



PASADENA CITY COLLEGE

CATALOG

2017-2018



PASADENA
CITY COLLEGE

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PASADENA CITY COLLEGE

2017-2018 Catalog and Announcement of Courses



Pasadena Area Community College District Pasadena City College

**1570 East Colorado Boulevard
Pasadena, California 91106-2003
Telephone (626) 585-7123
Web site: <http://www.pasadena.edu>**

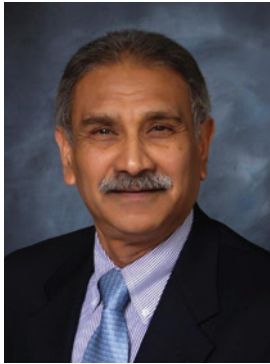
ACCREDITATION

Pasadena City College is accredited by the Accrediting Commission for Community and Junior Colleges (ACCJC) of the Western Association of Schools and Colleges (WASC), an institutional accrediting body recognized by the Commission on Recognition of Postsecondary Accreditation and the U.S. Department of Education. Accreditation reports are available on the Pasadena City College website.

CAMPUS LOCATION

The Pasadena City College main campus occupies a 53-acre site centrally located in Pasadena at 1570 East Colorado Boulevard (between Hill and Bonnie Avenues). The Community Education Center is located at 3035 East Foothill Boulevard in Pasadena. The Child Development Center is located at 1324 East Green Street, just west of the main campus. Pasadena City College Rosemead is located at 4105 N. Rosemead Boulevard in Rosemead. Courses offered through Continuing Education and the Office of Economic Development are offered at other sites throughout the Community College District.

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Welcome to Pasadena City College, home of the Lancers!

We are excited about the opportunity to serve you, whether you are entering PCC directly from high school, preparing yourself for a career change, returning to college to finish your degree, or laying the foundation for an advanced degree.

As Lancers, we pride ourselves in offering you a pathway to achieving your academic and career goals, and I am confident that we can assist you on your journey.

PCC has a stellar track record, as evidenced by our number one ranking in conferring Associate Degree for Transfers to bachelor's degree-granting institutions. Moreover, our list of distinguished alumni is filled with high achievers: from baseball pioneer Jackie Robinson (Class of 1939) and esteemed educator Jaime Escalante (Class of 1971) to State Supreme Court Justice Joyce Kennard (Class of 1970) and prolific filmmaker John Singleton (Class of 1985). Our distinguished alumni are a virtual "who's who" of American success stories, and it is our hope that someday one of you might be added to this list.

In the pages of this catalog, you will find information on the various programs and courses that our college offers, the steps you need to take to achieve your academic goals, and our outstanding support services tailored to meet every student's needs. Think of this document as your roadmap to success, and you are in the driver's seat.

At PCC, we share a common goal: to deliver the resources you need to help you achieve your academic goals. Your success is our success, and it is the driving force behind everything we do here.

Thank you again for allowing us to serve you. Please know that my door is always open. I look forward to hearing about how you are doing and how I may assist you on your road to a bright future.

Onward Lancers!

Sincerely,

A handwritten signature in black ink that reads "Rajen Vurdien". The signature is fluid and cursive.

Rajen Vurdien, Ph.D.
Superintendent-President





THE PASADENA AREA COMMUNITY COLLEGE DISTRICT ORGANIZATION

The Pasadena Area Community College District is composed of the communities represented by the following school districts: Arcadia, a portion of El Monte, La Cañada Flintridge, Pasadena, Rosemead, San Marino, South Pasadena, and Temple City. It is governed by an elected seven-member Board of Trustees representing the seven trustee areas and a Student Trustee elected by the student body. The Superintendent/President of the College is the chief administrative officer of the District.

BOARD OF TRUSTEES 2017-2018

Dr. Ross Selvidge	Area 1
James A. Osterling	Area 2
Berlinda Brown	Area 3
Hoyt R. Hilsman	Area 4
Linda Wah	Area 5
John Martin	Area 6
Dr. Anthony R. Fellow	Area 7
Emily Ekshian	Student Trustee

COLLEGE ADMINISTRATION

Superintendent-President.	Dr. Rajen Vurdien
Assistant Superintendent/Senior Vice President, Noncredit and Offsite Campuses	Dr. Robert H. Bell
Assistant Superintendent/Vice President, Instruction	Dr. Terry Giugni
Assistant Superintendent/Vice President, Business and Administrative Services	Dr. Richard Storti
Vice President, Human Resources.	Dr. Lisa Norman
Vice President, Student Services	Dr. Cynthia Olivo
Executive Director, Pasadena City College Foundation	Bobbi Abram
Executive Director, Institutional Effectiveness and Planning	Crystal Kollross
Executive Director, Strategic Communications and Marketing	Alexander Boekelheide



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OFFICIAL ACADEMIC CALENDAR — 2017-2018

(Dates Subject to Change)

SUMMER 2017 TERM

June 26, 2017	Summer session classes begin
July 4, 2017	Independence Day (campus closed)
August 18, 2017.	Summer Session ends
August 18, 2017.	Last day of Summer Intersession and officially posted graduation date

FALL 2017 TERM

August 28, 2017.	First day of classes (16 weeks)
September 4, 2017	Labor Day holiday (campus closed)
Refer to Class Schedule	Last date to add a 16-week course. Last date to drop a 16-week course without receiving a “W”
September 16, 2017	Last day to petition for December graduation
November 10, 2017.	Veteran’s Day holiday (campus closed)
Refer to Class Schedule	Last day to drop and receive a “W”
November 23 - November 26, 2017	Thanksgiving holiday (campus closed)
December 11-17, 2017	Final Examinations
December 18, 2016.	Last day of the semester and officially posted date of graduation for this semester
December 22, 2017 - January 1, 2018	Winter vacation (campus closed)

WINTER 2018 TERM

January 3, 2018	Winter session classes begin
January 15, 2018	Martin Luther King Jr. Day (campus closed)
Refer to Class Schedule	Last day to petition for Spring Graduation
February 13, 2018.	Winter Session ends
February 16-19, 2018	Presidents Day holiday (campus closed)



SPRING 2018 TERM

February 20, 2018	First day of classes (16 weeks)
Refer to Class Schedule	Last day to add a 16-week course. Last day to drop a 16-week course without receiving a "W"
March 30, 2018	Cesar Chavez Day holiday (campus closed)
April 16-19, 2018	Spring Break – Classes not in session
April 20-22, 2018	Campus closed
Refer to Class Schedule	Last day to drop and receive a "W"
June 12-18, 2018	Final Examinations
June 15, 2018	Commencement ceremony for all 2017-2018 graduates
June 18, 2018	Last day of the semester and officially posted date of graduation for this semester

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General Information



A BRIEF HISTORY OF PASADENA CITY COLLEGE

In 1924, in response to this community's need for higher education facilities, one year of college work was added to the program offered by Pasadena High School. Soon after, another year was added. In 1928, Pasadena High School and Pasadena Junior College merged into a four-year junior college with grades 11 to 14 inclusive.

By 1946, increased enrollment justified the establishment of a second four-year junior college—John Muir. In 1947 the official names of the two schools became Pasadena City College and John Muir College.

During the school year 1953-54, the Board of Education modified the school system organization from the 6-4-4 plan to the 6-3-2-2 plan and combined the two junior colleges into a single college, Pasadena City College, to serve freshmen and sophomores. Thus, the present college is heir to the development of junior college-level work in Pasadena since 1924.

In 1966, local voters in affected communities approved a greater Pasadena Area Junior College District, effective July 1, 1967. The name was changed to the Pasadena Area Community College District on Sept. 10, 1970.

Embracing Change

PCC continues to offer state-of-the-art resources for its students and the greater Pasadena-area community. With voter-approved Measure P bonds totaling \$150 million, PCC constructed a two-story Bookstore, Industrial Technologies Building and parking structure, as well as renovated the two-story Campus Center to add a WiFi Lounge and new dining areas. PCC also constructed a 69,000 square-foot Center for the Arts facility, which houses an art gallery, recital hall, and theater. It also serves as the home of the School of Visual, Media and Performing Arts.

PCC has made unique contributions to its community over the years. Albert Einstein dedicated the Observatory on campus. PCC's Registered Nursing program, founded in 1953 as one of only five pilot programs in the nation, continues to address the need for qualified nurses in California. The Artist-in-Residence program, which brings prominent professionals to work with and teach PCC students is offered regularly.

