Society

3 units SC

- IGETC: 4; CSU GE: D, E; DVC GE: IV
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

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

- IGETC: 4; CSU GE: D, E; DVC GE: IV
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

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

- *IGETC: 1B; CSU GE: A3; DVC GE: IB*
- *54 hours lecture per term*
- *Prerequisite: ENGL-122 or equivalent*

This course presents 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. C-ID ENGL 105, CSU, UC

PSYCH-155 Topics in Psychology

.3-4 units SC

- *Variable hours*

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

- *IGETC: 4; CSU GE: D, E; DVC GE: IV*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course is an examination of various factors in the development of gender identity, including personality, social processes, biology, and culture. Topics include interpersonal relations, communication styles, and psychological similarities and differences between people as a function of gender identity. CSU, UC

PSYCH-190 Psychology of Adolescence

3 units SC

- *IGETC: 4; CSU GE: D; DVC GE: IV*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course presents a survey of adolescent development and the psychological challenges faced by adolescents. Topics include adolescent values and attitudes; adolescent self-concept, self-esteem and identity; adolescent sex-role socialization; parent and family influence on adolescent socialization and peer group influence on adolescent development. CSU, UC

PSYCH-195 Psychology of Adult Development and Aging

3 units SC

- *IGETC: 4; CSU GE: D, E; DVC GE: IV*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course examines the physical, psychological, cognitive, social, and emotional aspects of the aging process including the interactions between the elderly and society. Topics include an analysis of stereotypes, social connections, environmental influences, sexuality, physical health, cognitive changes, mental health, death, and bereavement, and self-reflection on life's meaning and purpose. CSU, UC

PSYCH-200 Life Span Development

3 units LR

- *IGETC: 4; CSU GE: D, E; DVC GE: IV*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course examines the developmental changes and socio-cultural events that take place during an individual's life span from conception to death. Students are introduced to the psychological characteristics, personal or social developmental problems and opportunities for each of life's age periods. Students are also exposed to classic and contemporary theories and research (including the role of heredity and the environment) in the area of human development. Life stages will be viewed in terms of a variety of theoretical frameworks that address the following domains of human development: physical, cognitive, social and personality. C-ID PSY 180, CSU, UC

PSYCH-214 Introduction to Statistics for Psychology

4 units SC

- *IGETC: 2A; CSU GE: B4; DVC GE: IB, 1C*
- *72 hours lecture per term*
- *Prerequisite: Placement into MATH-121 or higher or MATH-119 or MATH-119SP or intermediate algebra or equivalent*

This course presents an introduction to the use of statistics and probability in the scientific study of people. Topics include descriptive statistics, linear regression, design of experiments, introductory probability, random variables, normal distribution and t-distribution, and statistical inference including confidence intervals and tests of significance. Emphasis will be given to the methods psychologists use to collect, describe, graph, and interpret patterns in data about people, and how psychologists report these results in research papers. Use of a computer for statistical analysis is required. CSU, UC (Credit limits may apply to UC - see counselor)

PSYCH-215 Introduction to Research Methods in Psychology

- 3 units SC
- CSU GE: D
- 54 hours lecture per term
- Prerequisite: PSYCH-101 and BUS-240 or MATH-142 or PSYCH-214 or equivalent
- Advisory: College-level reading and writing are expected.

This course is an introduction to the methods psychologists use to understand human behavior. The course examines the scientific method, operationalization of variables, inductive and deductive reasoning, experimental and non-experimental designs (including descriptive methods), experimental instrumentation, group and single-subject designs, and research ethics. Research in a variety of subfields within psychology will be utilized to demonstrate research design and the collection, analysis, interpretation, and reporting of research data. Students will perform a literature review, design an original research study, and prepare research reports using American Psychological Association (APA) style report writing. C-ID PSY 200, CSU, UC

PSYCH-220 Psychology of Personality: Personal, Social, Cultural Differences

- 3 units SC
- IGETC: 4; CSU GE: D; DVC GE: IV
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This course examines the dynamics of personality development, adjustment, and growth. Particular emphasis is placed on contrasting the ideas and methodologies of various schools of psychology, including Western and non-Western views. CSU, UC

PSYCH-225 Social Psychology

- 3 units SC
- IGETC: 4; CSU GE: D; DVC GE: IV
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

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, interpersonal attraction, person perception, social cognition, aggression, 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. C-ID PSY 170 CSU, UC

PSYCH-230 Abnormal Psychology

- 3 units SC
- IGETC: 4; CSU GE: D; DVC GE: IV
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This course introduces the scientific study of the symptoms, causes, treatments, and prevention of psychological disorders. Multiple theoretical perspectives are used to examine the biological, psychological, and sociocultural factors creating abnormality. The course examines the Diagnostic and Statistical Manual of Mental Disorders (DSM) classification system, cultural and gender differences in abnormality, current research and ethical issues, and case illustrations of behavioral disorders. C-ID PSY 120, CSU, UC

PSYCH-240 Transpersonal Psychology

- 3 units SC
- IGETC: 4; CSU GE: D; DVC GE: IV
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This course examines the psychological study of consciousness, mind-body relationship, and the role of spiritual inquiry in human transformation. Students will learn about ultimate human capacities such as peak and transcendent experiences, inspired creativity, altruistic ideals, and peak performance. 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
- Variable hours
- Note: Submission of acceptable educational contract to department and Instruction Office is required.

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. CSU

PSYCH-299 Student Instructional Assistant

- .5-3 units SC
- 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

PUBLIC HEALTH – PH

Diablo Valley College is approved by the California Board of Registered Nurses for continuing education credits (provider #CEP 7992). Health Science courses that can be used are: PH-124, 140, 164 and 170.

Christine Worsley, Dean
Kinesiology, Athletics, and Health Sciences Division
Kinesiology Office, Room 1

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.

Associate in science degree Health education

Students completing the program will be able to...

- apply a multi-dimensional approach to health that incorporates the study of social, behavioral and physiological sciences.
- identify risk factors for disease and disability.
- analyze the psychological, physical, social, sexual, and environmental influences on health and wellness.
- demonstrate behavior-changing techniques to maximize health and wellness.
- evaluate information and its sources by articulating and applying fundamental evaluation and selection criteria.

The associate of science 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 individual and socio-cultural risk factors for disease and disability and be taught behavior-changing skills and public health strategies to improve quality and quantity of life, 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 public health profession.

Students may apply the knowledge to work areas, such as workplace wellness, hospital health education center, state or university health center, health club, and/or government and public health agencies that focus on improving individual and societal health. Students wishing to pursue a career in the field of health education should consider this two-year program as it satisfies the general education and/or elective requirements necessary to transfer, and will prepare students for a bachelor's of science (B.S.) degree program in the field of public health science.

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 (CSUGE). 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 general education requirements as listed in the catalog. Degree requirements can be completed by attending classes in the day, the evening, or both. Certain courses may satisfy both a major and a graduation requirement; however the units are only counted once.

<i>major requirements:</i>		<i>units</i>
PH-124	Health and Wellness.....	3
PH-130	Introduction to Public Health	3

plus at least 4 units from:

BIOSC-102	Fundamentals of Biological Science with Laboratory	4
BIOSC-117	Human Biology with Laboratory	4
BIOSC-119	Fundamentals of Microbiology	4
BIOSC-139	Human Anatomy.....	5
BIOSC-140	Human Physiology	5
BIOSC-146	Principles of Microbiology	5

plus at least 3 units from:

NUTRI-160	Nutrition: Science and Applications	3
PH-127	Drugs, Health, and Society	3
PH-135	Health and Social Justice	3
PH-137	Cultural Competence in Health and Social Service.....	3
PH-140	Human Sexuality	3
PH-164	Health and Healing Systems: Cross-Cultural Perspectives.....	3
PH-170	Women's Health	3
PH-298	Independent Study.....	3

plus at least 6 units from any course not used above, or:

BUS-240	Business Statistics.....	3
or		
MATH-142	Elementary Statistics with Probability.....	4
or		
MATH-144	Statway II.....	4
CHEM-108	Introduction to Chemistry	4
PSYCH-101	Introduction to Psychology	3
or		
SOCIO-120	Introduction to Sociology.....	3

total minimum units for the major 19

Associate in science in public health science for transfer

Students completing the program will be able to...

- A. identify the basic concepts and terminologies of the public health discipline.
- B. access credible public health information from various local, state and national public health organizations and agencies.
- C. analyze of the social determinants of health and strategies for eliminating disease, illness and health disparities among various populations.
- D. demonstrate the steps of community organizing and health promotion programming.
- E. develop the preliminary skills to serve as an effective advocate for community/public health.

The associate in science in public health science for transfer degree is primarily intended for students who plan to complete a bachelor's degree at a California State University (CSU) in areas of study such as health science, health science with health education option, health science with public health option, health science with community health option, health science with health promotion and disease prevention, health education, public health, public health promotion, kinesiology with health education, kinesiology with health science option, kinesiology with health and wellness promotion, kinesiology with health promotion and disease prevention, and collaborative health and human services with community health option. Students completing this degree are guaranteed admission to the CSU system, but not necessarily to a particular major or campus.

In order to earn the degree, students must:

- Complete 60 CSU-transferable units.
- Complete the California State University-General Education pattern (CSU GE); or the Intersegmental General Education Transfer Curriculum (IGETC) pattern, including the Area 1C requirement for Oral Communication.
- Complete a minimum of 18 units in the major.
- Attain a minimum grade point average (GPA) of 2.0.
- Earn a grade of "C" or higher in all courses required for the major.

Students transferring to a CSU campus that accepts the degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to university or college that is not part of the CSU system, or those students who do not intend to transfer.

Students must complete each course used to meet a major requirement with a "C" grade or higher. Some courses in the major satisfy both major and CSUGE/IGETC general education requirements; however, the units are only counted once toward the 60 unit requirement for an associate degree. 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.

<i>major requirements:</i>		<i>units</i>
BIOSC-101	Fundamentals of Biological Science	3
	or	
BIOSC-102	Fundamentals of Biological Science with Laboratory	4
BIOSC-139	Human Anatomy.....	5
BIOSC-140	Human Physiology	5
BUS-240	Business Statistics.....	3
	or	
MATH-142	Elementary Statistics with Probability	4
CHEM-108	Introductory Chemistry	4
	or	
CHEM-120	General College Chemistry I.....	5
PH-124	Health and Wellness.....	3
PH-130	Introduction to Public Health	3
PSYCH-101	Introduction to Psychology	3

<i>plus at least 3 units from:</i>		
ECON-220	Principles of Macroeconomics	3
ECON-221	Principles of Microeconomics	3
NUTRI-160	Nutrition: Science and Applications	3
PH-127	Drugs, Health, and Society.....	3
PH-135	Health and Social Justice	3
PH-140	Human Sexuality	3
SOCIO-120	Introduction to Sociology.....	3

total minimum units for the major 33

PH-100 Introduction to Health Care Careers

- 3 units SC
- 54 hours lecture per term
 - Note: Credit by examination available.
 - Formerly HSCI-100 (22-23)

This course provides an overview of health care careers and their respective career paths, educational and skill requirements, and professional responsibilities. Basic skills required by health-related careers such as emphasizing personal attributes, demonstrating professionalism, engaging in teamwork, and building communication skills will be covered. This course is designed to assist students in making educational and career decisions for a wide variety of health care occupations. CSU

PH-124 Health and Wellness

3 units SC

- CSU GE: E
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.
- Note: The nutrition, tobacco and substance abuse components of this course fulfill a portion of the state health education requirements for a teaching credential. For CPR training see PH-131.
- Formerly HSCI-124 (22-23)

This course will require students to explore, analyze, personalize, and discuss the following issues as they relate to the essential components of health and wellness: nutrition, physical activity/exercise/fitness, weight control, eating disorders and body image, media influences, mental health, stress, violence, substance use/abuse, sexuality and sexual orientation, sexually transmitted infections, reproductive choices/contraception, relationships, disease prevention, environment, health care, aging, and general public health issues. Students will be taught the knowledge and skills necessary to implement lifestyle behaviors that can improve their health and well-being. C-ID PHS 100, CSU, UC (credit limits may apply to UC - see counselor)

PH-126 Stress Management and Health

3 units SC

- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.
- Formerly HSCI-126 (22-23)

This course covers theoretical and research-based frameworks of stress, stress response, and stress management techniques. Topics include the definition of stress, physiological and psychological effects of stress, sources and causes of stress, and health consequences of chronic stress. Numerous evidence-based techniques to manage and cope with stress will also be covered and practiced. CSU

PH-127 Drugs, Health and Society

3 units SC

- IGETC: 4; CSU GE: D, E; DVC GE: IV
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.
- Formerly HSCI-127 (22-23)

This course explains concepts and theories relating to the epidemiology and toxicology of substance use, misuse, abuse and dependence, and the impact on personal, community and societal health. The biological/physiological, neurological, and psychological short and long-term effects of selected pharmacological substances on the human brain and body are explored, including an analysis of risk factors associated with abuse and dependence. Historical, political, social, socioeconomic, and legal factors involved in the practice, marketing, distribution, and government regulations of legal and illegal drugs will be covered. An overview of contemporary methods used in prevention, diagnosis and treatment will be reviewed, including an analysis of effective evidence-based strategies and local recovery resources. C-ID ADS 110 X, C-ID PHS 103, CSU, UC (credit limits may apply to UC - see counselor)

PH-128 Medical Terminology

3 units SC

- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.
- Formerly HSCI-128 (22-23)

This course covers terminology relevant to various medical and allied health care fields. The construction, pronunciation, spelling, definition, and common usage for all medical terms in anatomy, physiology, pathology, and health care will be covered. C-ID HIT 103 X, CSU

PH-130 Introduction to Community and Public Health

3 units SC

- IGETC: 4; CSU GE: D, E; DVC GE: IV
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.
- Formerly HSCI-130 (22-23)

This course presents an overview of the disciplines of community and public health. Topics include the basic concepts and terminologies of public health; an overview of various public health sectors, professions and organizations; the study, prevention and control of diseases in the community; the analysis of the social determinants of health and how they impact individual, community, and population outcomes; strategies for eliminating disease, illness, and health disparities among various populations; community organizing and health promotion programming; school health promotion; environmental health and safety; and an overview of the healthcare delivery system in the United States within a paradigm emphasizing social determinants. Emphasis will be placed on the development of knowledge and preliminary skills to serve as an effective advocate for community and public health. C-ID PHS 101, CSU, UC

PH-131 Cardiopulmonary Resuscitation (CPR)

.5 unit SC

- 9 hours lecture/3 hours laboratory per term
- Formerly HSCI-131 (22-23)

This course covers lifesaving skills used in respiratory and cardiac emergencies, and re-certifies students who have already attained Cardio Pulmonary Resuscitation (CPR) certification. CSU

PH-135 Health and Social Justice

3 units SC

- IGETC: 4; CSU GE: D, E; DVC GE: IV
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.
- Formerly HSCI-135 (22-23)