Career education and academic programs have evolved with the times, supporting the development of radio and television, filmmaking, dentistry, computer science, journalism, business, industrial and consumer-product design, manufacturing, home construction, military and aviation science, music, fashion technology, and much more.

The Community Education Center showcases the College's commitment to career education and basic skills education. Similarly, the PCC Child Development Center has strengthened PCC's involvement in early childhood education.

A Gateway to Education

PCC actively fosters partnerships with other institutions of higher learning. The Teacher Preparation Program at PCC creates educational pathways to California State University, Los Angeles; University of California, Riverside; Mount St. Mary's; and Pacific Oaks. This program helps students earn both a bachelor's degree and teaching credential within four years. The Transfer Center at PCC now welcomes more than 100 public and private colleges to campus each year. The Center's FAST TRACK program also helps high school students enroll in PCC classes in order to accelerate their transfer to four-year institutions.

The College is a recognized national leader in education and innovation. PCC has been honored by the Community College Futures Assembly with the National Bellwether Award for Innovation, the California Community Colleges Chancellor's Student Success Award for the First Year Pathways program, and the National Tutoring Association Award of Excellence.

For more information about the history and evolution of Pasadena City College, visit the college website at www.pasadena.edu.

MISSION OF THE COLLEGE

The mission of Pasadena City College is to provide a high quality, academically robust learning environment that encourages, supports and facilitates student learning and success. The College provides an academically rigorous and comprehensive curriculum for students pursuing educational and career goals as well as learning opportunities designed for individual development. The College is committed to providing access to higher education for members of the diverse communities within the District service area and to offering courses, programs, and other activities to enhance the economic conditions and the quality of life in these communities.

At Pasadena City College we serve our students by:

- Providing courses and programs in a variety of instructional modalities that reflect academic excellence and professional integrity;
- Fostering a dynamic and creative learning environment that is technologically, intellectually, and culturally stimulating;
- Challenging our students to participate fully in the learning process and encouraging them to be responsible for their own academic success;

- Respecting them as individuals who may require diverse and flexible learning opportunities;
- Supporting organizational practices that facilitate student progress towards their goals; and
- Encouraging and supporting continuous learning and professional development in those who serve our students: faculty, staff, managers, and administrators.

INSTITUTIONAL CORE VALUES

As an institution committed to successful student learning in an environment of intellectual freedom, Pasadena City College is guided by the following essential, enduring and shared values:

A PASSION FOR LEARNING

We recognize that each one of us will always be a member of the community of learners.

A COMMITMENT TO INTEGRITY

We recognize that ethical behavior is a personal, institutional and societal responsibility.

AN APPRECIATION FOR DIVERSITY

We recognize that a diverse community of learners enriches our educational environment.

A RESPECT FOR COLLEGIALITY

We recognize that it takes the talents, skills and efforts of the entire campus community, as well as the participation of the broader community, to support our students in their pursuit of learning.

A RECOGNITION OF OUR HERITAGE OF EXCELLENCE

We recognize that we draw upon the College's rich tradition of excellence and innovation in upholding the highest standard of quality for the services we provide to our students and community.

PASADENA CITY COLLEGE GENERAL EDUCATION OUTCOMES

1. Communication: Use creative expression to communicate acquired knowledge or skills effectively.

Competencies:

1.1 **Reading:** Read and comprehend written material critically and effectively at the appropriate program level.

1.2 **Writing:** Write in a clear, coherent, and organized manner, at the appropriate academic level, to explain ideas; to express feelings; and to support conclusions, claims, or theses.

1.3 **Listening:** Listen actively, respectfully, and critically.

1.4 **Creative Communication:** Create or communicate through speech, music, art and/or performance.

2. Cognition: Use critical thinking skills to observe, analyze, synthesize, and evaluate ideas and information.

Competencies:

2.1 **Problem Solving:** Identify and analyze real or potential problems and develop, test, apply, and evaluate possible solutions, using the scientific method where appropriate.

2.2 **Critical Thinking and Application:** Formulate and apply knowledge, skills, ideas, and concepts to appropriate contexts.

2.3 **Quantitative Reasoning:** Apply appropriate mathematical concepts and methods to understand, analyze, and explain issues in quantitative terms.

3. Information Competency: Use research and technical skills effectively and ethically to achieve an objective.

Competencies:

3.1 **Information Literacy:** Locate, retrieve, and evaluate information using appropriate research tools.

3.2 **Research Proficiency:** Conduct research and present findings effectively and ethically including the use of correct source citations.

3.3 **Technological Literacy:** Apply technology effectively to locate, evaluate, interpret, organize, and present information using appropriate research tools.

4. Social Responsibility: Demonstrate sensitivity to and respect for others.

Competencies:

4.1 **Respect for Diversity:** Demonstrate an understanding of the beliefs, opinions, and values of other people and cultures.

4.2 **Effective Citizenship:** Demonstrate an understanding of the requirements for being an informed, ethical, and active citizen of the local community, California, the nation, and the world.

5. Personal Development: Demonstrate an understanding of practices that promote physical, psychological, and emotional well-being.

Competencies:

5.1 **Awareness of Mind and Body:** Demonstrate knowledge and practices that promote a sense of self as an integrated physiological, psychological, and social being.

5.2 **Aesthetic Appreciation:** Show an informed appreciation for artistic and individual expression.

FUNCTIONS OF THE COLLEGE

GENERAL EDUCATION

General education provides students with the knowledge, attitudes and skills needed to be effective individuals in our society. Pasadena City College has established graduation requirements that are intended to achieve the objectives of general education. In addition to class work, students are also encouraged to participate in student government, public and departmental forums, radio and television presentations, concerts, art gallery exhibits and other College-sponsored events.

COLLEGE TRANSFER

Students may qualify for transfer with Junior status to an accredited college or university if they follow the lower division pattern of study required of them by the four-year institution, and transfer with a minimum of 60 transferable units. Acceptance to a particular college or university depends upon conditions at the four-year institution, which are subject to change.

CAREER AND TECHNICAL EDUCATION

Career and Technical Education supports the expansion of area businesses and industries, and economic growth in the community by promoting educational programs, training, and services that contribute to a quality workforce.

Career and Technical Education provides leadership and coordination for all vocational education programs offered at Pasadena City College. PCC's many career programs prepare students for entry-level employment, as well as upgrading occupational skills for those already employed. The curricula are developed in coordination with industry advisory committees that provide input to ensure the training is consistent with industry standards. Responsibilities also include coordination of articulation between PCC's occupational programs and area high schools. The office administers federal programs for career and technical education and job training and manages special grants and projects related to occupational programs and economic development services.

See Section V for a list and details of PCC's CTE programs.

NONCREDIT EDUCATION

The College offers a variety of courses to meet the needs of students who do not desire or need to obtain college unit credit. The Community Education Center offers noncredit (state funded) classes, and Extended Learning offers not-for-credit, fee-based classes. These classes are open to the community and are designed to provide learning opportunities, for personal interest, cultural enrichment, and recreational enjoyment.

COMMUNITY EDUCATION CENTER

The Community Education Center (CEC) provides noncredit education, training, and services designed to continuously improve California's workforce such as small business development and entrepreneur programs. The Center offers vocational, technical, and academic courses including high school diploma program, GED, business office systems, printing technology, apparel skills, fashion retail, ESL, adult basic education, parent education, enrichment classes for seniors and disabled students, and a wealth of support programs. The cosmetology credit program is offered at the Center. The Community Education Center is a satellite center to the main campus, with shuttle services to and from the main campus every 20 minutes. It is located at 3035 East Foothill Boulevard, Pasadena, CA, 91107. For more information, call (626) 585-3000.

NOT-FOR-CREDIT EDUCATION AND CONTRACT EDUCATION

PCC COMMUNITY SERVICES CLASSES

PCC Extension offers community services classes for personal enjoyment and professional develop-

ment. Personal enjoyment classes include art, music, languages, photography, writing, yoga, exercise, and travel. Professional development classes focus upon skill building, workforce training and career exploration, and include numerous certificate programs. Community Education classes are taught in classrooms and online, are fee-based, and are self-supporting. For further information or to register go to pcclearn.org or call (626) 585-7608.

CONTRACT EDUCATION

PCC Contract Education makes available to business entities customized training programs, as well as classroom and online workforce training solutions, skill building, and career advancement for employees. For further information call (626) 585-7608.

PASADENA CITY COLLEGE FOUNDATION

Incorporated as a nonprofit, charitable, public-benefit foundation in 1979, the Pasadena City College Foundation exists to support the growth and development of Pasadena City College.

The PCC Foundation raises money, accepts donations, is the beneficiary of bequests, realizes interest income, and accepts designated in-kind gifts all of which benefit the college and enable it to better serve the students of the Pasadena Area Community College District.

The Board of Directors of the PCC Foundation is composed of citizens from the community and representatives of the college. The PCC Foundation is organized as a 501(c)(3) charity. For further information, please call (626) 585-7065.

DISCLAIMER

Pasadena City College has made every reasonable effort to determine that everything stated in the *Catalog* is accurate. Courses offered, together with other matters contained herein, are subject to change without notice by the administration of Pasadena City College for reasons related to student enrollment, level of financial support, or for any other reason, at the discretion of the college. The college further reserves the right to add, amend or repeal any of their rules, regulations, policies and procedures, consistent with applicable laws. The college reserves the right to change any provision in this *Catalog* at any time, with or without notice.

CATALOG

The *Catalog* provides students with the necessary information for planning their course of study. The *Catalog* is available online at: www.pasadena.edu.

The *Catalog* is available in alternate formats (Braille, enlarged text, e-text, etc.). Please contact the Disabled Student Programs and Services at (626) 585-3174 or Room D209.

PASADENA CITY COLLEGE
CATALOG
2017-2018

Admissions and Registration



SECTION I

ADMISSIONS AND REGISTRATION

STUDENT SUCCESS AND SUPPORT SERVICES

Matriculation is a process to help students in achieving their educational goal. Beginning Fall 2014 all first time freshmen shall be provided and participate in mandated core services as outlined in Senate Bill 1456 The Student Success Act of 2012:

1. Assessment Testing
2. Orientation
3. Education Plan on File

Students who complete all three activities will receive priority registration. Please see below for more information on possible exemption from services and how they impact registration priority. Appeal processes are available through the Associate Vice President of Student Affairs.

Appeal processes are available through the Associate Vice President of Student Affairs.

Who Participates?

All incoming students are encouraged to complete the three Student Success activities. We believe these activities enrich the student experience for anyone entering the college whether for the first time or after an absence. Depending on your background and educational goals, you may be exempt from some parts of the process; however, students choosing to be exempt from one or more of the activities are not considered to be “matriculated”, and are not eligible for priority registration.

Students who meet one or more of the following criteria may consider exempting themselves from one or more Student Success activity as noted:

1. I have completed an associate degree or higher;
2. I am enrolled at the college for a reason other than career development or advancement, transfer, attainment of a degree or certificate of achievement, or completion of a basic skills or English as a Second Language course sequence;
3. I have completed these services at another community college within a time period identified by the district (documentation required);

4. I have enrolled at the college solely to take a course that is legally mandated for employment as defined in section 55000 or necessary in response to a significant change in industry or licensure standards.
5. I have enrolled at the college as a special admit student pursuant to Education Code section 76001. (c) Any student exempted pursuant to this section from orientation, assessment, counseling, advising, or student education plan development shall be notified that he or she is covered by an exemption and may be given the opportunity to choose whether or not to participate in that part of the services.

Student Success and Support Activities

Orientation

Pasadena City College offers an online Orientation to familiarize students with important College policies and expectations, as well as the range of services and programs available. Go to: <https://www.pasadena.edu/admissions-and-aid/orientation/online-orientation.php> to begin (or go to the college website at www.pasadena.edu and search for orientation). Students will need their Lancer ID number to log in. This step must be completed before moving on to Assessment.

Assessment Services

Assessment Services administers a variety of tests, inventories, surveys, and other assessment instruments to provide current information about student achievement, abilities, and skills. Assessment testing is offered in the areas of Chemistry, English, English as a Second Language (ESL) and Mathematics. Our goal is to assist students and their counselors in making course selections by providing accurate information on a student’s current preparation through the use of multiple measures. Services also include competency testing in English and Mathematics for the A.A. and A.S. degrees. Assessment services are available for admitted and currently enrolled students and for applicants specifically referred for assessment. Pasadena City College assessment exam results are valid for two years. All first-time college students are required to take the place-

ment exam. The New Student Online Orientation must be completed before testing at <https://www.pasadena.edu/admissions-and-aid/orientation/online-orientation.php>.

Importance of Assessment Exam: Taking an assessment exam is very important because it will assist students and their Counselor in identifying the appropriate level of Chemistry, English, ESL and Math courses they should enroll in at PCC. Students should review *before* taking a placement exam so they can become familiar with the exam format and what to expect on the exam. Review materials are available on the Assessment website at www.pasadena.edu/placement. Pre-Assessment Workshops and Study Sessions (PAWS) are available to assist students with preparing for the exam. Please visit the Learning Assistance Center website at www.pasadena.edu/student-services/lac/ or call 626-585-7230 for further information.

Items to Bring For Assessment

New and Returning Students

1. A valid photo ID (driver's license, State ID, high school ID, passport, etc.).

Please note: no photocopies of identification will be accepted.

2. LancerPoint ID #
3. Pencil

Continuing Students

1. PCC LancerPoint ID Card
2. Pencil

Policies

Course Enrollment Policy

The assessment exams are designed for initial placement in a course sequence for Chemistry, English, ESL and Math courses. Once a student is enrolled in the course, the professor's evaluation and grade will determine whether or not a student advances to the next level. **Students may not retest to challenge or skip a course in a sequence.**

Retest Policy

Students must wait a minimum of eight weeks to retake the assessment exam. Exams may be retaken once in a one-year period.

Assessment and Counseling

If you are in good standing, are not enrolled in pre-collegiate basic skills courses, are not seeking admission to a selective program, and meet either one of the following criteria, you are exempt from both the counseling, advisement and assessment components:

1. Have a bachelor's or higher degree from a regionally accredited educational institution; or
2. Have an educational goal of "educational development/personal development/interest" **AND** enroll in courses with no prerequisites **AND** enroll in 6 units or fewer.

Testing

Assessment testing may be waived if you have a recent (taken within one year) comparable or equivalent test score which the College accepts. Please present documentation of test scores to the Assessment Office for consideration.

Optional Initial Placement in Courses

Although assessment exams are offered, students seeking initial placement in a sequence of courses are strongly advised to participate in the assessment process, in which a counselor will help evaluate skills, experience, aptitudes, and motivation. Based on information such as the student's goals, high school grades, test scores, work experience, and other measures, the counselor will recommend placement at the level which meets the student's needs and in which he or she has a reasonable chance of success.

Prerequisite/Corequisite Enrollment Limitation

What are Prerequisites?

A prerequisite is a specific level of preparation that students must demonstrate before taking certain courses. In most cases, either assessment results or a course from PCC or another community college will satisfy the prerequisite requirement. Courses must be completed with a minimum grade of "C" to satisfy the prerequisite requirement. Students must present documentation of having completed a prerequisite course at another college, to the Prerequisite Office prior to registration. If the prerequisite course was taken at PCC, the prerequisite requirement will be automatically cleared.

Challenge Process

A student may file the "Pasadena City College Prerequisite/Corequisite/Enrollment Limitation Challenge," with supporting documentation, if he or she believes one or more of the following:

1. The student has the knowledge or ability to succeed in the course or program despite not meeting the prerequisite or corequisite.
2. The student will be subject to undue delay in attaining his/her educational goal because of the enrollment limitation or because the prerequisite or corequisite course has not been made reasonably available.

3. The prerequisite, corequisite, or limitation on enrollment has not been established in accordance with applicable PCC policies and procedures.
4. The prerequisite or corequisite is in violation of Title 5, Sections 55002 and 55003 of the California Code of Regulations.
5. The prerequisite, corequisite, or enrollment limitation is either unlawfully discriminatory or is being applied in an unlawfully discriminatory manner.