This course provides an introduction to the health inequities in the United States that stem from unequal living conditions. Students will explore how education, socioeconomic status, racism, and gender shape health epidemics and policy development. Fundamental theories to advocate for health and social justice will be explored, and community organizing approaches will be practiced. C-ID PHS 102, CSU, UC

PH-137 Cultural Competence in Health and Social Service

3 units SC

- IGETC: 4; CSU GE: D, E; DVC GE: IV
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.
- Formerly HSCI-137 (22-23)

This course examines the political, social, and theoretical perspectives of diverse populations as they relate to health and social services settings. The impact of health status, lifestyle and behavioral patterns, communication styles, socioeconomic status, personal prejudices, ethnic stereotyping, and cultural beliefs on individual and group access to health and social services will be investigated. Emphasis is placed on developing effective strategies to use with diverse populations as well as evaluating the effectiveness of existing health and social service programs. C-ID ADS 195X, CSU, UC

PH-140 Human Sexuality

3 units SC

- IGETC: 4; CSU GE: D, E; DVC GE: IV
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.
- Formerly HSCI-140 (22-23)

This course presents an overview of the field of human sexuality from a biological, psychological, sociocultural, and research-based perspective. Topics include the dimensions of sexuality, sex in the media including the effects of pornography, cultural differences, Sexology research, reproductive anatomy and sexual response, contraception, reproductive options, sexually transmitted infections, sexual problems and solutions, gender, intimate relationships and communication, sexual orientation, sexual development through the lifespan, atypical (paraphilia) behaviors, violence including rape and sexual assault, and the sexual marketplace including human trafficking and prostitution. Students will be encouraged to examine their own sexual beliefs, values, and behaviors and cultivate unprejudiced attitudes toward diversity in human sexuality. C-ID PSY 130, CSU, UC

PH-150 Topics in Health Science

.3-4 units SC

- Variable hours
- Formerly HSCI-150 (22-23)

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

PH-164 Health and Healing Systems: Cross-Cultural Perspectives

3 units SC

- IGETC: 4; CSU GE: D, E; DVC GE: IV
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.
- Note: Continuing Education Units (CEUs) for nurses
- Formerly HSCI-164 (22-23)

This course examines health, disease, healing and medicine from an interdisciplinary perspective. Concepts and philosophies from traditional cultural healing systems and contemporary western medicine will be examined from psychological, sociological, biological, historical and cultural perspectives. Topics covered include the history of western medical practices, principles of indigenous healing systems, the role of gender in healing, the effects of personality and emotions on health and disease, and integrative medicine. CSU, UC

PH-170 Women's Health

3 units SC

- IGETC: 4; CSU GE: D, E; DVC GE: IV
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.
- Formerly HSCI-170 (22-23)

This course analyzes the biological, psychological and sociocultural aspects of women's health and explores health services, health education, and healthcare delivery systems. Social determinants of health and health inequities are examined, as well as current issues relating to LGBTQ+ rights, racism, ageism, gender stereotypes and gender roles, politics, and the role of women in the family, workforce, community, and society. Strategies for social and political change are developed. CSU, UC (credit limits may apply to UC - see counselor)

PH-230 Advanced First Aid/CPR

3 units SC

- 54 hours lecture per term
- Note: Continuing Education Units (CEUs) for nurses
- Formerly HSCI-230 (22-23)

This course involves the theory and practice of emergency care of the injured. Students will learn to assess a victim's condition and incorporate proper treatment. Standard first aid, cardio-pulmonary resuscitation (CPR), and automatic external defibrillator (AED) certification(s) will be granted upon successful completion of requirements. This course is appropriate training for medical professionals. C-ID KIN 101, CSU, UC

PH-296 Internship in Occupational Work Experience Education in PH

2-4 units SC

- *May be repeated eight times*
- *Variable hours*
- *Note: In order to enroll in the PH-296 course, students must be interning or volunteering, register for the course, complete an online Employment Form, and participate in an orientation. Incomplete grades are not awarded for this course.*
- *Formerly HSCI-296 (22-23)*

PH-296 is a supervised internship in a skilled or professional level assignment in the student's major field of study or area of career interest. Under the supervision of a college instructor, students will engage in on-the-job and other learning experiences that contribute to their employability skills and occupational or educational goals. Internships may be paid, non-paid, or some partial compensation provided. Each unit represents five hours of paid work or four hours of unpaid work per week or 75 hours of paid work or 60 hours of unpaid work per term. Students may earn up to a total of 16 units in any combination of WRKX courses. Repetition allowed per Title 5, Section 55253. CSU

PH-298 Independent Study

.5-3 units SC

- *Variable hours*
- *Note: Submission of acceptable educational contract to department and Instruction Office is required.*
- *Formerly HSCI-298 (22-23)*

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. CSU

PH-299 Student Instructional Assistant

.5-3 units SC

- *Variable hours*
- *Note: Applications must be approved through the Instruction Office. Students must be supervised by a DVC instructor.*
- *Formerly HSCI-299 (22-23)*

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

RESPIRATORY THERAPY – RT

Charles Ramos, Dean

Sciences Division

Physical Sciences Building, Room 263

Associate in science degree

Respiratory therapy

Associate in science degree

Respiratory therapy

Students completing the program will be able to...

- demonstrate the cognitive, psychomotor, and affective skills necessary to assist the physician in the diagnosis and disorders.
- demonstrate appropriate critical thinking skills, time management skills, interpersonal communication skills, and technical skills necessary to provide competent respiratory care in multidisciplinary care settings.
- qualify for licensure in the State of California.
- qualify nationally for Registered Respiratory Therapist status.

The respiratory therapy (RT) program is offered in collaboration with Ohlone College in Newark. Students complete general education courses at DVC, laboratory and clinical courses at Ohlone College, and have supervised clinical practice at local hospitals.

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 CoARC (Committee on Accreditation for Respiratory Care) 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 an associate in science degree from Ohlone College. Students must maintain a minimum of a "C" grade or higher in all program courses. In order for a respiratory therapy program application to be considered at Ohlone College, both overall GPA and science GPA must be 2.7 or higher. For applications and information, contact the Ohlone College RT program director at www.ohlone.edu/instr/rt. All applicants are required to attend a Pre-Application Orientation. Dates are posted annually on the Ohlone website.

<i>required program prerequisites or equivalents:**</i>	<i>units</i>
BIOSC-119 Fundamentals of Microbiology	4
BIOSC-139 Human Anatomy.....	5
BIOSC-140 Human Physiology	5
ENGL-122 First-Year College Writing and Reading	3
PSYCH-200 Life Span Development	3

Respiratory therapy

plus at least 4 units from:

CHEM-107	Integrated Inorganic, Organic, and Biological Chemistry	5
CHEM-108	Introductory Chemistry	4
CHEM-109	Introduction to Organic and Biochemistry	4
CHEM-120	General College Chemistry I.....	5

plus at least 4 units from:

MATH-119	Beginning and Intermediate Algebra	4
MATH-119SP	Beginning and Intermediate Algebra – Self-Paced.....	4

total minimum units of program prerequisites 28

recommended course before entering the program:

complete at least 3 units from:

COMM-120	Public Speaking	3
COMM-128	Interpersonal Communication	3
COMM-130	Small Group Communication.....	3

major requirements:

AH 151*	Applied Clinical Pharmacology.....	2
RT 220*	Beginning Clinical Practice	1.5
RT 222*	Respiratory Therapy I.....	5
RT 223*	Patient Care I.....	1
RT 225*	Beginning Laboratory	3.5
RT 251	Clinical Pharmacology for Respiratory Therapists.....	2
RT 252*	Respiratory Therapy II.....	4.5
RT 258*	Patient Care II: Respiratory Pathophysiology... ..	1.5
RT 265*	Intermediate Laboratory	2
RT 270*	Mechanical Ventilation Laboratory I.....	1.5
RT 275*	Intermediate Clinical Rotation.....	3.5
RT 297*	Neonatal and Pediatric Respiratory Care.....	2
RT 298*	Principles of Mechanical Ventilation I.....	2.5
RT 302*	Advanced Mechanical Ventilation and Advanced Laboratory	4.5
RT 303*	Respiratory Therapy III.....	2.5
RT 323*	Advanced Respiratory Therapy Pathophysiology.....	2
RT 330*	Clinical Practicum in Neonatal and Pediatric Respiratory Care	1.5
RT 340*	Advanced Clinical Rotation.....	3
RT 360*	Pulmonary Function Testing	1.5
RT 370*	Care for Critically Ill Patients and Pulmonary Rehabilitation	0.5
RT 380*	Respiratory Therapy IV	2.5
RT 385*	Computer Simulation, Graduation, and NBRC Preparation	1.5
RT 399	Respiratory Practicum	6

total minimum required RT program units 58

*These are Ohlone College courses.

**Prerequisites and support course may be “in progress” at the time of application. These courses must be completed no later than the end of the spring term during the year of application.

In addition to above courses, students must complete Ohlone College general education requirements:

Ohlone

Area III, Fine Arts/Humanities
3 units required

Area V, Physical Education/Wellness
1 unit required

Area VI, Intercultural/International Studies
3 units required

Area VII, Information competency
1 units required

DVC

Area III, Arts and Humanities

Minimum of 1 unit of activity courses including:

KNACT, DANCE (formerly KNDAN) 100-199, 1 unit or PH-124, 126, 127, 130, 135, 140, 164, 170

One course from:
ADS-155, ADJUS-130, ANTHR-120, 130, 135, ARCHI-158, ARTHS-193, BUSMG-131, COMM-125, CULN-228, DRAMA-142, ECE-144, EDUSP-101, ENGL-162, 163, 164, 166, 167, 168, 170, 173, 177, 178, 190, 225, 252, 262, 272, 273, ETHN-101, FTVE-210, 260, 281, 283, GEOG-130, 135, HIST-124, 125, 126, 127, 128, 129, 135, 136, 150, 151, 170, 171, 181, PH-137, 164, 170, HUMAN-112, 115, 116, 124, MUSIC-112, 114, 115, 117, 118, 119, NUTRI-130, PHILO-140, 145, 220, POLSC-122, 123, 210, 220, 250, 252, PSYCH-122, 140, 141, 160, 220 SOCIO-122, 124, 125, 131, 135, SOCSC-110, 111, 120, 123, 220

RUSSIAN – RUSS

Janette Funaro, Dean
Arts and Communication Division

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.

Associate in arts degree Russian

Students completing the program will be able to...

- communicate verbally in the target language with accurate pronunciation in meaningful situation present in both informal and formal contexts.
- effectively apply rules of grammar and syntax in tandem with appropriate vocabulary in written and oral communication.
- demonstrate auditory comprehension of instruction, authentic content, and purposeful conversations in the target language.
- discuss, describe, and infer information from authentic texts in the target language.
- demonstrate cultural appreciation by making (comparative) connections, on both an individual and societal level, between the target cultures and students' own cultures.
- create (write or present) narratives and/or arguments that demonstrate cohesive critical thinking in the target language.

The associate in arts degree in Russian at DVC will provide students with skills in understanding, speaking, reading and writing Russian. It also gives students a greater understanding of Russian culture and civilization and will prepare them for a broad range of international and domestic career opportunities and professions. The degree will also provide students the opportunity to transfer to UC, CSU and other four year colleges and universities to earn a bachelor's degree.

The DVC Russian 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 baccalaureate-granting institutions of their choice are met. Students who intend to transfer are advised to select General Education Option 2 (IGETC) or Option 3 (CSUGE). Option 1 (DVC General Education) is appropriate for those students who do not intend to transfer. Students may not take

a credit/no credit option for major courses and each of the major requirements must be completed with a "C" grade or higher. Certain courses may satisfy both a major and a general education requirement; however, the units are counted only once.

To earn an associate in arts degree in Russian, students must complete 20 units from the list of major requirements, which will provide students with the essential grammar of the language, culture and basic literature of the Russian speaking countries.

<i>required courses:</i>		<i>units</i>
RUSS-120	First Term Russian	5
RUSS-121	Second Term Russian	5
RUSS-220	Third Term Russian	5
RUSS-221	Fourth Term Russian	5
total minimum units for the major		20

Certificate of achievement Russian

Students completing the program will be able to...

- communicate verbally in the target language with accurate pronunciation in meaningful situation present in both informal and formal contexts.
- effectively apply rules of grammar and syntax in tandem with appropriate vocabulary in written and oral communication.
- demonstrate auditory comprehension of instruction, authentic content, and purposeful conversations in the target language.
- discuss, describe, and infer information from authentic texts in the target language.
- demonstrate cultural appreciation by making (comparative) connections, on both an individual and societal level, between the target cultures and students' own cultures.
- create (write or present) narratives and/or arguments that demonstrate cohesive critical thinking in the target language.

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. Students may not take a credit/no credit option for required courses and each course must be completed with a “C” grade or higher.

<i>complete at least 15 units from:</i>	<i>units</i>
RUSS-120 First Term Russian	5
RUSS-121 Second Term Russian	5
RUSS-220 Third Term Russian	5
RUSS-221 Fourth Term Russian.....	5
total minimum required units	15

RUSS-120 First Term Russian

- 5 units SC
- IGETC: 6A
 - 90 hours lecture per term
 - Note: This course is equivalent to two years of high school study.

This course provides an introduction to the Russian language and the culture of Russian-speaking countries. Topics include the four language skills: speaking, listening, reading and writing. Emphasis is placed on active use of the language in class as well as basic communicative functions and structures. CSU, UC

RUSS-121 Second Term Russian

- 5 units SC
- IGETC: 3B, 6A; CSU GE: C2; DVC GE: III
 - 90 hours lecture per term
 - Prerequisite: RUSS-120 or two years of high school study or equivalent
 - Note: Students may meet equivalency in a variety of ways. Students should seek assistance at Admissions and Records.

This is the second course in a sequence of Russian language courses. It addresses the understanding, speaking, reading and writing of the Russian language. The course continues to expand vocabulary, communicative functions, and structures. The course will continue the examination of the cultures of the Russian-speaking countries. CSU, UC

RUSS-150 Topics in Russian

- .3-4 units SC
- 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
- IGETC: 3B, 6A; CSU GE: C2; DVC GE: III
 - 90 hours lecture per term
 - Prerequisite: RUSS-121 or three years of high school study or equivalent
 - Note: Students may meet equivalency in a variety of ways. Students should seek assistance at Admissions and Records.

This is the third term Russian course in the sequence that develops early intermediate fluency in understanding, speaking, reading and writing Russian. All verbal tenses are reviewed, expanded and refined. Advanced grammar concepts, new vocabulary, and idiomatic expressions are introduced. Selected readings about the culture and literature of Russian speaking countries will be explored. This course is taught mainly in Russian. CSU, UC

RUSS-221 Fourth Term Russian

- 5 units SC
- IGETC: 3B, 6A; CSU GE: C2; DVC GE: III
 - 90 hours lecture per term
 - Prerequisite: RUSS-220 or four years of high school study or equivalent
 - Note: Students may meet equivalency in a variety of ways. Students should seek assistance at Admissions and Records.