Challenge forms are available on the PCC website at <http://pasadena.edu/academics/support/counseling/academic-planning/prerequisite-clearance.php>, in the Counseling Office (room L104) or the Prerequisite Office (L103D). The student bears the initial burden of showing that grounds exist for the challenge. The challenge will be resolved in a timely manner, and if it is upheld, the student will be permitted to enroll in the course or program in question, provided that space is available. It is to the student's advantage to file the form early to retain as much registration priority as possible. **The student should review the challenge form itself for more detailed information and required procedures.**

Please bring the form to the Prerequisite Office, L103D, or fax it to (626) 585-7187 with the appropriate documentation. Forms received without documentation will be denied.

New Student Group Counseling (Develop a Student Educational Plan)

The third and final Student Success activity for new students is to attend a New Student Group Counseling session. This three-hour session with counselors will prepare you to select courses for your first semester, start your Student Educational Plan, learn more about Financial Aid and the importance of academic progress, about the resources available to you on campus and more. Schedule your Group Counseling session on the college website at: <http://pasadena.edu/academics/support/counseling/academic-planning/new-students.php> or contact the counseling Office in L104. Email questions to counselingdesk@pasadena.edu.

ADMISSIONS

Scholastic Requirements for Admission

Students who are high school graduates or the equivalent (GED, California High School Proficiency Examination), or who are 18 years of age or older and can profit from the instruction offered, may attend Pasadena City College. Certain two-year curricula have special admission require-

ments (See Curriculum section). Students who are under 18 but have graduated from high school or earned the equivalent (GED, CHSPE) must provide documentation of high school completion to the Admissions Office. Acceptable proofs include a high school transcript with graduation date posted (official or unofficial), GED completion certificate that certifies completion of all areas, or the certificate of completion from the California High School Proficiency Exam.

Application for Admission

All prospective students must submit a completed and signed admissions application. The application is available online through the college website (<http://pasadena.edu/get-started/>) and in paper format for applicants under age 13 or who are unable to complete the online version. Returning students with a lapse of two consecutive primary terms (Fall and Spring semesters) must submit a new application. Once submitted, the application and any submitted supporting documents become the permanent property of the College and will not be returned to the applicant.

- a. Each person is expected to complete and sign his or her own application, and to provide true and accurate information. Deliberate falsification of information may result in disciplinary action.
- b. Each person will be classified as a resident or non-resident for admission and tuition purposes based on the admissions application. (See BP 5015, AP 5015, BP 5020 and AP 5020 for information on residency determination and non-resident tuition.)
- c. Persons who possess or are applying for an F1 or M1 student visa may only be admitted upon submission of a completed International Student Application packet. Holders of F1 or M1 student visas must be classified as non-residents for tuition purposes.
- d. Specific admission requirements and limitations apply to minors who are concurrently enrolled in a K-12 school, and those who are no longer attending a K-12 school. See AP 5011 for more information on admission of minors to the college.

Applications generally open on or about October 1st for Winter and Spring terms, December 1st for Summer and Fall terms. Consult the college website for exact dates. Once an application is processed, students will receive an email providing their Lancer ID number and instructions for activating their Lancerpoint account and college email. This is a critical step for all students to complete as information regarding their financial aid, academic standing, waitlisted classes, registration issues and more are communicated only through Lancerpoint and PCC email.

First-time students are encouraged to complete the Student Success activities of online orientation, assessment and New Student group counseling in order to receive an early registration appointment. First-time students includes recent high school graduates even though they may have taken classes at PCC while in high school, and others who are age 18 or older and have never attended Pasadena City College even if they have attended other colleges or universities (first time transfer students). Please see "Student Success and Support Services" at the front of this section for more information.

Returning students are those who have attended Pasadena City College in the past but have not attended in a year or more. Returning students need to reapply for admission, will receive the email verifying their Lancer ID and providing instructions to reactivate their Lancerpoint account and college email. They may also need to complete one or more of the three Student Success activities if those activities were not completed in the past or if their assessment test results have expired.

Concurrent Enrollment Students

Pasadena City College may admit minors who demonstrate that they can benefit from advanced scholastic and/or career technical education to take college-level courses that are not available through their primary school or other alternatives. Minors may be permitted to take college courses under very specific circumstances and in most cases are expected to also maintain minimum day attendance at a K-12 school.

All K-12 students seeking to attend Pasadena City College as concurrent or dual enrollment students must do the following:

- a. Apply online for admission to the college; except that students age 13 and under must submit a written application for admission to the college Admissions and Records office;
- b. Submit all required completed, signed "Recommendation for Admission of Selected Students" paperwork to the Admissions and Records Office at Pasadena City College or one of its instructional sites prior to registration;
- c. Submit a current high school transcript with the "Recommendation for Admission" paperwork;
- d. Registration for K-12 and other young students occurs after DSPS, EOPS, Veterans, continuing and new and returning students have registered.
- e. The per-unit enrollment fee and student representation fee will be waived for all K-12 and other young students who are enrolled in 11 or fewer units in any one term. Nonresident tuition, health, student activity and materials fees (if applicable) are not waived; however, students

may be eligible for exemption from payment of nonresident tuition pursuant to the provisions of California Senate bills SB 149 and SB 150. Contact the Admissions and Records Office for more information and the petition forms.

Students admitted under this provision are subject to the same college regulations, policies and procedures that apply to regularly enrolled community college students, including but not limited to standards for attendance and scholarship. Courses attempted, units and grades earned will be recorded in an official student record.

Students admitted under this provision are not eligible to receive Title IV Federal Financial Aid. See AP 5011 for more information regarding the admission of minors for concurrent or dual enrollment.

Open Enrollment Policy

It is the policy of Pasadena City College that, unless specifically exempted by statute, every course supported by state funds shall be open for enrollment to any person who has been admitted to the College, except that students may be required to meet prerequisites established pursuant to Title 5 of the California Code of Regulations (Sections 55200-55202).

Each class is allowed a maximum number of students which is based on the special nature of the course and/or physical limitations of the facilities. Whenever pre-enrollment in such a class reaches this number, the class is designated as "closed." Admission to the College does not guarantee space in any class.

Many, not all, classes have Wait Lists. Students may choose to be placed on a Wait List when registering for the term. If a space in a closed class opens prior to the start of the class, waitlisted students are contacted by email in priority order based on the date they registered on the wait list, and advised to enroll in the class within 48 hours from the time the email was sent. If the 48-hour window is missed the student will be removed from the Wait List. Students remaining on the Wait List must attend the first class meeting to find out if space becomes available. If so, students obtain an Add Code from the instructor and add/register for the course prior to the late add deadline.

Counseling – Room L104, (626) 585-7251

Students have access to the counselor of their choice. Each counselor is well-informed in fields such as art, business, engineering, liberal arts, life sciences, mathematics, music, kinesiology, physical sciences, social sciences, and Career & Technology Education. Counselors can advise students regarding educational plans, career goals and personal problems. They interpret tests and analyze interests, abilities, failures and successes. Although counselors as-

sist in long-range planning and in checking specific requirements, *the responsibility for meeting graduation requirements, course prerequisites or requirements for transfer to other colleges or universities is one which must be assumed by each student.* In the counseling offices, as well as the College Library and the Transfer Center, students have access to a reference library of catalogs from various colleges and universities.

REGISTRATION

All students receive a registration date. Students register by using the online LancerPoint system. For information concerning the registration process, consult the current semester schedule of classes which is available within the LancerPoint system.

Registration Priority

Registration priority is determined by numerous factors as identified in Board Policy and Administrative Procedure 5055, which can be accessed through the college website. Students who are on two consecutive terms of probation, or who have completed 100 or more units at PCC (not counting ESL and basic skills classes in math and English) will lose registration priority but may appeal to reinstate it. The petition for Reinstatement of Enrollment Priority may be downloaded from the website Petitions page, and submitted to the Admissions and Records Office.

Changes in the Student's Schedule

Students should exercise great care when planning their semester schedules. If a schedule change is unavoidable, required procedures must be completed before the change becomes official. Courses critical dates are listed in the online class schedule.

Adding Courses

Students may add courses only during the course official "Add" period, subject to Course limitation and restrictions, by following required procedures.