This is the fourth term Russian course in the sequence that develops intermediate fluency in understanding, speaking, reading, and writing Russian. The grammatical moods are reviewed and developed; the sequences of tenses are introduced. Additional vocabulary and idiomatic expressions are introduced and connected to the selected readings. These readings about Russian culture and literature will be analyzed. This course is taught mainly in Russian. CSU, UC

RUSS-299 Student Instructional Assistant

- .5-3 units SC
- 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

Janette Funaro, Dean
Arts and Communication Division

Possible career opportunities

Sign language will help to prepare the student to communicate and work with deaf and hard of hearing people. There is a need for skilled, qualified sign language interpreters in educational and social service agencies. Teachers, human services providers, or independent living attendants also sometimes use sign language in their work. Some career options require more than two years of college study.

SIGN-280 American Sign Language (ASL) I

3 units SC
• 54 hours lecture per term

The course provides an introduction to American Sign Language (ASL) including expressive and receptive sign, the manual alphabet, facial expression, and body gestures. Conversational skills in everyday situations, utilizing ASL vocabulary and grammatical expression, are emphasized. An introduction to Deaf culture, community, and history is woven throughout the course. CSU, UC

SIGN-281 American Sign Language (ASL) II

3 units SC
• IGETC: 6A; CSU GE: C2
• 54 hours lecture per term
• Prerequisite: SIGN-280 or equivalent

This course builds on American Sign Language (ASL) fundamentals introduced in SIGN-280. Students will develop beginning-intermediate ASL skills including expressive and receptive sign, the manual alphabet, expanded vocabulary, grammar, facial grammar, and body gestures. An emphasis will be placed on an appreciation of Deaf culture and community through conversational skills in functional situations. CSU, UC

SIGN-282 American Sign Language (ASL) III

3 units SC
• IGETC: 3B, 6A; CSU GE: C2; DVC GE: III
• 54 hours lecture per term
• Prerequisite: SIGN-281 or equivalent

This course in American Sign Language (ASL) expands receptive and expressive vocabulary and grammatical skills at the intermediate level building on skills acquired in ASL I and II. Students will further develop conversational skills in functional situations. Techniques of facial grammar, role shift, and classifier use as it relates to American Sign Language and Deaf culture will be studied. CSU, UC

SIGN-283 American Sign Language (ASL) IV

3 units SC
• IGETC: 3B, 6A; CSU GE: C2; DVC GE: III
• 54 hours lecture per term
• Prerequisite: SIGN-282 or equivalent

This course is an advanced study of American Sign Language (ASL), expanding receptive and expressive vocabulary and grammatical skills presented in SIGN-282. Communication skills essential for advanced conversations in a variety of functional settings are developed. Emphasis is placed on understanding Deaf culture stories and storytelling techniques as well as history of Deaf people who influenced the rich Deaf cultural heritage. CSU, UC

SIGN-299 Student Instructional Assistant

.5-3 units SC
• 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 – SOCSC

Obed Vazquez, Dean
Social Sciences Division
Faculty Office Building, Room 136

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.

Associate in arts in social justice studies for transfer

Students completing the program will be able to...

- demonstrate a basic understanding of social injustices and inequities, and proposed approaches to their remediation and/or resolution, drawn from a variety of historic, cultural and regional settings.
- analyze the processes through which communities attempt to overcome and heal from problems associated with inequality, stigma, prejudice and discrimination.
- demonstrate analytical writing ability that effectively integrates theoretical frameworks, research findings and experiential knowledge about social justice.
- be empowered through their participation in community engagement projects to be civically engaged participants in college and community life.

Social science

The associate in arts in social justice studies for transfer degree provides students with a community-engagement model of learning about inequalities, stigma, prejudice and discrimination and efforts to remediate, heal and overcome them. It offers a wide range of courses in sociology, interdisciplinary social sciences, history, psychology, drama, music, fine arts, and literature.

Completion of the degree is valuable in its own right, as it empowers students to be effective agents for social change. This program is also an excellent starting point for students contemplating a career in law, law enforcement, social work, clinical psychology, any social science, health and medical fields, education, public policy, politics, business, music, drama, or fine arts.

The associate in arts in social justice studies for transfer degree is primarily intended for students who plan to complete a bachelor's degree at a California State University (CSU) in areas of study such as african american studies; africana studies; american indian studies; american studies; arabic language, literature and culture; asian american studies; chicano/chicana studies; ethnic studies; gender studies; labor and employment studies; labor studies; latin american studies; liberal studies w/option in interdisciplinary studies in culture and society; liberal studies - border studies option; mexican-american studies; modern jewish studies; negotiation, conflict resolution and peace building; sociology - concentration in critical race studies; sociology – concentration race, class, and gender; sociology with inequalities and diversity option; social science with emphasis in islamic and arabic studies; women, gender, and sexuality studies; women's studies. Students completing this degree are guaranteed admission to the CSU system, but not necessarily to a particular major or campus.

In order to earn the degree, students must:

- Complete 60 CSU-transferable units.
- Complete the California State University-General Education-Breadth pattern (CSU GE-Breadth); or the Intersegmental General Education Transfer Curriculum (IGETC) pattern, including the Area 1C requirement for Oral Communication.
- Complete a minimum of 18 units in the major.
- Attain a minimum grade point average (GPA) of 2.0.
- Earn a grade of "C" or higher in all courses required for the major.

Students transferring to a CSU campus that accepts the degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to university or college that is not part of the CSU system, or those students who do not intend to transfer.

Students must complete each course used to meet a major requirement with a "C" grade or higher. Some courses in the major satisfy both major and CSUGE/IGETC general education requirements; however, the units are only counted once toward the 60 unit requirement for an associate degree. 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.

<i>required courses:</i>		<i>units</i>
SOCSC-101	Introduction to Social Justice.....	3
or		
SOCIO-135	Introduction to Race and Ethnicity.....	3
SOCIO-124	Gender, Culture and Society.....	3

<i>plus at least 3 units from:</i>		
ENGL-163	Asian American Literature.....	3
ENGL-167	Latin American Literature.....	3
HIST-125	History of the United States: A Mexican American Perspective.....	3
HIST-127	African American Perspective History of the US to 1865.....	3
HIST-128	African American Perspective History of the US after 1865.....	3
HIST-129	History of Asian and Pacific Islanders in the United States.....	3
POLSC-122	Latinx Politics and American Government.....	3
PSYCH-140	Psychology of African Americans in a Multicultural Society.....	3
SOCSC-120	Women and Social Change in the United States: 1890-Present.....	3
SOCSC-220	Women in United States Society.....	3

plus at least 3 courses from two areas:

history or government

HIST-170	History of Women in the United States before 1877.....	3
HIST-171	History of Women in the United States after 1865.....	3
POLSC-123	Black Politics and American Government.....	3

arts and humanities

ENGL-164	Native American Literature.....	3
ENGL-166	African American Literature.....	3
ENGL-168	Multiethnic Literatures of the United States.....	3
ENGL-173	Queer Literature Across Cultures.....	3
ENGL-190	Multicultural Literature by American Women...	3
FTVE-210	American Ethnic Cultures in Film.....	3
FTVE-260	Ethnic Images in United States (U.S.) Television.....	3
HUMAN-115	Humanities: The Multicultural American Experience.....	3
MUSIC-112	America's Music: A Multicultural Perspective.....	3
MUSIC-117	History of Rock and R&B.....	3
MUSIC-118	The History of Jazz.....	3

social science

PSYCH-141	Psychology of Latinos/Chicanos in the US.....	3
SOCIO-121	Introduction to Social Problems.....	3
SOCIO-125	Families, Relationships, and Commitment.....	3

quantitative reasoning and research methods

MATH-142	Elementary Statistics and Probability.....	4
or		
MATH-144	Statway II.....	4
PSYCH-215	Introduction to Research Methods in Psychology.....	3
or		
SOCIO-123	Introduction to Social Research.....	3

major preparation

PH-135	Health and Social Justice	3
PH-170	Women's Health	3
	total minimum units for the major	18

Certificate of accomplishment

Social justice

Students completing the program will be able to...

- demonstrate a basic understanding of social injustices and inequities, and proposed approaches to their remediation and/or resolution, drawn from a variety of historic, cultural and regional settings.
- analyze the processes through which communities attempt to overcome and heal from problems associated with inequality, stigma, prejudice and discrimination.
- demonstrate analytical writing ability that effectively integrates theoretical frameworks, research findings and experiential knowledge about social justice.
- be empowered through their participation in community engagement projects to be civically engaged participants in college and community life.

Completion of the certificate empowers students to be effective agents for social change. This certificate is an excellent starting point for students who are seeking a social justice orientation. In addition, the certificate complements many degrees in the social sciences, health and medical fields, politics and public policy, music, drama, and the fine arts.

To earn a certificate of accomplishment, students must complete each course used to meet a requirement with a "C" grade or higher.

<i>required courses:</i>	<i>units</i>
SOCSC-101 Introduction to Social Justice	3

plus at least 6 units from:

HIST-125	History of the United States: A Mexican American Perspective	3
HIST-127	African American Perspective History of the US to 1865	3
HIST-128	African American Perspective History of the US after 1865	3
POLSC-122	Latinx Politics and American Government	3
POLSC-123	Black Politics and American Government	3
PSYCH-140	Psychology of African-Americans in a Multicultural Society	3
PSYCH-141	Psychology of Latinos/Chicanos in the U.S.	3
SOCIO-124	Gender, Culture, and Society	3
SOCIO-135	Introduction to Race and Ethnicity	3
	total minimum required units	9

SOCSC-101 Introduction to Social Justice

3 units SC

- IGETC: 4; CSU GE: D; DVC GE: IV
- 54 hours lecture
- Advisory: College-level reading and writing are expected.

This course examines social justice movements and policies as they advocate for people marginalized on the basis of race, nationality, gender, sexuality, and/or religion in the United States. A holistic approach is utilized to explore theories of justice, the history of social justice movements, and contemporary issues through the lenses of sociology, history, media studies, art and music. An introduction to the study and practice of community engagement is also presented. C-ID SJS 110, CSU, UC

SOCSC-110 The American Social Experience

3 units SC

- IGETC: 4; CSU GE: D; DVC GE: IV
- 54 hours lecture per term

This course is an interdisciplinary examination of the various interpretations developed within the social sciences of the roles of individuals and their experiences in the United States of America. 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 Asian-Americans, Latinx, African-Americans, Native-Americans, and women in shaping the evolution of the concept of American individualism. The course 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

- IGETC: 4; CSU GE: D; DVC GE: IV
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This course is 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. The United State Constitution and state and local government in California will be emphasized. 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-120 Women and Social Change in the United States: 1890-Present

- 3 units SC
- *IGETC: 4; CSU GE: D; DVC GE: IV*
 - *54 hours lecture per term*
 - *Advisory: College-level reading and writing are expected.*

This course presents an overview of the history of U.S. women from the Progressive Era (1890) to the present, emphasizing the commonalities of women’s experiences. It examines 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 Latina women. Topics of emphasis will include political, economic and cultural change in the U.S., change fostered by women, and the transformed roles of women in the family within the continuity of the United States experience. Students will analyze 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. CSU, UC

SOCSC-123 American Popular Culture

- 3 units SC
- *IGETC: 4; CSU GE: D; DVC GE: IV*
 - *54 hours lecture per term*
 - *Advisory: College-level reading and writing are expected.*

This course is an interdisciplinary examination of popular culture’s changing nature in the United States of America. Looking through the lens of popular culture, this course will examine social and political institutions, such as federal and California state government, and various values that shape American popular culture. The course considers the significant contributions of Asian-American, Latinx, 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

SOCSC-155 Topics in Social Science

- .3-4 units SC
- *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-220 Women in United States Society

- 3 units SC
- *IGETC: 4; CSU GE: D; DVC GE: IV*
 - *54 hours lecture per term*
 - *Advisory: College-level reading and writing are expected.*

This course is a multicultural and interdisciplinary examination of women’s changing roles in U.S. society. The social institutions and values that shape those roles, including federal, state, and local governments, as well as the U.S. and California Constitutions will be explored. Significant events and developments that shape the social, political, and economic status of women, as well as the importance of race/ethnicity, class, region, and sexual orientation in differentiating the experiences and opportunities for women will also be presented. CSU, UC

SOCSC-298 Independent Study

- .5-3 units SC
- *Variable hours*
 - *Note: Submission of acceptable educational contract to department and Instruction Office is required.*

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. CSU

SOCSC-299 Student Instructional Assistant

- .5-3 units SC
- *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

SOCIOLOGY – SOCIO

Obed Vazquez, Dean
 Social Sciences Division
 Faculty Office Building, Room 136

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.

Associate in arts in sociology for transfer

Students completing the program will be able to...

- define and apply sociological concepts.
- identify, explain and provide possible solutions to social problems.
- identify and apply the major theoretical paradigms, functionalist, conflict and interactionist perspectives to analyze social and cultural issues.
- demonstrate knowledge of research methods and ethical considerations in conducting research.
- utilize critical thinking skills to analyze and evaluate complex social issues.
- utilize data to study social phenomena.
- make connections between individuals' lives, their biographies and their social context.

The sociology major is a valuable liberal arts major for students planning careers in social research, criminology, demography, or social psychology, but also for those pursuing a course of study in public administration, gerontology, education, social work and market research. Sociology provides a useful background for those planning to enter law, business, marketing, medicine, community planning and services, architecture, and politics. In many professional programs in human services, courses in sociology are part of the required training. Sociologists with graduate degrees may teach at the high school, college or graduate levels. They may also become research sociologists in both the public and private sectors and work in areas of public policy, the law and international studies. Applied sociologists may work with social service agencies and community programs on behalf of others, including underrepresented or neglected populations.

Sociology at Diablo Valley College offers a broad range of courses including the urban environment, marriage and families, minority and race relations, social problems, social research and gender studies.

The associate in arts in sociology for transfer is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major.

In order to earn the degree, students must:

- Complete 60 CSU-transferable units.
- Complete the California State University-General Education pattern (CSU GE); or the Intersegmental General Education Transfer Curriculum (IGETC) pattern, including the Area 1C requirement for Oral Communication.
- Complete a minimum of 18 units in the major.
- Attain a minimum grade point average (GPA) of 2.0.
- Earn a grade of "C" or higher in all courses required for the major.

Students transferring to a CSU campus that accepts the degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system, or those students who do not intend to transfer.

Some courses in the major satisfy both major and CSUGE/IGETC general education requirements; however, the units are only counted once toward the 60 unit requirement for an associate degree. 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:	units
SOCIO-120 Introduction to Sociology.....	3

plus at least 6 units from:	
BUS-240 Business Statistics with Probability	3
or	
MATH-142 Elementary Statistics with Probability.....	4
SOCIO-121 Introduction to Social Problems	3
SOCIO-123 Introduction to Social Research	3

plus at least 6 units from any course not used above, or:	
PSYCH-225 Social Psychology.....	3
SOCIO-122 Critical Thinking About Social and Cultural Issues	3
SOCIO-124 Gender, Culture and Society.....	3
SOCIO-125 Families, Relationships, and Commitment.....	3
SOCIO-135 Introduction to Race and Ethnicity	3

plus at least 3 units from any course not used in either group above, or:	
SOCIO-131 The Urban Community.....	3
SOCSC-120 Women and Social Change in the United States:1890-Present	3
total minimum units for the major	18

SOCIO-120 Introduction to Sociology

3 units SC

- IGETC: 4; CSU GE: D; DVC GE: IV
- 54 hours lecture per term
- Advisory: College-level reading and writing are expected.

This course provides an introduction to the theory and scientific methodology of sociology; a survey of the interactions, interrelationships, and processes of society as an organized structure. Sociology's substantive areas including methodology, socialization, culture, social stratification, race and ethnic minorities, gender and sexual orientation will be discussed. Institutional analysis of the economy, family, religion, and education are also introduced. C-ID SOCI 110, CSU, UC

SOCIO-121 Introduction to Social Problems

3 units SC

- *IGETC: 4; CSU GE: D; DVC GE: IV*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course is a survey of perspectives on major social problems, primarily in the urban, industrial settings. Sources, consequences of and means of coping with a variety of social problems will be investigated. The scientific methodology required for accurate analysis is emphasized. Topics will be selected from social problems such as aging, health care, 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. C-ID SOCI 115, CSU, UC

SOCIO-122 Critical Thinking About Social and Cultural Issues

3 units SC

- *IGETC: 1B; CSU GE: A3; DVC GE: IB*
- *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 course will include an introduction to the principles of logic, the structure of language, research methodologies, and prevailing theoretical models in sociology. Students will complete a series of increasingly complex analytical essays that identify sociological perspectives, gather and analyze sociological information, recognize sociological relationships and patterns, and discuss the relevancy 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

- *IGETC: 4; CSU GE: D; DVC GE: IV*
- *54 hours lecture per term*
- *Prerequisite: SOCIO-120 or equivalent*
- *Advisory: College-level reading and writing are expected.*

This course examines various social research methods and the ways in which sociologists gather, evaluate, and analyze social data. Topics 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. C-ID SOCI 120, CSU, UC

SOCIO-124 Gender, Culture, and Society

3 units SC

- *IGETC: 4; CSU GE: D; DVC GE: IV*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course provides a multidimensional examination of gender in the United States and other societies, exploring the mechanisms by which gender roles develop and the consequences for society. It also examines the social and cultural processes and institutional arrangements that give meaning to being a woman and a man in a gendered society. C-ID SOCI 140, CSU, UC

SOCIO-125 Families, Relationships, and Commitment

3 units SC

- *IGETC: 4; CSU GE: D; DVC GE: IV*
- *54 hours lecture per term*

This course examines current issues concerning families and personal relationships in African-American, Euro-American, Latino, Asian, and Native American families. Emphasis is placed on cross-cultural and cross-societal comparisons of diverse family groups. This course will also examine the relation of families to other social institutions, as well as child rearing, plural marriages, family politics, and speculations concerning the future of the family. C-ID SOCI 130, CSU, UC

SOCIO-131 The Urban Community

3 units SC

- *IGETC: 4; CSU GE: D; DVC GE: IV*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course examines current and historical social change in cities and suburbs through the experience of African Americans, Latinx, Asian Americans, Native Americans and European Americans. Challenges faced by multicultural communities, neighborhoods and suburbs, and programs and strategies that are designed to meet these challenges will be covered. CSU, UC

SOCIO-135 Introduction to Race and Ethnicity

3 units SC

- *IGETC: 4; CSU GE: D; DVC GE: IV*
- *54 hours lecture per term*
- *Advisory: College-level reading and writing are expected.*

This course is a sociological analysis of race and ethnicity in the United States. The course examines the ways in which changing U.S. demographics and recent immigration history have complicated both racial and ethnic categories as well as the relationships between and among group within those categories. Students will utilize the conceptual tools needed to recognize some of the ways in which race is embedded in ordinary discourse and life. The avenues to and potential for bringing about social change and racial justice will be explored. C-ID SOC 150, CSU, UC

SOCIO-155 Topics in Sociology

- .3-4 units SC
 • *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
 • *Variable hours*
 • *Note: Submission of acceptable educational contract to department and Instruction Office is required.*

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. CSU

SOCIO-299 Student Instructional Assistant

- .5-3 units SC
 • *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

**Associate in arts degree
Spanish**

Students completing the program will be able to...

- communicate verbally in the target language with accurate pronunciation in meaningful situations present in both informal and formal contexts.
- effectively apply rules of grammar and syntax in tandem with appropriate vocabulary in written and oral communication.
- demonstrate auditory comprehension of instruction, authentic content, and purposeful conversations in the target language.
- discuss, describe, and infer information from authentic texts in the target language.
- demonstrate cultural appreciation by making (comparative) connections, on both an individual and societal level, between the target cultures and students' own cultures.
- create (write or present) narratives and/or arguments that demonstrate cohesive critical thinking in the target language.

The associate in arts degree in Spanish at DVC will provide students with skills in understanding, speaking, reading and writing Spanish. It also gives students a greater understanding of Spanish culture and civilization and will prepare them for a broad range of international and domestic career opportunities and professions. The degree will also provide students the opportunity to transfer to UC, CSU and other four year colleges and universities to earn a bachelor's degree.

The DVC Spanish 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 baccalaureate-granting institutions of their choice are met. Students who intend to transfer are advised to select General Education Option 2 (IGETC) or Option 3 (CSU GE). Option 1 (DVC General Education) is appropriate for those students who do not intend to transfer. Students may not take a pass/no pass option for major courses and each of the major requirements must be completed with a "C" grade or higher. Certain courses may satisfy both major and general education requirements; however, the units are counted only once.

To earn an associate in arts degree in Spanish, students must complete 20 units from the list of major requirements, which will provide students with the essential grammar of the language, culture and basic literature of the Spanish speaking world. Students with no previous knowledge of Spanish when entering DVC will take the first four courses in the list for a total of 20 units. If students enter the program with previous knowledge of Spanish, they may start at the second term level and take fifth and sixth terms to achieve a total of 21 units.

	<i>units</i>
complete at least 20 units from:	
SPAN-120 First Term Spanish	5
SPAN-121 Second Term Spanish.....	5
SPAN-220 Third Term Spanish	5
SPAN-221 Fourth Term Spanish.....	5
SPAN-230 Fifth Term Spanish	3
SPAN-231 Sixth Term Spanish	3
total minimum units for the major	20

SPANISH – SPAN

Janette Funaro, Dean
 Arts and Communication Division

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.

Associate in arts in Spanish for transfer

Students completing the program will be able to...

- A. communicate verbally in the target language with accurate pronunciation in meaningful situations present in both informal and formal contexts.
- B. effectively apply rules of grammar and syntax in tandem with appropriate vocabulary in written and oral communication.
- C. demonstrate auditory comprehension of instruction, authentic content, and purposeful conversations in the target language.
- D. discuss, describe and infer information from authentic texts in the target language.
- E. demonstrate cultural appreciation by making (comparative) connections, on both an individual and societal level, between target cultures and students' own cultures.
- F. create (write or present) narratives and/or arguments that demonstrate cohesive critical thinking in the target language.

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.

The associate in arts in Spanish for transfer is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major.

In order to earn the degree, students must:

- Complete 60 CSU-transferable units.
- Complete the California State University-General Education-Breadth pattern (CSU GE-Breadth); or the Intersegmental General Education Transfer Curriculum (IGETC) pattern, including the Area 1C requirement for Oral Communication.
- Complete a minimum of 18 units in the major.
- Attain a minimum grade point average (GPA) of 2.0.
- Earn a grade of "C" or higher in all courses required for the major.

Students transferring to a CSU campus that accepts the degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system, or those students who do not intend to transfer.

Students must complete each course used to meet a major requirement with a "C" grade or higher. Some courses in the major satisfy both major and CSUGE/IGETC general education requirements; however, the units are only counted once toward the 60 unit requirement for an associate degree. 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:

	<i>units</i>
SPAN-120 First Term Spanish	5
SPAN-121 Second Term Spanish.....	5
SPAN-220 Third Term Spanish	5
SPAN-221 Fourth Term Spanish.....	5
SPAN-230 Fifth Term Spanish	3

total minimum units for the major 23

**Certificate of achievement
Spanish**

Students completing the program will be able to...

- A. communicate verbally in the target language with accurate pronunciation in meaningful situations present in both informal and academic contexts.
- B. effectively apply rules of grammar and syntax in tandem with appropriate vocabulary in written and oral communication.
- C. demonstrate auditory comprehension of instruction, authentic content, and purposeful conversations in the target language.
- D. discuss, describe and infer information from authentic texts in the target language.
- E. create (write or present) narratives and/or arguments that demonstrate cohesive critical thinking in the target language.
- E. demonstrate cultural appreciation by making (comparative) connections, on both an individual and societal level, between the target cultures and students' own cultures.
- F. create (write or present) narratives and/or arguments that demonstrate cohesive critical thinking in the target language.

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. Students may not take a credit/no credit option for required courses and each course must be completed with a "C" grade or higher.

<i>List A</i>	<i>units</i>
SPAN-120 First Term Spanish	5
SPAN-121 Second Term Spanish.....	5
SPAN-220 Third Term Spanish	5
SPAN-221 Fourth Term Spanish.....	5
SPAN-230 Fifth Term Spanish	3
SPAN-231 Sixth Term Spanish	3

<i>List B</i>	
SPAN-121	Second Term Spanish.....5
SPAN-155	First Term Beginning Conversational Spanish.....3
SPAN-156	Second Term Beginning Conversational Spanish.....3
SPAN-157	Third Term Beginning Conversational Spanish.....3
SPAN-220	Third Term Spanish.....5
SPAN-221	Fourth Term Spanish.....5
	total minimum required units 13

SPAN-120 First Term Spanish

5 units SC

- IGETC: 6A
- 90 hours lecture per term
- Note: This course is equivalent to two years of high school study.

This course provides an introduction to the Spanish language and the culture of Spanish-speaking countries. Topics include the four language skills: speaking, listening, reading, and writing. Emphasis is placed on active use of the language in class as well as basic communicative functions and structures. C-ID SPAN 100, CSU, UC

SPAN-121 Second Term Spanish

5 units SC

- IGETC: 3B, 6A; CSU GE: C2; DVC GE: III
- 90 hours lecture per term
- Prerequisite: SPAN-120 or two years of high school study or equivalent
- Note: Students may meet equivalency in a variety of ways. Students should seek assistance at Admissions and Records.

This is the second course in a sequence of Spanish language courses. It addresses the understanding, speaking, reading and writing of the Spanish language. The course continues to expand vocabulary, communicative functions and structures. The course will continue the examination of the culture of the Spanish-speaking world. C-ID SPAN 110, CSU, UC

SPAN-150 Topics in Spanish

.3-4 units SC

- 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

- 54 hours lecture per term
- Note: This course does not satisfy major or general education requirements.

This is the first term of the conversational Spanish series. Basic grammar and vocabulary as well as an introduction to Spanish culture will be covered. CSU

SPAN-156 Second Term Beginning Conversational Spanish

3 units SC

- 54 hours lecture per term
- Advisory: SPAN-155 or equivalent
- Note: This course does not satisfy major or general education requirements.

This is the second term of the beginning Spanish conversation series. It is a participatory class based on oral-aural practice. The preterit and imperfect tenses are introduced and contrasted. New vocabulary and cultural material are also covered. CSU

SPAN-157 Third Term Beginning Conversational Spanish

3 units SC

- 54 hours lecture per term
- Advisory: 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 the examination of some of the cultures of the Spanish speaking world are covered. CSU

SPAN-220 Third Term Spanish

5 units SC

- IGETC: 3B, 6A; CSU GE: C2; DVC GE: III
- 90 hours lecture per term
- Prerequisite: SPAN-121 or three years of high school study or equivalent
- Note: Students may meet equivalency in a variety of ways. Students should seek assistance at Admissions and Records.

This is the third term Spanish course in the sequence that develops intermediate fluency in understanding, speaking, reading and writing Spanish. All verbal tenses are reviewed, expanded and refined. Advanced grammar concepts, new vocabulary, and idiomatic expressions are introduced. Selected readings about the culture and literature of Spain and Latin American countries will be explored. This course is taught entirely in Spanish. C-ID SPAN 200, CSU, UC

SPAN-221 Fourth Term Spanish

5 units SC

- IGETC: 3B, 6A; CSU GE: C2; DVC GE: III
- 90 hours lecture per term
- Prerequisite: SPAN-220 or four years of high school study or equivalent
- Note: Students may meet equivalency in a variety of ways. Students should seek assistance at Admissions and Records.

This is the fourth term Spanish course in the sequence that develops high-intermediate fluency in understanding, speaking, reading and writing Spanish. The grammatical moods are reviewed and developed; the sequences of tenses are introduced. Additional vocabulary and idiomatic expressions are introduced and connected to the selected readings. These readings about Latin American and Spanish culture and literature will be analyzed. This course is conducted entirely in Spanish. C-ID SPAN 210, CSU, UC

SPAN-230 Fifth Term Spanish

3 units SC

- IGETC: 3B, 6A; CSU GE: C2; DVC GE: III
- 54 hours lecture per term
- Prerequisite: SPAN-221 or equivalent
- Note: Students may meet equivalency in a variety of ways. Students should seek assistance at Admissions and Records.

This is the fifth term advanced Spanish language course emphasizing reading, writing (prioritizing the mechanics of academic 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. This course is taught entirely in Spanish. CSU, UC

SPAN-231 Sixth Term Spanish

3 units SC

- IGETC: 3B, 6A; CSU GE: C2; DVC GE: III
- 54 hours lecture per term
- Prerequisite: SPAN-230 or equivalent

This is the sixth term advanced Spanish language course strengthening reading, writing (prioritizing the mechanics of academic writing), listening, and speaking skills. Deepening the exploration of the rich Hispanic heritage through a wide range of materials including novels, articles, poems, films, documentaries, and dramas. This course is taught entirely in Spanish. CSU, UC

SPAN-240 Spanish for Heritage Speakers I

5 units SC

- CSU GE: C2
- 90 hours lecture per term
- Prerequisite: SPAN-121 or equivalent

This course is designed for heritage speakers of Spanish or other linguistically qualified students. It explores and increases awareness of formal and informal linguistic registers and builds on existing listening, speaking, reading, and writing skills of heritage speakers of Spanish. Formal grammatical concepts are introduced and practiced. Special emphasis is given to the development of academic reading and writing skills and cultural literacy skills including an understanding and appreciation for the linguistic and cultural variations of Spanish speakers in and outside of the United States. This course is conducted entirely in Spanish. C-ID SPAN 220, CSU, UC

SPAN-241 Spanish for Heritage Speakers II

5 units SC

- IGETC: 3B; CSU GE: C2; DVC GE: III
- 90 hours lecture per term
- Prerequisite: SPAN-240 or Equiv.