Dropping Courses

A student may drop courses during the course official "Drop" period. Courses dropped prior to course census date will not appear on the student transcript, courses dropped after census date will appear on the student transcript with a "W". All withdrawals/drops must be initiated prior to the end of the 12th week of a full term course. The final drop deadline for short-term classes falls at 75% of the total number of class meetings (e.g. for a class that meets a total of 16 times, the final day to drop falls on the day of the 12th class meeting). Specific deadline dates

are available in the Schedule of Classes at www.pasadena.edu. **It is the student's responsibility to officially drop courses he/she is no longer attending, Students must clear all obligations to the college prior to withdrawal. If a course is not officially dropped, the student may receive an "F" for the course.**

Withdrawal from a class after the drop deadline (late withdrawal) shall be authorized in the event of extenuating circumstances. Extenuating circumstances are verified cases of accidents, illnesses, or other circumstances beyond the control of the student. Should a verified condition require a withdrawal after the final drop deadline, a student may petition to the Admissions and Records Office. Petitions will be considered based on the submission of verifiable documentation in support of the extenuating circumstances, and the dates of the circumstances must be relevant to the term and date for which a late withdrawal is requested.

In the case of a petition for late withdrawal based on medical circumstances (illness or injury), students must present documentation that clearly identifies the timing and severity of the illness or injury. A medical circumstances withdrawal will apply to all courses in a term, will result in "W" grades being awarded for all classes, and will not generate a refund. A partial withdrawal for medical circumstances will apply only to Dance/Kinesiology activity courses.

Military withdrawals shall be authorized when a student who is a member of an active or reserve United States military service receives unexpected orders compelling a withdrawal from courses. A copy of the orders must be submitted to the Admissions and Records office. Military withdrawals shall not be counted in progress probation and dismissal calculations.

Academic or Administrative Drop

- a. Drop for Absenteeism – Students who fail to attend the first class meeting are considered "no shows" and may be dropped. Excessive, continuous or cumulative absence may also result in being dropped. Students must make arrangements with instructors prior to any planned absences from class.
- b. Drop for Unsafe Performance – A student whose classroom, clinical, or laboratory actions are dangerous to the health or welfare of the student or other persons may be dropped from the class.
- c. Drop for Unsatisfactory Conduct or Citizenship – A student may be dropped from class for unsatisfactory conduct or citizenship related to the class. This includes, but is not limited to, conduct in a classroom or other setting such as a laboratory, clinic, or work station. Unsatisfactory conduct or citizenship includes, but is not limited to, cheating, plagiarism, other forms of academic dishonesty, flagrant

violation of instructor direction, and actions disruptive to the on-going teaching and learning process.

A student subject to class drops for condition(s) noted in (b) or (c) above will be counseled by the instructor and the school dean and given a chance to improve, except when the violation is so flagrant that immediate suspension from class is in order.

If a student is counseled for improvement but there is insufficient improvement in the judgment of the instructor and the dean, or if immediate suspension appears to be in order, a signed class drop form and a written report on the incident will be submitted to the Director of Admissions and Records. The Director of Admissions and Records will obtain and review information available and take action deemed appropriate. The Director of Admissions and Records will inform the student of due process rights if the class drop or other discipline is imposed.

Continuous Enrollment

For purposes of admissions and registration, students maintain continuous enrollment by being enrolled in a minimum of one class on the census day for the class for both Fall and Spring semesters.

For purposes of meeting IGETC or CSU General Education Certification, continuous enrollment is defined as attending PCC at least one semester during each academic year without missing two consecutive semesters.

Change of Address

Any changes in contact information must be reported immediately. Update contact information online through your LancerPoint account. Students must go to the Admissions and Records Office (L113) to change their permanent address. Proof of current address must be provided.

Study Load Regulations

Maximum Load

Full-time students are expected to carry 15 units per semester for normal progress. Those who would like to take more than 19.3 units per semester may submit a Special Circumstance Student Petition form to request more units online to petition@pasadena.edu or to the petitions drop box outside the Admissions and Records Office (L113). Ordinarily, such petitions will not be considered unless the student's cumulative GPA is 2.0 or above.

Students on probation are limited to 12 units during the Fall and Spring semesters. Such students should speak with a counselor frequently regarding progress and further program limitations.

Concurrently enrolled high school students are limited to 9 units during Fall or Spring semesters and 6 for Summer sessions.

Maximum credit in field practice or similar courses is 16 units with no more than one course enrollment per semester.

The maximum load for the Summer session is 8.3 units.

Each unit of community college work is approximately three hours of recitation, study or laboratory work per week in a semester-length course. All students are expected to devote the full time indicated above for each unit of work. Students employed part time are advised to limit their college program accordingly. It is recommended that the total of college and work hours not exceed 60 hours per week.

The following is a suggested guideline:

College Academic Load	Hours of Employment per Week
15 Units	15 Hours
12 Units	24 Hours
9 Units	33 Hours
6 Units	40 Hours

Minimum Load

The college does not specify a minimum load except when the student desires to meet certain requirements such as those below.

1. Certification that a student is attending full time. Requirement: 12 or more units in a Fall or Spring semester.
2. Full-time load to maintain status as an F-1 visa (international) student. Requirement: 12 or more units per Fall or Spring semester.
3. Eligibility to participate in California Community College intercollegiate athletics. Requirement: Be enrolled in 12 or more units during the season of competition, complete 24 units between each season of competition in that sport and maintain an overall grade-point average of 2.000. Contact the Director of Kinesiology, Health and Athletic Division or the Assistant Dean, Student Affairs, for additional California Community College and/or conference requirements.
4. Eligibility to participate in student government as an office holder. Requirement: Be enrolled in 9 or more units in the Fall or Spring semester of participation, and have an overall 2.000 grade-point average.

Summer Session Load

To determine the equivalent semester unit load for certification purposes during Summer session, multiply the number of Summer units for each course taken by 16 and divide by the number of weeks the class meets. Add the

calculated equivalent units. This result may be compared to the units required during a Fall or Spring semester to determine the equivalent Summer load.

Student Classification:

Freshman, first semester: fewer than 15 units of college credit.

Freshman, second semester: at least 15 units of college credit and fewer than 30.

Sophomore, first semester: at least 30 units of college credit and fewer than 45.

Sophomore, second semester: 45 to 60 units of college credit.

PREREQUISITES, COREQUISITES, LIMITATIONS ON REGISTRATION AND ADVISORIES

PLAN AHEAD! All prerequisites, corequisites, and limitations on enrollment stated in the course descriptions listed in this *Catalog* will be strictly enforced at the time of registration. Students who do not meet the prerequisite requirements according to College records will not be permitted to register for the course. Students who believe they have met the prerequisite at another institution are strongly advised to have all transcripts of prior college work evaluated and on file well in advance of registration to minimize registration delays.

Note: Unofficial transcripts are accepted for prerequisite clearance.

Initial Placement in Courses

Students seeking initial placement in a sequence of courses are strongly advised to participate in the assessment process, in which a counselor will help evaluate skills, experience, aptitudes, and motivation. Based on information such as the student's goals, high school grades, test scores, work experience, and other measures, the counselor will recommend placement at the level which meets the student's needs and in which he or she has a reasonable chance of success.

Prerequisites/Corequisites/Recommended Preparation

A "prerequisite" is a condition of enrollment, such as successful completion of another course (with a grade of A, B, C, or P), that must be met BEFORE a student can register for a course or an educational program. Successful completion of a prerequisite demonstrates readiness for the subsequent course or program. By meeting the prerequisite, the student shows that he or she

knows certain skills, concepts, and/or information without which the college considers success in the subsequent course or program highly unlikely.

A "corequisite" is a course in which a student is required to enroll *at the same time* that he or she is enrolled in another course. In the corequisite course, the student acquires certain skills, concepts, and/or information without which the College considers success in the concurrent course highly unlikely.

A "recommended preparation" statement in a course description means that a student is advised, but not required, to complete the identified course(s) prior to enrollment in another course or educational program. The skills, concepts, and/or information gained in the "recommended preparation" in another course or educational program will prepare students for success in the subsequent course or program.

All prerequisites, corequisites, and recommended preparation statements listed in the course descriptions are periodically reviewed. Students – especially those new to Pasadena City College – should consult the Schedule of Classes and Counseling Services for the most current information. Students are expected to meet valid and necessary course prerequisites and corequisites.

Prerequisite/Corequisite Enrollment Limitation Challenge Process

A student may file the "Pasadena City College Prerequisite/Corequisite/Enrollment Limitation Challenge," with supporting documentation, if he or she believes one or more of the following:

1. The student has the knowledge or ability to succeed in the course or program despite not meeting the prerequisite or corequisite.
2. The student will be subject to undue delay in attaining his/her educational goal because of the enrollment limitation or because the prerequisite or corequisite course has not been made reasonably available.
3. The prerequisite, corequisite, or limitation on enrollment has not been established in accordance with applicable PCC policies and procedures.
4. The prerequisite or corequisite is in violation of Title 5, Sections 55002 and 55003 of the California Code of Regulations.
5. The prerequisite, corequisite, or enrollment limitation is either unlawfully discriminatory or is being applied in an unlawfully discriminatory manner.

Challenge forms are available in the Counseling Office (room L104) or the Advising Center (L103D). The student bears the initial

burden of showing that grounds exist for the challenge. The challenge will be resolved in a timely manner, and if it is upheld, the student will be permitted to enroll in the course or program in question, provided that space was available at the time the challenge was filed. It is to the student's advantage to file the form as soon as he or she becomes aware of the alleged grounds for the challenge. The student should review the challenge form itself for more detailed information and required procedures.

A link to the Prerequisite Challenge Form can be found at:

<http://www.pasadena.edu/admissions/registration/procedures/index.cfm>. Submit the completed form to Advising, L103D, or fax it to (626) 585-7187 with the appropriate documentation. Forms received without documentation will be denied.

RESIDENCE DETERMINATION

A student who does not qualify as a resident according to the policies and procedures described herein, must pay nonresident tuition at the rate per unit in effect for the term the student plans to attend. It is the student's responsibility to read and adhere to the following rules and procedures for residence determination as set forth in the applicable laws and regulations.

A student seeking reclassification from nonresident to resident status must complete a Supplemental Residency Questionnaire (available in the Admissions and Records Office, L113) and attach legible copies of documents in support of the claim for resident status. *The questionnaire and all supporting documentation must be submitted to the Admissions and Records Office (room L113) as early as possible to avoid delays in processing. (The residence determination date for a given semester or session is the day before the semester or session opening date.)* Additional information may be required during the residency review. The burden of proof is on the student to prove that California residence has been established.

Students classified incorrectly as residents or incorrectly granted an exception from nonresident tuition are subject to reclassification as nonresidents and payment of nonresident tuition in arrears. Applications for a change in classification with respect to a previous term are not accepted.

After a final decision on residency classification is made, a student may appeal by completing a Special Circumstance Student Petition to the Director of Admissions and Records (room L113) within 30 days.

General Summary of Residency Rules

Students are cautioned that the following statement of the rules regarding residence determination is not a complete discussion of the law, but a summary of the principal rules and their exceptions. Students should also note that changes may have been made in policies, statutes and regulations between the time this information is published and the applicable residence determination date. For the text of relevant laws and regulations, refer to the California Education Code Civil Code Section 25.1 and to California Code of Regulations, Title 5.

The State of California requires the following before a student may be classified a resident for tuition purposes: (1) any applicant who has lived in California for less than two years must be required to show documentation of physical presence and actions of intent as defined herein; (2) evidence of one year's physical presence in California prior to the residence determination date; (3) evidence (in the words of the state, "objective manifestations") of one year's intent to make California the home for other than a temporary purpose (the "permanent residence") prior to the residence determination date; and (4) for any student seeking reclassification from nonresident to resident status, evidence of financial independence from any nonresident of California.

A student classified as a nonresident cannot be reclassified as a resident merely because he or she has maintained continuous attendance for one year at a California institution while paying nonresident tuition. The student must meet all three criteria of presence, intent and financial independence.

For an adult student (e.g., a student 18 years of age or older) the evidence produced in support of the claim for California residence must apply directly to the student. That is, the name of the student must appear on the documents submitted. Documentation pertaining to parents, other relatives, or friends is not sufficient. If the student's residence is legally derived from (and thus is the same as) that of another person (see below), the evidence produced must apply to that other person.

Spouses

A person's residence is not derived from that of his or her spouse; each person must establish residence separately.

Minors

The residence of a minor is determined in accordance with the following:

1. The residence of the natural or legally adoptive parent with whom an unmarried minor lives is the residence of that minor, regardless of the length of time the minor has resided with that parent. This rule applies equally to the minor child of permanently separated parents.

2. A married minor may establish his or her own residence. A minor who was married but thereafter divorced, retains the capacity to establish his or her own residence. A minor whose marriage has been annulled must be treated as an unmarried minor since for all intents and purposes a marriage has not occurred.
3. If the minor lives alone, he or she takes the residence status of the parent with whom he or she last lived.
4. If both parents are deceased and there is no court-appointed guardian, the minor may establish residence as though he or she were an adult.
5. The residence of an unmarried minor who has a parent living cannot be changed by the minor's own act, by the appointment of a legal guardian, or by relinquishment of a parent's right of control.
6. A student who has been an adult for less than a full year (e.g., one under 19 years of age) may under certain circumstances combine the immediate pre-majority derived California residence with the immediate post-majority California residence to satisfy the one year necessary for resident classification.

Meeting the Criteria of Presence and Intent

The burden is on the student to demonstrate clearly both physical presence in California and intent to establish permanent California residence. Presence and intent may be manifested in many ways - no one factor is controlling - but all those ways fall into two main categories.

1. An individual who is **19 years of age or over**, and who can provide sufficient evidence that he or she has maintained a home in California continuously for the two years prior to the residence determination date, and has not been a student during the two years, is presumed to have met the presence and intent criteria, unless the individual has taken any action inconsistent with the claim of intent as described below.

An individual who is under **19 years of age** is presumed to have met the presence and intent criteria if both the individual and his or her parents can show that they have resided in California continuously for the two years prior to the residence determination date, unless the student has taken any action inconsistent with the claim of intent as described below. Evidence of two continuous years residence of a home in California can take the same form as evidence of presence and intent as described below. However, the documents presented must show continuity over the two-year period.

2. Students who are not in the "two-year" category described above must present evidence of one year's presence and intent. A list of acceptable items is

available in the Admissions and Records Office. Some examples of such items include: California state income tax form, voter registration, driver's license, or automobile registration; active resident membership in a California professional, service, or social organization; and utility deposit or installation receipts. The more of these items presented, and the higher their relative weight, the stronger the case for classification as a California resident becomes. All documents presented must be valid, readable, dated at least one year before the residence determination date, and properly identified with respect to student name and address.

Actions inconsistent with a claim of intent to remain a permanent California resident will be counted against that claim. Such actions include, but are not limited to, doing the following in a state other than California: registering to vote, entering into a legal agreement, attending an educational institution as a resident of the other state or maintaining a driver's license or automobile registration in another state. In some cases, financial independence may also be considered in the evaluation of intent as indicated below.

Meeting the Criterion of Financial Independence

In addition to meeting the presence and intent criteria as outlined above, the student seeking reclassification from nonresident to resident status must show financial independence from any nonresident of California according to guidelines set forth by the State of California. In order to establish financial independence, a student seeking reclassification must show the extent to which he or she has met the following criteria for the current and each of the immediately preceding three calendar years:

1. That the student has not been claimed as an exemption for state and federal tax purposes by his or her nonresident parents;
2. That the student has not received more than \$750 from his or her nonresident parents; and
3. That the student has not lived in the home of his or her nonresident parents for more than six weeks in any given year.

Inability to prove all the financial independence criteria for the entire period will not necessarily result in classification as a nonresident if the showing of one year's presence and intent is sufficiently strong. However, a student who is unable to satisfy all three financial independence criteria for the current and immediately preceding calendar years will be classified as a nonresident, since financial independence is of greater significance for those years. Financial independence for the second and third calendar years immediately preceding the year in which reclassifi-

cation is requested will be considered together with all other relevant factors in determining intent, with no special weight attached to the financial independence factor.

Evidence of financial independence may be presented in the form of (1) affidavits signed by student and parent indicating the extent to which the three criteria listed above have been met, and (2) copies of the federal and state income tax returns filed by student and/or parent for the current and any applicable preceding calendar years.