This course continues the study presented in SPAN-240 and is designed for heritage speakers of Spanish or other linguistically qualified students, emphasizing development of advanced formal Spanish language skills and structures. This course includes the refinement and integration of the essential principles of grammar and usage through reading, discussion and analysis of authentic fiction and non-fiction texts, as well as through required critical and creative writing and oral activities. Comparative linguistic and cultural materials are presented to further develop understanding and knowledge of the linguistic and cultural diversity of the Spanish-speaking world. This course is conducted entirely in Spanish. C-ID SPAN 230, CSU, UC

SPAN-298 Independent Study

.5-3 units SC

- Variable hours
- Note: Submission of acceptable educational contract to department and Instruction Office is required.

This course is designed for advanced students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course. The student and instructor develop a written contract that includes objectives to be achieved, activities and procedures to accomplish the study project, and the means by which the supervising instructor may assess accomplishment. CSU

SPAN-299 Student Instructional Assistant

.5-3 units SC

- 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

See Education - Special education - EDUSP

SPORTS MEDICINE/ATHLETIC TRAINING

See Kinesiology theory - KINES

STEAMFITTING – STMFT

Despina Prapavessi, Dean
Mathematics and Engineering Division
Mathematics Building, Room 267

Possible career opportunities

In collaboration with Plumbers and Steamfitters Union Local 159 email: info@plumbers159.org and Plumbers-Steamfitters-Refrigeration Union Local 342 www.ua342.org, DVC offers two five-year apprenticeship programs: steamfitting and plumbing. Apprenticeship is training that is designed to prepare an individual for a career in the skilled crafts and trades. Apprentices develop technical skills, experience the sharing of assignments and see how technical tasks relate specifically with theoretical knowledge and interpretation. Apprentices earn a wage while learning. Enrollment in this program is restricted. You must be registered as an apprentice with the State of California to participate in the program and accepted into the apprenticeship program by our Union partners.

Plumbers-Steamfitters-Refrigeration Union Local 342,
Joint Apprenticeship and Journeymen Training Office

935 Detroit Avenue
Concord, CA 94518-2501
925-686-0730

Plumbers and Steamfitters Local 159
1308 Roman Way
Martinez, CA 94553
800-443-0220 or
925-229-0883
email: info@plumbers159.org

**Associate in science degree
Steamfitting**

Students completing the program will be able to...

- discuss safety harness practices during rigging.
- apply mathematical formulas for calculating travel on a spool.
- demonstrate knowledge of using a band saw.
- use proper method in fabricating a copper spool.
- explain the responsibilities of a journey person with regards to training an apprentice on the job.
- demonstrate use of tubing benders.
- explain the attributes of a successful apprentice

This program is offered in collaboration with Plumbers and Steamfitters Union Local 159 and Plumbers-Steamfitters-Refrigeration (HVACR) Union Local 342. Apprenticeship is training that is designed to prepare an individual for a career in the skilled crafts and trades. Apprentices develop technical skills, experience the sharing of assignments and see how technical tasks relate specifically with theoretical knowledge and interpretation. Apprentices earn a wage while learning. Enrollment in this program is restricted. You must be registered as an apprentice with the State of California to participate in the program and accepted into the apprenticeship program by our union partners.

This program prepares students to become steamfitters and includes an introduction to the installation, maintenance, and repair of different types of pipe systems; tool use; material applications and storage; and safety. Upon completion of the program, students will be able to install pipe systems that move liquids or gases under high pressure and use many different materials and construction techniques, depending on the type of project. They will be able to follow building plans or blueprints and instructions from supervisors to lay out the job and work efficiently with the materials and tools of the trade.

To earn an associate in science degree with a major in steamfitting, students must complete 20 out of 31 core courses to meet their individual educational and career goals. In addition they must complete General Education Option 1 (DVC General Education). 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. The associate in science degree with a major in steamfitting is not a transfer program.

DVC steamfitting students who intend to transfer must consult with a program advisor or counselor to ensure that the requirements for transfer to baccalaureate institutions of their choice are met.

Steamfitting

major requirements:

<i>complete at least 30 units from:</i>		<i>units</i>
STMFT-110	OSHA-CPR.....	1.5-2.5
STMFT-111	Trade Mathematics.....	1.5-2.5
STMFT-112	Use and Care of Tools.....	1.5-2.5
STMFT-113	Welding Safety/Plate Welding.....	1.5-2.5
STMFT-114	Oxygen/Acetylene Cutting.....	1.5-2.5
STMFT-115	Pipe Shop I.....	1.5-2.5
STMFT-116	Pipe Shop II.....	1.5-2.5
STMFT-117	Related Science in the Piping Trades.....	1.5-2.5
STMFT-118	Beginning Drawing and Plan Reading for the Piping Trades.....	1.5-2.5
STMFT-119	Advanced Drawing in the Piping Trade.....	1.5-2.5
STMFT-120	Instrumentation I.....	1.5-2.5
STMFT-121	Instrumentation II.....	1.5-2.5
STMFT-122	Steam Systems.....	1.5-2.5
STMFT-123	Electricity for Steamfitting.....	1.5-2.5
STMFT-124	Industrial Rigging.....	1.5-2.5
STMFT-125	Beginning AutoCAD.....	1.5-2.5
STMFT-126	Advanced AutoCAD.....	1.5-2.5
STMFT-127	Pumps.....	1.5-2.5
STMFT-128	Tube Bending.....	1.5-2.5
STMFT-129	Union Heritage.....	3
STMFT-131	Pipe Welding 1.....	1.5-2.5
STMFT-132	Welding 5.....	1.5-3.5
STMFT-133	Welding 6.....	1.5-3.5
STMFT-134	Welding 7.....	1.5-3.5
STMFT-135	Welding 8.....	1.5-3.5
STMFT-136	Welding 9.....	1.5-3.5
STMFT-137	Welding 10.....	1.5-3.5
STMFT-138	Orbital Welding.....	1.5-3.5
STMFT-140	Construction Management in Steamfitting.....	1.5-2.5
total minimum units for the major		30

Certificate of achievement Steamfitting

Students completing the program will be able to...

- A. demonstrate proper isometric drawing technique.
- B. apply mathematical formula for calculating load weight on pipe.
- C. use the proper method to cut a steel plate, using an OXY/ACT torch.
- D. explain proper brazing technique for copper.
- E. demonstrate proper knot tying.
- F. demonstrate proper preparation for a beveled coupon.
- G. explain the attributes of a successful apprentice.

This program is offered in collaboration with Plumbers and Steamfitters Union Local 159 and Plumbers-Steamfitters-Refrigeration (HVACR) Union Local 342. Apprenticeship is training that is designed to prepare an individual for a career in the skilled crafts and trades. Apprentices develop technical skills, experience the sharing of assignments and see how technical tasks relate specifically with theoretical knowledge and interpretation. Apprentices earn a wage while learning. Enrollment in this program is restricted. You must be registered as an apprentice with the State of California to participate in the program and accepted into the apprenticeship program by our union partners.

This program prepares students to become steamfitters and includes an introduction to the installation, maintenance, and repair of different types of pipe systems; tool use; material applications and storage; and safety. Upon completion of the program, students will be able to install pipe systems that move liquids or gases under high pressure and use many different materials and construction techniques, depending on the type of project. They will be able to follow building plans or blueprints and instructions from supervisors to lay out the job and work efficiently with the materials and tools of the trade.

To earn a certificate of achievement, students must complete 14 out of 19 core courses. 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. The courses required for the certificate of achievement also meet some of the requirements of the major for the associate of science degree.

<i>complete at least of 21 units from:</i>		<i>units</i>
STMFT-110	OSHA-CPR.....	1.5-2.5
STMFT-111	Trade Mathematics.....	1.5-2.5
STMFT-112	Use and Care of Tools.....	1.5-2.5
STMFT-113	Welding Safety/Plate Welding.....	1.5-2.5
STMFT-114	Oxygen/Acetylene Cutting.....	1.5-2.5
STMFT-115	Pipe Shop I.....	1.5-2.5
STMFT-116	Pipe Shop II.....	1.5-2.5
STMFT-117	Related Science in the Piping Trades.....	1.5-2.5
STMFT-118	Beginning Drawing and Plan Reading for the Piping Trades.....	1.5-2.5
STMFT-119	Advanced Drawing in the Piping Trade.....	1.5-2.5
STMFT-120	Instrumentation I.....	1.5-2.5
STMFT-121	Instrumentation II.....	1.5-2.5
STMFT-122	Steam Systems.....	1.5-2.5
STMFT-123	Electricity for Steamfitting.....	1.5-2.5
STMFT-124	Industrial Rigging.....	1.5-2.5
STMFT-125	Beginning AutoCAD.....	1.5-2.5
STMFT-126	Advanced AutoCAD.....	1.5-2.5
STMFT-127	Pumps.....	1.5-2.5
STMFT-128	Tube Bending.....	1.5-2.5
STMFT-129	Union Heritage.....	3
total minimum required units		21

Certificate of accomplishment Steamfitting

Students completing the program will be able to...

- A. explain the responsibilities of a journey person with regards to training an apprentice on the job.
- B. apply mathematical formula for calculating load weight on pipe.
- C. demonstrate proper knot tying.
- D. use the proper method to cut a steel plate, using an OXY/ACT torch.

This program is offered in collaboration with Plumbers and Steamfitters Union Local 159 and Plumbers-Steamfitters-Refrigeration (HVACR) Union Local 342. Apprenticeship is training that is designed to prepare an individual for a career in the skilled crafts and trades. Apprentices develop technical skills, experience the sharing of assignments and see how technical tasks relate specifically with theoretical knowledge and interpretation. Apprentices earn a wage while learning. Enrollment in this program is restricted. You must be registered as an apprentice with the State of California to participate in the program and accepted into the apprenticeship program by our union partners.

Program content includes an introduction to the installation, maintenance, and repair of different types of pipe systems; tool use; material applications and storage; and safety. Upon completion of the program, students will be able to install pipe systems that move liquids or gases under high pressure and use many different materials and construction techniques, depending on the type of project. They will be able to follow building plans or blueprints and instructions from supervisors to lay out the job and work efficiently with the materials and tools of the trade.

To earn a certificate of accomplishment students must complete five out of seven core courses. 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. The courses required for the certificate of accomplishment also meet some of the requirements of the certificate of achievement and major for the associate of science degree.

<i>complete at least 10 units from:</i>	<i>units</i>
STMFT-110 OSHA-CPR.....	1.5-2.5
STMFT-111 Trade Mathematics.....	1.5-2.5
STMFT-112 Use and Care of Tools.....	1.5-2.5
STMFT-113 Welding Safety/Plate Welding.....	1.5-2.5
STMFT-114 Oxygen/Acetylene Cutting.....	1.5-2.5
STMFT-115 Pipe Shop I.....	1.5-2.5
STMFT-116 Pipe Shop II.....	1.5-2.5
total minimum required units	10.5

STMFT-110 OSHA-CPR

- 1.5-2.5 units LR
- *Variable hours*
 - *Note: This program is sponsored by the United Association of Union Plumbers, Fitters, Welders, and Service Technicians 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 PLUMB-110.*

This course covers the regulations governed by OSHA 30 that provide and recognize safe work practices. The student will receive certification in Cardio-Pulmonary Resuscitation and First Aid.

STMFT-111 Trade Mathematics

- 1.5-2.5 units LR
- *Variable hours*
 - *Note: This program is sponsored by the United Association of Union Plumbers, Fitters, Welders, and Service Technicians 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 PLUMB-111.*

This course covers the approaches to mathematical problem solving used in pipe fitting and plumbing.

STMFT-112 Use and Care of Tools

- 1.5-2.5 units LR
- *Variable hours*
 - *Note: This program is sponsored by the United Association of Union Plumbers, Fitters, Welders, and Service Technicians and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the union local responsible for the section.*

This course presents an introduction to the identification of tools encountered in the industrial environment and the proper use of trade-related tools.

STMFT-113 Welding Safety/Plate Welding

- 1.5-2.5 units LR
- *Variable hours*
 - *Note: This program is sponsored by the United Association of Union Plumbers, Fitters, Welders, and Service Technicians and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the local union responsible for the section.*

This course presents an introduction to welding safety and theory. Students will also be introduced to plate arc welding.

STMFT-114 Oxygen/Acetylene Cutting

- 1.5-2.5 units LR
- *Variable hours*
 - *Note: This program is sponsored by the United Association of Union Plumbers, Fitters, Welders, and Service Technicians and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the local union responsible for the section.*

This course presents an introduction to oxygen and acetylene cutting and safety. The processes to cut various plate/pipe thicknesses and layouts will also be discussed and practiced.

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.*

This course gives related technical instruction to enhance the apprentice’s on-the-job training in pipefitting and related technology. The use of various pipe and fitting materials and their applications to piping projects as described in technical drawings will be covered.

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.

This course gives related technical instruction to enhance the apprentice's on-the-job training in pipefitting and related technology. Students will be introduced to basic isometric drawing and steam systems with copper connections to be made with soldering, brazing, and welding procedures.

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.

This course covers the scientific and mechanical principles that are basic to the work of the piping industry. An overview of hydraulic and pneumatic systems as well as industrial plumbing and piping systems and materials will be covered.

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.

This course covers the interpretation of drawings and sketches associated with piping installation. An introduction to basic drawing and drafting methods, technical symbols, and notation will be covered in orthographic and isometric drawing views.

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.

In this course students will Interpret, coordinate and make drawings and sketches associated with piping installation.

STMFT-120 Instrumentation 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.

This course gives related technical instruction to enhance the apprentice's on-the-job training in pipefitting and related technology. Students will be introduced to instrumentation, which includes basic descriptions of processes, loop diagrams and documentation in the instrumentation field.

STMFT-121 Instrumentation 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.

This course gives related technical instruction to enhance the apprentice's on-the-job training in pipefitting and related technology. Students will be introduced to more advanced Instrumentation including pneumatic controls, liquid level instruments, analyzers, and fiber optic signals.

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.

This course gives related technical instruction to enhance the apprentice's on-the-job training in pipefitting and related technology. Students will be introduced to the properties of saturated steam, traps, boilers, and heating systems.

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.

This is an introductory course in electrical concepts, components, systems, and equipment. Ohm's and Kirchoff's laws are used to calculate and measure resistance, voltage, amperage, power in circuits, and safety in the field of steamfitting.

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.

This course presents the study of rigging for the pipe trades and emphasizes principles of safety. Topics will include safety, load limits, crane ratings, basic knots, and organizing a rigging plan.

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.

This introductory course presents the fundamentals of AutoCAD and its application to the creation of technical drawings. Hands-on training is utilized to provide a comprehensive overview of the software package and its applications to technical drafting.