Exceptions

There are several exceptions to the laws regarding residency. If it appears that any of these exceptions might be applicable, the student should discuss the matter with the Associate Dean of Admissions and Records or designee. In any case where an exception is claimed, proper documentation of the basis for that claim must be presented. Some of the exceptions follow:

- A. A minor student remaining in California, whose parent has established residence outside California within one year prior to the residence determination date and had legal California residence for at least one year before leaving, is entitled to resident classification until the student has attained the age of majority and has resided in the state the minimum time necessary to become a resident, so long as, once enrolled, the student maintains continuous attendance at an institution.
- B. A student under 19 years of age on the residence determination date who has been entirely self-supporting for more than one year immediately preceding that date and who can meet the regular adult presence and intent criteria outlined above is entitled to resident classification until the student has resided in the state the minimum time necessary to become a regular adult resident.
- C. A minor student is entitled to resident classification if, immediately prior to enrolling at an institution, the student has lived with and has been under the continuous direct care and control of any adult or adults, other than a parent, for a period of not less than two years, provided that the adult or adults having such control have had legal California residence during the year immediately prior to the residence determination date. This exception continues until the student has resided in the state the minimum time necessary to become a resident, so long as continuous attendance is maintained at an institution.
- D. A student who is an adult alien is entitled to resident classification if the student has been lawfully admitted to the United States for permanent residence in accordance with all applicable laws of the United States, provided that the student has met all the legal requirements for California resi-

dence for more than one year after such admission and prior to the residence determination date. In other words, the one-year period for showing presence and intent cannot begin until the date lawful admission for permanent residence is established. (Holders of valid A, E, G, H-1, H-4, I, K, L, N, NATO, O-1, O-3, R, T, U or V visas should contact the Associate Dean of Admissions and Records or his or her designee regarding their residence status.)

- E. A student who is a minor alien is entitled to resident classification if both the student and his or her parent have been lawfully admitted to the United States for permanent residence in accordance with all applicable laws of the United States, provided that the parent has met all the legal requirements for California residence for more than one year after such admission and prior to the residence determination date. (Holders of valid A, E, G, H-1, H-4, I, K, L, O-1, R and V visas see note under "D" above.)
- F. A student who was admitted to the United States as a refugee, asylee or parolee and produces proper documentation of that status and who produces appropriate evidence of having met the presence and intent criteria described above may be entitled to resident classification.
- G. A student who is a full-time employee of a California public institution of higher learning or whose parent or spouse is such a full-time employee may at the option of the institution which the student proposes to attend be entitled to resident classification until the student has resided in the state the minimum time necessary to become a resident.
- H. A student who left California due to a job transfer made at the request of the employer of the student or the employer of the student's spouse, or in the case of a student who resided with and was a dependent of his or her parent, made at the request of the parent's employer; who was absent from California for less than four years; and who would qualify as a resident if the period of absence was disregarded may be entitled to resident classification.
- I. Other exceptions pertain to certain members of the armed forces and their dependents, apprentices (as defined in Labor Code Section 3074-3077), certain agricultural laborers, and certain employees of California public schools. More detailed information about these categories is available in the Admissions and Records Office. Students seeking additional information concerning residence requirements for tuition purposes should contact the Admissions Office, room L113, or the Associate Dean of Admissions and Records or designee.

California Nonresident Tuition Exemption (AB 540)

Any student, other than a nonimmigrant alien, who meets all of the following requirements, shall be exempt from paying nonresident tuition at the California Community Colleges, the California State University and the University of California (all public colleges and universities in California):

1. The student must have attended a high school (public or private) in California for three or more years.
2. The student must have graduated from a California high school or attained the equivalent prior to the start of the term (for example, passing the GED or California High School Proficiency exam).
3. An alien student who is without lawful immigration status must file an affidavit with the college or university stating that he or she has filed an application to legalize his or her immigration status, or will file an application as soon as he or she is eligible to do so.

Students who are nonimmigrants (for example, those who hold valid F [student] visas, B [visitor] visas, J [exchange visitor visas], etc.) are not eligible for this exemption.

The student must file an exemption request including a signed affidavit with the college that indicates the student has met all applicable conditions described above. Student information obtained in this process is strictly confidential unless disclosure is required under law.

Students eligible for this exemption who are transferring to another California public college or university must submit a new request (and documentation if required) to each college under consideration.

For procedures on requesting the exemption from nonresident tuition at Pasadena City College, please contact the Admissions and Records Office or go online to PCC's website and search for AB540.

(SB 150)

Any special part-time student, other than a nonimmigrant alien, who meets all of the following requirements, shall be exempt from paying nonresident tuition at Pasadena City College.

1. The student must be residing in California.
2. The student must be attending a high school (public or private) in California.
3. The student must be enrolled as a special part-time student in 11.99 or fewer units per semester.
4. The student must be recommended by the principal of the pupil's school and have parental permissions to attend a community college.
5. This exemption does not apply to special full-time students

6. This exemption does not apply to nonimmigrant alien other than "T" and "U" nonimmigrant visa.

A student receiving a nonresident tuition exemption under SB 150 does not receive resident status. The district shall not claim apportionment funding under this Provision.

(SB 141)

1. Any student who is a U.S. citizen and who resides in a foreign country, who meets all of the following requirements, shall be exempt from nonresident tuition:
 2. Demonstrates a financial need for the exemption.
 3. Has a parent or guardian who has been deported or was permitted to depart voluntarily under the federal immigration and Nationality Act.
 4. Moved abroad as a result of the deportation or voluntary departure.
 5. Lived in California immediately before moving abroad.
 6. Attended a public or private secondary school in California for three or more years.
 7. Upon enrollment, the student will be in their first academic year as a matriculated student in California public higher education.
 8. Will be living in California and will file an affidavit with the community college stating that he or she intends to establish residency in California as soon as possible.
 9. Documentation shall be provided by the student required by statute as specified in the Education Code section 76140(a)(5).

A student receiving a nonresident tuition exemption under SB 141 does not receive resident status. The district is authorized to claim apportionment funding under this Provision.

Military Exemption

- A. A nonresident member of the Armed Forces of the United States stationed in California on active duty (except those assigned for education purposes to state-supported institutions of higher education) and their eligible dependents are exempt from paying nonresident tuition until they are no longer stationed in California or discharged from their military service.
- B. A nonresident member of the Armed Forces of the United States stationed in California on active duty for more than one year immediately prior to being discharged shall be exempt from paying nonresident tuition for up to one year (The one-year exemption shall be used by the student within two years of being discharged) if he or she files an affidavit stating that he or she intends to establish residency in California as soon as possible.

- C. A student or prospective student and their eligible dependents who are using, or are intending to use, "GI Bill education benefits" may be exempt from paying nonresident tuition while enrolled as a student.

Former members of the Armed Forces of the United States who received a dishonorable or bad conduct discharge shall not be eligible for an exemption

Residence Categories

Applicants for admission are divided into the following categories:

1. Applicants whose legal residence is in the Pasadena Area Community College District. This consists of the following school districts: Arcadia, a portion of El Monte, San Gabriel, La Cañada Flintridge, Pasadena, Rosemead, San Marino, South Pasadena and Temple City.
2. Applicants whose legal residence is in California but not within the area of a California community college.
3. Applicants whose legal residence is within another California community college district.
4. Applicants who do not qualify as legal California residents for tuition purposes and are determined to have nonresident status. Such applicants will be required to pay nonresident tuition fees.

International Students – (F-1 Visa Status Students)

The policy of the Board of Trustees of the Pasadena Area Community College District is that provision of an adequate program for international students on campus makes a significant contribution to the education of students at the college and the promotion of international understanding in the community and throughout the world.

Under federal law of the United States, Pasadena City College is authorized to enroll non-immigrant alien students on F-1 student visas for the first two years of an accredited Baccalaureate Degree program. Admission is subject to the requirements stated below and to the approval of the Assistant Director, International Student Office. An international student interested in applying should write to the International Student Office for application materials, or access the college website (www.pasadena.edu/internationalstudents).

All transcripts (submitted in English translation if the original is in another language), English language test results and other required documents must be on file in the International Student Admissions Office by the deadline dates (please see the ISO website for deadline dates).

All F-1 visa students are subject to nonresident tuition as set by the PCC Board of Trustees. Current tuition rates may be obtained from the Office of Admissions and Records, or the College website (www.pasadena.edu). F-1

visa student must carry illness and accident insurance purchased through Pasadena City College.