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.

This course is designed for students with previous knowledge and experience in using AutoCAD. Three-dimensional modeling, solid models, customization, and optimal application of AutoCAD are presented.

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.

This course presents the practical and theoretical aspects of pump systems. Topics include concepts and theory as well as common systems, components, devices, installation, and operation. The laboratory emphasizes hands-on exercises in the installation, operation, and maintenance of industrial pumps.

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.

This course presents the practical and theoretical aspects of tube bending. Topics include theory and concepts of tube bending, as well as components, tools, and installation. The laboratory emphasizes hands-on exercises in the mechanical skills of industrial tube bending including calculating angles, different types of tubing, valves, fittings, clamps and installation.

STMFT-129 Union Heritage

3 units LR

- 54 hours lecture per term
- 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 course presents the heritage and traditions of the United Association, which represents plumbers, steamfitters, and welders among other occupations. Topics include partnerships between the United Association and local union contractors, good work practices, and history of the pipe trades.

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.

This course covers the practical and theoretical aspects of welding processes for the steamfitting apprentice. Safe procedures, components, regulator settings and practices for use of the cutting torch, and groove pipe welding are presented.

STMFT-132 Welding 5

1.5-3.5 units LR

- Variable hours
- Note: This program is sponsored by the United Association of Union Plumbers, Fitters, Welders, and Service Technicians and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the local union responsible for the section.

This course is an introduction to the techniques and methods for welding processes for the steamfitting apprentice. Students will learn how to identify various welding rods, electrodes, and their applications.

STMFT-133 Welding 6

1.5-3.5 units LR

- *Variable hours*
- *Note: This program is sponsored by the United Association of Union Plumbers, Fitters, Welders, and Service Technicians and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the local union responsible for the section.*

This course is an introduction to the techniques and methods for welding processes for the steamfitting apprentice. Techniques studied will include string beads on an open grooved pipe weld.

STMFT-134 Welding 7

1.5-3.5 units LR

- *Variable hours*
- *Note: This program is sponsored by the United Association of Union Plumbers, Fitters, Welders, and Service Technicians and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the local union responsible for the section.*

This course is an introduction to the techniques and methods for welding processes for the steamfitting apprentice. The topics will include proper handling of grinders, weld coupons, identification of hazards, and an introduction to bevel groove welding processes on pipe.

STMFT-135 Welding 8

1.5-3.5 units LR

- *Variable hours*
- *Note: This program is sponsored by the United Association of Union Plumbers, Fitters, Welders, and Service Technicians and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the local union responsible for the section.*

This course is an introduction to the techniques and methods for welding processes for the steamfitting apprentice. Techniques studied will include gas tungsten arc welding (GTAW) process.

STMFT-136 Welding 9

1.5-3.5 units LR

- *Variable hours*
- *Note: This program is sponsored by the United Association of Union Plumbers, Fitters, Welders, and Service Technicians and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the local union responsible for the section.*

This course introduces the techniques and methods for welding processes for steamfitting apprentices. Topics include gas metal arc welding (GMAW) and metal arc welding equipment, processes, and applications.

STMFT-137 Welding 10

1.5-3.5 units LR

- *Variable hours*
- *Note: This program is sponsored by the United Association of Union Plumbers, Fitters, Welders, and Service Technicians and is for apprenticeship only. Course enrollment is limited to those who have been accepted by the local union responsible for the section.*

This course is an introduction to the techniques and methods for welding processes for the steamfitting apprentice. The topics will include identification of materials, dissimilar metal, distortion control, welding symbols for materials, fabrication standards, and codes.

STMFT-138 Orbital Welding

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.*

This course covers the practical and theoretical aspects of automatic orbital welding machine processes for the steamfitting apprentice. Topics include safety procedures, components, settings, calibration, and practice using the orbital welding machine.

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.*

This course offers an introduction to construction management in steamfitting. Topics include administrative procedures, plans and specifications, scheduling, permits, variances, and forms of communication.

STMFT-141 Hydrostatic Testing

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 this section.*

This course presents the proper procedures to successfully complete a hydrostatic test on a piping system. Demonstrations of test packages, hydrostatic pump test procedures, pressure and safely securing the testing area will be included.

STMFT-150 Topics in Steamfitting

.3-4 units SC

- 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.

STMFT-299 Student Instructional Assistant

.5-3 units SC

- 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.

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. 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 GE transfer information in this catalog.)

total minimum required units (CSU GE)	39
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TRANSFER STUDIES – CSU

**Certificate of achievement
CSU general education breadth**

Students completing the program will be able to...

- communicate effectively, both verbally and in writing.
- 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.
- 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.
- 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.

TRANSFER STUDIES – IGETC

**Certificate of achievement
Intersegmental General Education Transfer
Curriculum (IGETC)**

Students completing the program will be able to...

- communicate effectively, both verbally and in writing.
- 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.
- 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.
- 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.
- organize and present information in person in a logical and understandable manner.
- 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).

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. 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) 34

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.

WORK EXPERIENCE - WRKX

Beth Arman, Senior Dean
Career and Community Partnerships
Administration Building, Room 121

Students may earn units for learning on-the-job through Work Experience 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.

These courses are for students who are working full or part-time and interested in earning units while gaining practical work experience, either for pay, as interns, or as volunteers. College credit is granted for the following: WRKX-160: Students who are employed but have not declared a major or their jobs are unrelated to their major. WRKX-170: Students who are employed and their jobs are related to their major. WRKX-180: Students who are participating in internship or volunteer opportunities in jobs that are related to their major.

WRKX-160 General Work Experience Education

2-3 units SC

- May be repeated eight times
- Variable hours
- Note: In order to enroll in a WRKX course, students must be employed, register for the course, complete an online Employment Form and participate in an orientation. Does not meet requirements for veterans' benefits. Incomplete grades are not awarded for WRKX.

WRKX-160 is supervised employment for students whose jobs do not relate to their college major or area of career interest. Under the supervision of a college instructor, students will acquire employability skills, desirable work habits, and career awareness through on-the-job and other learning experiences. Each unit represents five hours of work per week or 75 hours work per term. Students may earn up to a total of 16 in any combination of WRKX courses. Repetition allowed per Title 5, Section 55253. CSU

WRKX-170 Occupational Work Experience Education

2-4 units SC

- May be repeated eight times
- Variable hours
- Note: In order to enroll in a WRKX-170, students must be employed, register for the course, complete an online Employment Form, and participate in an orientation. Incomplete grades are not awarded for this course.

WRKX-170 is supervised employment that extends classroom learning to the job site and relates to the student's chosen field of study or area of career interest. Under the supervision of a college instructor, students will engage in on-the-job and other learning experiences that contribute to their employability skills and occupational or educational goals. Each unit represents five hours of work per week or 75 hours work per term. Students may earn up to a total of 16 in any combination of WRKX courses. Repetition allowed per Title 5, Section 55253. CSU

WRKX-180 Internship in Occupational Work Experience Education

2-4 units SC

- May be repeated eight times
- Variable hours
- Note: In order to enroll in the WRKX-180 course, students must be interning or volunteering, register for the course, complete an online Employment Form, and participate in an orientation. Incomplete grades are not awarded for this course.

WRKX-180 is a supervised internship in a skilled or professional level assignment in the student's major field of study or area of career interest. Under the supervision of a college instructor, students will engage in on-the-job and other learning experiences that contribute to their employability skills and occupational or educational goals. Internships may be paid, non-paid, or some partial compensation provided. Each unit represents five hours of paid work or four hours of unpaid work per week or 75 hours of paid work or 60 hours of unpaid work per term. Students may earn up to a total of 16 units in any combination of WRKX courses. Repetition allowed per Title 5, Section 55253. CSU

WORKFORCE PREPARATION - WRKP

Emily Stone, Dean
 Student Services Center, Room 122

Certificate of completion Workforce preparation for people with barriers to employment

Students completing this program will be able to...

- A. summarize legal protections for job applicants with disabilities or criminal records.
- B. explain desirable skills for employment, such as empathy, mindset, communication, self-awareness, and resilience.
- C. determine if and when to disclose a barrier to employment, such as a disability, criminal record, etc.

This certificate of completion presents job search and retention skill development to students with challenges in obtaining employment, such as those with a disability or a criminal record. To earn a certificate of completion, students must complete both courses. The courses are noncredit. They are non degree applicable and do not transfer to the California State University (CSU) or University of California (UC) systems or other private universities.

<i>required courses:</i>	<i>units</i>
WRKP-090NC Addressing Barriers to Employment I: Getting a Job.....	0
WRKP-091NC Addressing Barriers to Employment II: Keeping a Job	0
total minimum required units	0

WRKP-090NC Addressing Barriers to Employment I: Getting a Job

0 units P/NP
 • 18 hours lecture

This course prepares students with barriers to employment for the job search. Skills and tools needed by all applicants, such as a resume, cover letter, and networking are presented. Strategies to modify these skills and tools for specific populations, such as people with a disability, criminal record, former foster youth, or CalWORKs recipient are also covered. Students will tailor their own job search based on their objectives and specific circumstances.

WRKP-091NC Addressing Barriers to Employment II: Keeping a Job

0 units P/NP
 • 18 hours lecture

This course prepares students with barriers to employment for the job search. Skills and tools needed by all applicants, such as a resume, cover letter, and networking are presented. Strategies to modify these skills and tools for specific populations, such as people with a disability, criminal record, former foster youth, or CalWORKs recipient are also covered. Students will tailor their own job search based on their objectives and specific circumstances.

FACULTY AND ADMINISTRATORS

chapter five

catalog 2022-2023



Faculty and administrators **445**

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FACULTY AND ADMINISTRATORS

Abbott, Daniel

faculty - architecture
B.A. - University of Oregon

Abedrabbo, Samar

faculty - biology
A.A. - Irvine Valley Community College
B.S. - University of California, Irvine
P.h.D. - University of California, Santa Cruz

Abele, Robert

faculty - philosophy
B.A. - University of Dayton
M.Div. - Mount 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 - mathematics
B.S., M.S. - Ball State University

Akiyama, Mark

dean - guided pathway integration (interim)
B.A. - UC Berkeley
Ph.D. - University of Michigan

Al-Shabazz, Isma'il

manager - custodial services

Amato, Nicholas

faculty - computer science
B.S. - Western Michigan University
M.B.A. - UC Berkeley

Ang, Lisa

faculty - English
B.A. - UC Berkeley
M.A. - San Francisco State University

Ansari-Yan, Durrain

faculty - health science
B.S. - UCLA
M.S. - UC Berkeley

Antonakos, Cory

faculty - chemistry
B.S. - George Washington University
M.S. - UC Berkeley

Aranda, Alberto

faculty - counseling
certificate - CSU Los Angeles
B.S., M.S. - CSU Los Angeles

Arman, Beth

senior dean - career and community partnership
B.A. - University of Michigan, Ann Arbor
M.P.P. - Harvard University, Kennedy School of Government
Ph.D. - University of Maryland, Baltimore County

Armendariz, Rosa

dean - student equity and engagement
B.A. - Stanford University

Bailey, Jamie Lynn

faculty - counseling
B.A., M.A. - CSU Hayward

Beaulieu, Ellen

faculty - chemistry
B.S. - University of Georgia
Ph.D. - UC Berkeley

Bennett, Kathleen

faculty - counseling
B.A. - Indiana University
M.S.W. - San Jose State University

Bennett, Troy

faculty - art digital media
B.F.A. - Plymouth State University
M.F.A. - Rochester Institute of Technology

Bersamina, Leo

faculty - art
A.A. - Cabrillo College
B.F.A. - San Francisco State University
M.F.A. - Yale University

Bessie, Adam

faculty - English
B.A. - UC Davis
M.A. - San Francisco State University

Bhimji, Sahra

faculty - media studies
B.S. - Stanford University
M.A. - San Francisco State University

Black, Bethallyn

faculty - horticulture
B.A., M.A. - New College of CA

Blackwell-Stratton, Marian

faculty - English
B.A. - UC Berkeley
M.F.A. - Mills College

Blair, James

director - college advancement
B.A. - San Jose State University
J.D. - Lewis & Clark College

Bove, Kaitlin

faculty - music
B.M. - University of the Pacific
M.M. - University of the Pacific
D.M.A. - University of Kentucky

Breton, Hopi

faculty - art
B.A. - Loyola University
M.F.A. - Montana State University

Brizzi, Alicia

faculty - counseling
B.S. - Reed College
M.S.W. - Hunter College

Faculty and administrators

Buchanan, James

director - maintenance and operations

Burnaforde, Rochelle

faculty - psychology
B.A. - Taylor University
Ph.D. - University of South Florida

Burns, Laura

faculty - chemistry
B.S. - Texas Lutheran College
Ph.D. - UC Davis

Canada, Yvonne

faculty - counseling
B.A. - Cal Poly San Luis Obispo
M.A. - Bowling Green State University

Capozzo, Christopher

faculty - psychology
B.A. - UC Davis
M.A. - John F. Kennedy University

Carbonell, Ana María (Ía)

faculty - English
B.A. - Tufts University
M.S., Ph.D. - UC Santa Cruz

Carney, Edward

Chief of Police
B.S. - Thomas A. Edison State College
M.A. - Seton Hall University

Carrick, Jason

faculty - English
B.A. - UC Berkeley
M.A. - San Francisco State University

Carter, Janylle

faculty - mathematics
A.B. - Harvard University
M.A., Ph.D. - UCLA

Catterson, Arman

faculty - psychology
B.S. - University of Texas, Austin
M.S. - UC Berkeley

Chiar, Jean

faculty - astronomy
B.S., M.S., Ph.D. - Rensselaer Polytechnic Institute

Chisar, Michael

faculty - kinesiology
B.S. - CSU Fullerton
M.S. - Hahemann University

Chiu, Jeannie

faculty - English
A.B. - Cornell University
Ph.D. - UC Berkeley

Choi, Amanda

faculty - library
B.A. - Johns Hopkins University
M.A. - University of New Mexico
M.L.I.S. - San Jose State University

Clapper, Rayshell

faculty - English
B.A. - East Central University
M.A. - University of Oklahoma
Ed.D. - East Central University

Clarkson, Bryan

faculty - biological science
B.S. - Northeastern University
Ph.D. - UC Berkeley

Colchico, Kristen

faculty - health science
B.S. - CSU East Bay
M.S. - Indiana State University
Ed.D. - Columbia University

Colson, Michael

faculty - English
B.A. - UC Santa Barbara
M.A. - CSU Dominguez Hills

Colwell, Kitran

faculty - physics
B.S. - UC Berkeley
M.S. - UC San Diego
Ph.D. - UC Davis

Conde, Kellie

faculty - counseling
B.A. - CSU Hayward
M.S. - San Francisco State University

Cook, Bruce

faculty - music
B.A. - Greensboro College
M.A. - University of North Carolina
Ph.D. - University of Colorado

Corbally, John

faculty - history
B.A., M.A. - San Francisco State University
Ph.D. - UC Davis

Cornejo-Warner, Daniel

faculty - ethnic studies
B.A. - Loyola Univ New Orleans
M.A. -SFSU
Ph.D. -UC Davis

Covarrubias, Manuel

faculty - electrical/electronics
A.A. - City College of San Francisco
B.S. - San Jose State University
M.S. - Cal State University at Northridge

Crouse, Marina

faculty - foreign language
B.A., M.A., Ph.D. - UC Berkeley

Cruz, Edward

faculty - mathematics
B.A. - UC Berkeley
M.A. - CSU Hayward

Darr, Mike

faculty - kinesiology
A.A. - Diablo Valley College
B.A. - CSU Chico
M.A. - Saint Mary's College

Davidson, Squire

manager - culinary arts
B.A. - Simpson University

Dawson, Maria

faculty - counseling
B.S. - UC Santa Cruz
M.A. - San Francisco State University

DeFoe, Danielle

faculty - English
B.A., M.A. - Sacramento State University

Denning, Joann

faculty - art digital media
B.A. - UC San Diego
M.F.A. - UC Davis

Despins, Nicole

faculty - assistive technology specialist
B.A. - CSU Chico
M.S. - San Francisco State University

Dorado, Maria Isabel

faculty - counseling
B.A. - San Francisco State University
M.A. - Michigan State University

Dougan, Susana "Raine"

faculty - counseling
B.A., B.S. - UC Berkeley
M.A. - Pacifica Graduate Institute

Draa, Christopher

faculty - culinary arts
A.A. - Diablo Valley College
Certificate - California Culinary Academy

Drummond, Lisa

faculty - drama
B.A. - San Francisco State University
M.F.A. - San Diego State University

DuLaney-Greger, Keri

faculty - English
B.A. - UC Irvine
M.A. - San Diego State University

Ebesugawa, Martina

faculty - early childhood education
B.A., M.A. - San Francisco State University
Ph.D. - University of San Francisco

Eachus, Chris

faculty - math
A.A. -Allan Hancock College
B.S., M.S. - Cal Poly San Luis Obispo

Eidhin, Dorian

faculty - English
B.A. - Harvard University
M.A. - San Francisco State University

Eisa, Mohamed

faculty - business
B.A. - University of Alexandria, Egypt
M.B.A. - Michigan State University
Ph.D. - Louisiana State University

Erickson, Ashley

faculty - engineering
B.S., M.S., Ph.D. - University of Southern California

Espiritu, Florence

faculty - library science
A.A. - Los Medanos College
B.A. - UC Davis
M.L.I.S. - University of Washington

Etter, Marisabel

faculty - biology
B.A. - CSU Northridge
Ph.D. - UCLA

Fannin, Antonia

faculty - English
B.A. - UC Berkeley
M.A. - San Francisco State University

Farr, Todd

student life manager
B.A. - The Union Institute
M.B.A. - University of La Verne
M.A. - CSU Bakersfield

Ferguson, Vicki

vice president - equity and student services
B.S. - Alabama State University
M.S. - Jacksonville State University

Fisher, Jane

faculty - art
B.F.A. - Ohio University
M.F.A. - School of the Art Institute of Chicago

Fogli, John

faculty - business
B.S. - UC Berkeley
M.B.A. - University of San Francisco

Forgette, Chalisse

faculty - English
B.A., M.A. - San Francisco State University

Franco, Catherine

manager - workforce development
B.S. - University of Florida
M.S. - Walden University

Freidenreich, Eric

faculty - mathematics
B.A. - UCLA
M.A. - UC San Diego

Freidenreich, Jenny

faculty - mathematics
B.A., M.A. - San Jose State University

Freytag, John

faculty - oceanography
B.S. - UC Santa Barbara
Ph.D. - Pennsylvania State University

Funaro, Janette

dean - arts and communication
B.A. - Grinnell College
M.A. - University of Chicago
Ed.D. - National American University

Galbraith, Kimberly

faculty - counseling
B.A. - Spelman College
M.S. - San Francisco State University

Gand, Elizabeth

faculty - art history
B.A., M.A., Ph.D. - UC Berkeley
M.F.A. - New York University

Garcia, Marcos

faculty - English
B.A. - Colorado State University
M.A. - Pennsylvania State University
Ph.D. - UC Berkeley

Garcia, Raquel

faculty - foreign language
B.A., M.A., Ph.D. - UC Davis

Gard, Karen

faculty - biological science
B.S., M.S., D.V.M. - UC Davis

Gelinas, Richard P.

faculty - biological science
B.S. - Saint Mary's College
Ph.D. - UC Davis

Gentry-Kolen, Heidi

faculty - computer science
B.S. - University of Maryland
M.S. - University of West Florida

Gerkin, Craig

faculty - chemistry
B.S. - SUNY, Stony Brook
Ph.D. - UC Berkeley

Glaves, Richard (Sam)

faculty - biological science
B.S. - UC Berkeley
M.S. - Central Michigan 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

Gomez, Concetta

faculty - mathematics
B.S., Ph.D. - UC Berkeley

Gonzales, Anthony

faculty - English
B.A. - University of New Mexico
M.F.A. - University of San Francisco

Gonzalez, Brenda

faculty - counseling (PUENTE)
B.S. - UC Berkeley
M.A. - San Francisco State University

Goralka, Raymond

faculty - biological science
B.S., B.A. - UC Davis
Ph.D. - UC Santa Cruz

Gorga, Joseph

vice president - equity and instruction
B.A. - University of San Diego
Ph.D. - UC Santa Barbara

Greene, Valerie

faculty - biological science
B.S., M.S. - San Francisco State University

Hagerty, David

disability support services manager
B.A. - Vassar College
M.S. - CSU Hayward
M.F.A. - Pacific University

Hamida, Youcef

faculty - physical science
B.S. - UC Berkeley
M.S. - Ohio State University
Ph.D. - Temple University

Hampton, Todd

vice president, business services
M.B.A. - University of La Verne
Ph.D. - CSU Northridge

Handy, Eric

faculty - counseling
A.A. - Laney College
B.S. - San Francisco State University
M.A. - Saint Mary's College

Hanecak, John

faculty - communication studies
B.S. - Saint Mary's College
M.A. - CSU Hayward

Hansen, Megan

faculty - English
B.A. - University of Washington
M.A. - San Francisco State University

Harrington-Tsai, Christina

faculty - counseling
B.A. - UC Davis
M.A. - San Jose State University

Harrison, Taylor

faculty - counseling
B.A., M.S. - San Francisco State University

Harvin, Gabriel

registrar
B.A. - U.C. Santa Cruz
M.P.A. - CSU East Bay

Haslam, Alan

faculty - English
B.A., M.A. - CSU Sacramento

Hawkins, Robert

faculty - communication studies
B.A., M.A. - San Francisco State University

Hein, Claudia

faculty - chemistry
B.S. - Muhlenberg College
M.S. - Oregon State University

Hess Diestler, Nicole

faculty - drama
A.A. - Grossmont College
B.A. - San Diego State University
M.F.A. - Florida State University

Hickey, Joseph

faculty - chemistry
B.S. - University of Maryland, College Park
Ph.D. - UC Berkeley

Faculty and administrators

Hoffmann, James

faculty - physiology
B.A., M.A. - CSU Northridge

Holis-Sachau, Shaeheha

faculty - counseling
A.A. - Sacramento City College
B.S. - University of Phoenix
M.A. - Chapman University

Houshiar, Bijan

faculty - computer science
B.S. - CSU Fullerton
M.B.A. - National University

Howard, Brandy

director - marketing and media design

Huang, Lynn

faculty - English
B.A. - Tufts University
M.A. - Pace University
Ph.D. - UC Berkeley

Huerta Villicana, Juan

faculty - early childhood education
B.A., M.A. - San Jose State University

Huff, Mickey

faculty - history
B.A., M.A. - Youngstown State University

Huynh, Loc

faculty - computer information systems
B.A. - UC Berkeley
M.B.A. - California Coast University
M.S.T.C.M. - Academy of Chinese Culture and Health Sciences

Ignatowski, Brandon

faculty - health sciences
B.A., M.A. - CSU San Bernardino

Iles, Monique

faculty - English
A.A. - Butte College
B.A. - California State University Chico
M.A. - Mills College

Jacobson, Melissa S.

faculty - history
B.A. - Seattle University
M.Phil. - University of Glasgow

Jamshidnejad, Christie

faculty - counseling
B.A. - UC Davis
M.A. - San Francisco State University

Johnson, Steven C.

faculty - anthropology
B.A. - UC Berkeley
M.A. - CSU Hayward
Ph.D. - UC Berkeley

Jones-Castellano, Jackqueline

academic student services manager, educational talent search, upward bound
B.A., M.S. - CSU East Bay

Jones-Hagata, Laura

faculty - psychology
B.A., M.A. - San Jose State

Kadi, Kelly

faculty - English
B.A. - UC Davis
M.A. - Inter American University

Keating, Katrina

faculty - mathematics
A.A. - Laney College
B.A., M.A., Ed.D. - San Francisco State University

Khabiri, Mona

faculty - English as a second language
B.A. - Azad University, Iran
M.A. - University of Tehran
Ph.D. - Azad University, Iran

Khaja, Gene

faculty - computer science
B.A. - University of Punjab, Pakistan
M.S. - Utah State University
Ph.D. - University of Manchester, England

Khan, Azim

faculty - biological sciences
B.S. - University of Illinois
M.S. - Stanford University
M.A. - UC San Diego

Khandani, Seyyed M. H.

faculty - engineering
B.S. - Sharif University of Technology
M.S., Ph.D. - Massachusetts Institute of Technology

Kingsley, Anne

faculty - English
B.A. - UC San Diego
M.A. - City College of New York
Ph.D. - Northeastern University

Knight, Lynn M.

faculty - mathematics
B.A. - University of the Pacific
M.A. - UC Berkeley

Koblik, Kris

faculty - art history
B.A. - Stanford University
M.A. - San Francisco State University

Kong, Lindsay

dean - institutional effectiveness and accreditation liaison officer (interim)
B.S. - Massachusetts Institute of Technology
M.S. - UC San Diego
M.A. - Saint Mary's College

Kumakura, Akihiko

faculty - foreign language
B.A. - Tokyo University of Foreign Studies
M.A. - Ohio State University

Lacayo, Allan

faculty - business
B.S., M.A. - UC Berkeley

Laham, Martha S.

faculty - business
B.A. - UC Irvine
M.S. - Golden Gate University
M.B.A. - Thunderbird School of Global Management

Lamb, Susan

president
B.S., M. Ed. - Southwest Texas State University

Lang, Lindsey

faculty - mathematics
B.S., M.S. - Cal Poly San Luis Obispo

Large, Evan

faculty - physics
B.S. - Case Western Reserve University
Ph.D. - Ohio State University

Larson, Wayne

faculty - chemistry
B.S. - Carleton College
Ph.D. - California Institute of Technology

Lau, Sheila

faculty - counseling
B.A. - CSU Hayward
M.A. - University of San Francisco

Lawrence, Diane

faculty - chemistry
B.S., Ph.D. - University of Leeds

Lee, Owen

faculty - music
B.A. - UC Berkeley
Ph.D. - UCLA

Leeper, Kevin

faculty - art digital media
B.F.A. - San Francisco Art Institute
M.F.A. - Mills College

Leon-Bravo, Paula

faculty - mathematics
B.A. - UC Berkeley
M.A. - San Francisco State University

Leong, Patrick L.

faculty - English
B.A. - San Francisco State University
M.A. - CSU Fresno

Letona Riodriquez, Lynda

faculty - library science
B.A. - Mounty Marty College
M.A. - University of South Dakota
M.S. - University of North Texas

Levin, Anna

faculty - biological science
B.A. - UC Santa Cruz
Ph.D. - UC Berkeley

Levitin, Michael

faculty - journalism
B.A. - University of California, Santa Cruz
M.S. - Columbia University

Lin, Sheree

faculty - foreign language
B.A. - Fu-Jen University, Taipei
M.A. - University of San Francisco

Lipson, Joseph

faculty - chemistry
B.S. - UC Berkeley
M.S. - UC San Diego

Lo, Lan (Laura)

faculty - computer science
B.S., M.S. - National Taiwan University
M.S. - Santa Clara University

Long, Christopher

*director - math, engineering, science
achievement (interim)*

Luciano, Nancy

faculty - counseling
B.A., M.A. - Santa Clara University

Luna, Rachel

*program manager - eops/care, calworks,
and foster youth services (interim)*
B.A. - UC Berkeley
M.A. - Bowling Green State University

MacDougall, Scott

faculty - political science
B.A., M.A. - McGill University, Montreal

Mandapat, Manuel

*fiscal services manager - business ser-
vices finance and administration*
B.S. - University of Nevada, Las Vegas
M.S. - California State University, Bakers-
field

Martin, Shuleen

faculty - physics
B.S. - UC Berkeley
M.S. - San Francisco State University

Martucci, Cheryl

faculty - computer network technology
B.A. - Saint Mary's College
M.B.A. - Golden Gate University

Mason, Janet

faculty - early childhood education
B.A. - CSU East Bay
M.S. - San Jose State University
Ph.D. - California School of Professional
Psychology

Matlock, Elizabeth

faculty - mathematics
B.S. - Santa Clara University
M.S. - Cal Poly San Luis Obispo

Mayfield, Jason

faculty - geology
A.A. - Chabot College
B.S. - CSU Hayward
M.S. - UC Davis

McBrien, Beth

faculty - drama
B.A. - Saint Mary's College
M.A. - San Francisco State University

McDade, Karl

faculty - art
B.S. - Southern Oregon State University
M.F.A. - Montana State University

McDonald, Kathryn

police lieutenant
POST cert. - Los Medanos College

McNeil, Carmen

faculty - psychology
B.S. - UC Davis
M.A. - Boston College

Melvin, Ryan

faculty - computer science
B.S., M.S. - CSU Fresno

Mikolavich, Daniel Keith

faculty - English
B.A., M.A. - San Francisco State
University

Miller, Ruth

faculty - humanities
B.F.A. - San Francisco Art Institute
M.A. - San Francisco State University

Million, Carrie

faculty - counseling
B.A. - UC Davis
M.A. - CSU Sacramento

Moe, Patrick

faculty - communication studies
B.A., M.A. - San Francisco State
University

Mohan, Adhitya

faculty - mathematics
B.S. - UC Los Angeles
M.S. - University of San Luis Obispo

Molina, Carla

dean - enrollment services
B.A. - CSU East Bay
M.A. - St. Mary's College of California

Moran, Kelvyn

faculty - English as a Second Language
B.A., M.A. - CSU Sacramento

Moran, Roxanne

faculty - physics
B.S. - UC Davis
M.S. - UC Merced

Morgan, Christian

faculty - English
B.A. - Southwestern Oklahoma State
University
M.A. - University of Tulsa

Morrissey, Matthew

faculty - administration of justice
B.A., M.A. - CSU East Bay

Moss, Emily

faculty - librarian
B.A. - UC Santa Cruz
M.L.I.S. - San Jose State University

Moultrie, Nikki

*senior dean, curriculum and instruction
(interim)*
B.S. - Northern Arizona University
M.S. - University of California, San
Francisco

Mowry, Thomas A.

faculty - mathematics
B.S., M.S. - Michigan Tech University

Mullins, Cailin

faculty - kinesiology
B.A. - University of Maryland
M.S. - CSU Hayward

Munday, Matthew

faculty - counseling
B.A., M.A. - San Jose State University

Muñoz, Tedmund

faculty - counseling
B.S. - UC Berkeley
M.S. - San Francisco State University

Najarro, J. Mauricio

faculty - business
B.B.A., M.B.A. - Loyola Marymount
University

Nakano-Hiraki, Hideo

faculty - counseling
B.A. - UC Davis
M.A. - Argosy University

Needham, C. D. Samuel

faculty - mathematics
B.A. - University of Sydney, Australia
M.A., C.Phil. - UCLA

Newton, Kit

faculty - mathematics
B.A. - Reed College
M.A. - University of Wisconsin-Madison

Nezuka, Naomi

faculty - foreign language
B.A. - Waseda University
M.A. - San Francisco State University

Niyogi, Sanghamitra

faculty - sociology
B.A. - Delhi University
M.S. - Bristol University
Ph.D. - UC Davis

Noel, James

dean - English and equity pedagogy
B.A. - The Master's University
M.A. - University of Worcester
Ph.D. - Goldsmiths, University of London

Ocampo, Ada

manager - academic services
B.A., M.A. - Stanford University

Ogunlana, Shola

faculty - administration of justics
B.A. - UC Berkeley
M.S. - Calif. University of Pennsylvania

Faculty and administrators

Oguto, Fenno

faculty - sociology
B.A., M.A. - University of Nairobi
Ph.D. - UC Berkeley

Oliver, Taylor

faculty - psychology
A.A. - Consumes River College
B.S. - UCLA
M.S. - CSU Northridge
Ph.D. - University of Nevada

Orac-Sayre, Crina

faculty - chemistry
Ph.D. - Ohio State University

Ortega, Frank

faculty - sociology
B.A. - San Jose State University
M.A., Ph.D. - Texas A & M University

Osborne, Beatrice

faculty - mathematics
M.A. - UC Berkeley

Padilla, Shannon

faculty - communication studies
B.A. - San Diego State University
M.A. - San Francisco State University

Palmer, Erin

faculty - chemistry
B.S. - University of Arizona
M.S.E. - College University of New York
M.S., Ph.D. - UC Berkeley

Pamintuan, Khrystyn

faculty - counseling
B.A. - UC Irvine
M.A., M.S. - San Diego State University

Panahandeh, Mohammad

faculty - engineering
B.S. - Sharif University of
Technology, Iran
M.S., Ph.D. - UC Berkeley

Parkinson, Susan

faculty - biology
B.S., M.S. - Brigham Young University
P.h.D. - University of California, Berkeley

Parks, William

faculty - mathematics
B.A. - UC Berkeley
M.A. - San Francisco State University

Pentcheva, Caterina

faculty - computer science
B.S., M.S. - CSU East Bay

Peppo, Bret

faculty - music
B.A. - Eastern Illinois University
M.A. - Illinois State University
D.M.A. - University of Iowa

Perez, Emmanuel

faculty - counseling
B.S. - UC Merced
M.Ed. - USC

Perry, Adam

faculty - communication studies
B.A., M.A. - CSU Fresno
Ph.D. - Pennsylvania State University

Peterson, Anne

faculty - chemistry
B.A. - UC Davis
B.S., M.S. - CSU Sacramento

Pham, Thao

faculty - counseling
B.A. - UC Davis
M.S. - CSU Sacramento

Pieroni, Gary

faculty - business
B.A. - CSU Hayward
M.B.A. - John F. Kennedy University

Pierson, Shelly

faculty - kinesiology
A.A. - Allan Hancock College
B.S. - Cal Poly San Luis Obispo
M.S. - CSU Hayward

Pineda-Carranza, Servando

faculty - mathematics
B.A. - UC Berkeley
M.A. - San Francisco State University

Pitner, Paul

faculty - early childhood education
B.A. - UC Berkeley
M.A. - San Francisco State University

Pollock, Jeff

faculty - American sign language
B.S. - Madonna University
M.Ed. - University of Utah

Polos, John

faculty - biological science
B.S., M.E. - Saint Mary's College
M.S. - CSU East Bay

Ponce, Albert

faculty - political science
B.A. - UC Berkeley
M.A., Ph.D. - UCLA

Ponciano-Babb, Jacqueline

faculty - kinesiology
B.S., M.S. - CSU Sacramento

Ponthier, Lizette

financial aid supervisor
B.A. - UC Berkeley
M.A. - CSU Sacramento

Powell, Matthew

faculty - history
B.A. - CSU Chico
M.A. - University of New Mexico
Ed.D. - UC Davis

Powers, Pamela

faculty - dental hygiene
B.A. - CSU Hayward
M.S. - University New Haven, Connecticut

Prapavessi, Despina

dean - mathematics and engineering
B.A., M.A., Ph.D. - UC Berkeley

Prater, Aaron

faculty - culinary
A.A.S. - Food & Beverage Mgmt.
A.A.S. - Chef Apprenticeship
B.A. - University of Missouri
M.S. - Kansas State University

Puzia, Arek

faculty - accounting
A.A. - Diablo Valley College
B.A. - UCLA
M.B.A. - University of Chicago

Quinn, Michael

faculty - geography
B.A. - Humbolt State University
M.A. - CSU Fullerton

Quirarte-Amador, Carmina

faculty - history
B.A. - San Diego State University
M.A. - CSU Hayward

Ramos, Charles

manager - sports medicine
B.A., M.A. - CSU Fullerton
Ph.D. - A.T. Still University of Health Sci-
ences

Rasmussen, Christopher

faculty - humanities
B.A. Saint Mary's College
M.A., Ph.D. - University of Southern
California

Raymond, Brian

faculty - mathematics
B.S. - Worcester Polytechnic Institute
M.S. - CSU East Bay

Razo, Stephanie

faculty - English
B.A. - University of the Pacific
M.A. - CSU Sacramento

Reyes, Brandon

faculty - biological science
B.S. - University of Georgia
M.S. - San Diego State University

Robison, Richard

*dean - library, educational technology,
and learning support*
B.A. - UC Berkeley
M.L.S. - University of Maryland,
College Park

Rode, Lee T.

faculty - psychology
B.A. - Josephinum College
M.A., Ph.D. - Southern Illinois
University

Rodriguez, John

faculty - physics
B.A. - UC Santa Cruz
M.A. - UC Berkeley

Rogers, Emma

faculty - English
B.A. - UC Berkeley
M.A. - San Francisco State University

Roper, Percy

technology systems manager
B.S. - Park University
M.S. - University of Maryland

Ruehl, Jean

faculty - chemistry
B.S. - Cornell University
Ph.D. - UC Santa Cruz

Saechao, Teresita

faculty - nutrition
B.S. - CSU Sacramento
M.S. - Eastern Michigan University
Certificate - American River College

Sample, Laurie

faculty - English as a second language
B.A. - University of Sussex
M.A. - University of Southern California

Sasse, Paul M.

faculty - astronomy
B.A. - UC Berkeley
M.S. - Michigan State University

Schaffer, Bridgette

faculty - history
B.A. - UC Berkeley
Ph.D. - University of Cambridge

Scherer, Asa

faculty - mathematics
B.A. - University of Puget Sound
M.S. - Oregon State University

Scott, Glenn

faculty - mathematics
A.A. - Diablo Valley College
B.A., M.A. - San Francisco State University

Seefer, Carolyn M.

faculty - business
M.B.A. - University of Georgia
M.B.A. - John F. Kennedy University

Shackett, Charles

faculty - English
B.A. - University of New Hampshire
M.A. - San Francisco State University

Shi, (Xiaofeng) Charlie

dean - business, computer science, culinary arts and community education
B.S. - University of Illinois
M.A. - University of Nebraska
M.B.A. - UC Berkeley

Shields, Amber

faculty - film
BA - Carleton College, MN
M. Phil. - University of Cambridge, England
M.A. - CSUSF
Ph.D. - University of St. Andrews, Scotland

Shin, Ji Yeon

faculty - geology
B.S. - Ewha Womans University, South Korea
M.S. - University of Cincinnati
P.h.D. - University of California, Davis

Shipp, Colleen

faculty - dental assisting
B.A. - University of Nevada

Shively, Lindsey

faculty - library science
B.A. - Smith College
M.A. - San Jose State University

Sinha, Binita

faculty - geography
B.A., M.A., Ph.D. - Patna University, India
Ph.D. - University of Oklahoma

Smiley-Ratchford, Lisa

faculty - sociology
B.A. - UCLA
M.A. - UC Berkeley

Smith, Jeffrey

faculty - engineering
B.S. - Rochester Institute of Technology
M.A. - Chapman University
Ed.D. - Saint Mary's College

Sohi, Somayah (Anna)

faculty - mathematics
B.A. - UC Berkeley
M.S. - CSU East Bay

Sorce, Andrea

faculty - economics
B.A. - University of North Carolina at Chapel Hill
M.A. - Harvard University

Speliotopoulos, Achilles

faculty - physics
B.S., M.S., Ph.D. - UC Berkeley

Stanfield, Paula

faculty - counseling
B.S. - Cal Poly San Luis Obispo
M.S.W. - UC Berkeley

Steeb, Tonette

faculty - dental assisting
B.A. - CSU Sacramento
M.A. - St. Joseph's College of Maine

Steeb, Tonette

faculty - dental assisting
B.A. - CSU Sacramento
M.A. - St. Joseph's College of Maine

Steffan, Todd

faculty - counseling
B.A., M.A. - CSU Chico
M.A. - San Jose State University

Stone, Emily

dean - counseling and student success programs
B.A. - Macalester College
M.B.A. - Brandeis University
Ed. D. - Mills College

Storz, Marlene

faculty - dental hygiene
B.S. - University of the Pacific
M.S. - University of Bridgeport

Sugita, Toru

faculty - art
B.A. - Kyoto University of Education
M.F.A. - San Francisco State University

Swindle, Renee

faculty - English
B.A. - UC Davis
M.F.A. - San Diego State University

Tardivel, Dominic

faculty - mathematics
B.S. - UC Irvine
M.S. - CSU East Bay

Taugher, Kimberly

faculty - biological science
B.A. - UC Santa Barbara
M.S. - Colorado State University

Tejada, Jennifer

dean - San Ramon Campus
B.A., M.A. - San Francisco State University

Tejada, Mario

faculty - computer information systems
A.A. - Diablo Valley College
B.S. - University of San Francisco

Thomas, John

faculty - English
B.A. - Cal Poly San Luis Obispo
M.A. - CSU Sonoma

Thomas-Bignami, Ian

faculty - English
B.A., Ph.D. - UC Berkeley

Thomson, Rebecca

faculty - early childhood education
B.A. - Cal State University at Northridge
M.A. - St. Mary's College

Tribble, Kenyetta

senior dean - San Ramon Campus
B.A. - UC Berkeley
M.A. - CSU East Bay

Valmore, Kimberly

faculty - dance
B.A., M.F.A. - Mills College

Vanderbilt, John Read

faculty - mathematics
B.S.E. - Princeton
M.S. - Stanford University
M.A. - San Francisco State University

Faculty and administrators

Van Vleet, Jacob

faculty - philosophy
A.A. - Shasta College
B.A. - CSU Chico
M.A. - Graduate Theological Union
M.A. - Dominican School of Philosophy and Theology
Ph.D. - CA Institute of Integral Studies

Vasallo, Nicolas

faculty - music
A.A. - Diablo Valley College
B.A. - CSU East Bay
M.A., D.M.A. - UC Santa Cruz

Vazquez, Obed

dean - social sciences
B.A. - Andrews University
M.A. - Brown University
M.S. - New Jersey Institute of Technology

Vincent, (Frederick) Marcus

faculty - math
B.S. - UC Davis
M.S. - San Jose State University

Wade, Christina

faculty - counseling
B.A. - UC San Diego
M.A. - Saint Mary's College

Walker, Ted

faculty - physics
B.A. - UC Berkeley
Ph.D. - UC Irvine

Walters, Julia

faculty - mathematics
B.A., B.S. - UC Davis
M.S. - Colorado State University

Walton-Woodson, Cathy

supervisor - counseling
B.A. - State University of New York
M.A. - John F. Kennedy University

Wapner, Donna Sue

faculty - health science
B.A. - Pennsylvania State University
M.S. - University of South Carolina

Ward, Evangeline

faculty - dental hygiene
Certificate - Diablo Valley College
B.S. - CSU Fresno

Warren, Carolyn

faculty - counseling
B.A. - York University, Canada
M.A. - San Diego State University

Watkins, Stephen

faculty - business
B.A. - UC Davis
M.A. - Harvard University
J.D. - University of Oregon

Weber, Kathryn

faculty - mathematics
A.A., A.S. - Sacramento City College
B.S., M.S. - CSU East Bay

Wembes, Justin

faculty - counseling
B.A., M.S. - San Francisco State University

White, Nicole

faculty - photography
B.F.A. - Massachusetts College of Art
M.A. - University of Connecticut
M.F.A. - School of Art Institute Chicago

Whitmore, Kyle

faculty - communication studies
B.A. - UC Davis
M.A. - California Baptist University

Willett, Peter

faculty - mathematics
B.A. - UC Berkeley
M.A. - San Francisco State University

Willis, Julia

faculty - biological science
B.A. - Occidental College
M.A. - San Francisco State University
Ph.D. - UC Davis

Wilson, James

faculty - English
B.A. - McGill University, Montreal
M.A., M.F.A. - San Francisco State University
Ph.D. - University of Warwick

Wong, Melissa

faculty - learning disabilities specialist
B.A. - UC Davis
M.A. - CSU East Bay

Worsley, Christine

dean - kinesiology, athletics, and health science/athletic director
B.S. - Temple University
M.S. - University of Utah

Wylie, Lindsay

faculty - mathematics
B.A. - UC Berkeley
M.S. - CSU East Bay

Young, Patricia

faculty - chemistry
B.S., Ph.D. - Arizona State University

Zebley, Matthew

faculty - music
B.M. - Berklee College of Music
M.M., D.M.A. - University of Southern California

Zhu, Qi

faculty - architecture
B.A. - Tongi University
M.A., Ph.D. - Virginia Tech

Ziehlke, Seanna

faculty - biological science
B.S. - UC Santa Barbara
Ph.D. - UCLA

The names on the previous pages represent full-time faculty and administrators. Part-time faculty names appear on the DVC website in the faculty/staff directory <https://www.dvc.edu/directory/>

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