A. Admissions Requirements for Admission in F-1 Visa Status

1. General – All Applicants

- a. An applicant must have English language ability adequate to enable the student to profit from instruction at the college level. An international student is not admitted solely for special training in English. Adequacy of English proficiency is determined by a satisfactory score on the Test of English as a Foreign Language (TOEFL), administered worldwide by the Educational Testing Service, Box 899, Princeton, New Jersey 08540; if the test is not available in the applicant's area, results of a standardized test administered at a U.S. consulate may be substituted. PCC also accepts the STEP Test, Level 2, and International English Language Testing System (IELTS) 4.0 minimum score.
- b. An applicant must offer evidence of academic achievement equivalent to an American high school education.
- c. An applicant must present evidence of financial resources to cover costs during the period of attendance at the college. Estimated costs include: nonresident tuition fee of \$4,560 (24 units); enrollment and other fees, \$1,492; health and accident insurance, \$876; living expenses, \$10,000; textbooks and supplies, estimated at \$572, for a total of about \$16,500 per year. Students should anticipate increases each year. Fees are due at registration. The above figures do not include the Summer session.

2. Limitations and Exceptions

- a. An international student attending by another collegiate institution in the United States must obtain a SEVIS Record release from the other collegiate institution before acceptance to Pasadena City College.
- b. An applicant for admission in F-1 visa status who has completed college or university work in excess of that usually offered at a community college level in the United States (first two years of a four-year collegiate program) will be considered overly qualified and not eligible for admission to Pasadena City College. Such students should apply at institutions more appropriate to their needs.

B. Additional Information

1. Orientation

An on-campus international student orientation is provided both in the Fall and Spring semesters.

2. Employment

An international student must attend the College full time; a permit to work on campus is issued only if there is urgent financial need. For off-campus employment, approval of the United States of Citizenship and Immigration Services (USCIS) is required.

3. Housing

International students must arrange for their own housing.

4. Maximum Period of Enrollment

An international student is expected to complete a program in the most expeditious manner possible, generally in four to six semesters.

5. Regulations

An international student should become familiar with the United States Citizenship and Immigration Services regulations as well as College regulations on student conduct and enrollment and comply with those regulations. A student who drops below full-time enrollment or fails to maintain normal progress towards his/her goal is subject to dismissal from the College. The United States Citizenship and Immigration Services will be notified in such cases.

International Students – Other Than F-1 Visa

Some students with visas other than F-1 may be eligible for admission subject to approval of the Director of Admissions and Records. If admitted, such students will be subject to nonresident tuition and may be limited in their enrollment. Individuals holding F-2, B1/B2 visas are not admitted to PCC and are advised that they will be in violation of their visa status by attending school. Questions related to this should be directed to the International Student Office.

COSTS OF ATTENDING THE COLLEGE

The fees and tuition costs are subject to change by State law or at the discretion of the College. The information listed below was correct at the time of Catalog publication.

Fees

State law prescribes payment of the following enrollment fee each semester or session:

Enrollment Fee.....\$46 per unit

Students classified as California residents pay only the enrollment fee, a mandatory health fee of \$20.00 per semester, a \$10.00 student activity fee and a \$1.00 per semester student representation fee. During the Summer

session the health fee is \$16.00 and the student activity fee is \$5.00. Students who are not California residents pay these fees as well as nonresident tuition. Certain students may qualify for an exemption on the basis of verified religious reasons or enrollment in apprentice programs.

Nonresident Tuition

Students who are nonresidents of California for tuition purposes (see page 28) are required to pay a fee as established each year by the Pasadena Area Community College District Board of Trustees. Beginning in Summer 2014, all non-residents and non-citizens will be required to pay out-of-state tuition of \$234 per unit and \$14 per unit in Capital Outlay. However, nonresident students who attended high school in California for three or more years; graduated from a California high school or attained the equivalent (e.g., passed the high school proficiency or GED exam); and are U.S. citizens, immigrant aliens, or never-documented aliens may be eligible for exemption from nonresident tuition. Such students should contact the Admissions Office for more information.

Instructional Materials Fee

Students enrolled in credit or noncredit courses and programs may be required to provide certain instructional and other materials including, but not limited to, textbooks, tools, equipment and clothing.

Refund Policy

A student who has paid fees and withdraws from all or part of his/her enrollment **by the deadline date** may request a refund. Refunds are not automatic. Refund requests must be submitted based on the deadlines published in the semester Schedule of Classes. A Refund Application is available at the Cashier's Office, online or in the Schedule of Classes. **The refund amount is determined by the date the class first meets and the date the class is officially recorded as dropped.** A minimum service fee of \$5.00 (or more in the case of out-of-state tuition) will be charged for processing each refund request. Detailed information regarding the refund policy and procedure is available at the Cashier's Office, room L113. Please call (626) 585-7085 for further information.

Student Support and Learning Services



SECTION II

STUDENT SUPPORT AND LEARNING SERVICES

Counseling -

Room L104, (626) 585-7251 or
www.pasadena.edu/student-services/counseling

Counselors provide developmental advising which includes life, career, and education planning, interpretation of assessments, strategies to address academic difficulties, programs to develop student success skills, preparation for university transfer, and workforce preparedness. Although Counselors assist in long-range planning and in checking specific requirements, *the responsibility for meeting graduation requirements, course prerequisites or requirements for transfer to other colleges or universities is one which must be assumed by each student.* The Counseling website contains web-based tools to support your goal setting and planning process. You are encouraged to meet with a Counselor as you progress towards your academic or personal goals. You can see a counselor on a drop-in basis during hours of operation. Students can request to see a specific Counselor. Students can also access a Counselor online. Online Counseling allows PCC students or prospective students with a resource to ask general questions that pertain to reaching their educational goal at Pasadena City College. For more information, go to <http://www.pasadena.edu/student-services/counseling/online.cfm>

Transfer Center -

Room L110, (626) 585-7287

Services provided by the Transfer Center include advise-ment by representatives from CSU, UC and independent institutions; application, essay and other transfer-related workshops; transcript prescreening for transfer eligibility; information fairs, and tours to universities. Resources include an interactive tool listing transfer requirements specific to universities or majors to facilitate transfer course planning; a library containing university catalogs and transfer resources in multimedia formats.

Career Center -

Room L103, (626) 585-3377

The Career Center provides resources and assistance for students exploring major/career goals or looking for employment/internships.

New job listings are posted daily and there is a weekly Hot Jobs bulletin. Workshops are offered on topics such as resume writing, interviewing, major and career choice. There is a large selection of books, and software programs.

Career Counselors, Advisers and Employment Specialists are available to help students. For more information, go to <http://www.pasadena.edu/student-services/careercenter/>.

EMPOWERMENT PROGRAMS

The Stan Gray

Academic Athletic Zone -

Room GM112, (626) 585-3115

The Stan Gray Academic Athletic Zone is a comprehensive tutorial and counseling program that is designed to meet the specific needs of student athletes at Pasadena City College. The program offers new student athlete orientations, individual and group tutoring, academic advisement, personal counseling, financial aid assistance, and transfer workshops. The primary functions of the program are to provide timely and accurate academic support and improve basic skills. This program works within the division of student services to support the student athletes of the College. For further information see the website at <http://www.pasadena.edu/athletics/zone/index.cfm>

Puente Project -

Room L104, (626) 585-7860

The Puente Project is a one-year transfer program open to all students. The content of the Puente Project focuses on Mexican American/Latino authors and issues. The program includes writing instruction in developmental and transfer level English composition, complemented by both an in-class counselor and a community mentor. Puente students also take part in regular and state-wide conferences and workshops, as well as visit universities and meet university representatives in preparation for transfer. For further information see the website at <http://www.pasadena.edu/transfer/specialprograms/puente.cfm>

Ujima Program -

Room CC224, (626) 585-7255

The Pasadena City College (PCC) Ujima Program is a student-centered, learning community dedicated to the success of African-American students in higher education. The Swahili word *Ujima* (pronounced oo-JEE-ma) meaning "collective work and responsibility", provides historically under-represented students with an environment that nurtures and supports student development and community

involvement. Furthermore, the Ujima program fosters academic success through culturally relevant curriculum, culturally prescriptive interventions and social justice pedagogy.

This Program seeks to address and shrink the academic achievement gap for African American college students. The Ujima Program uniquely fuses coursework reflective of the African American experience with the academic rigor required for educational achievement. Students are equipped with success skills, mentoring modules and community building scenarios which helps them to identify with the greater college culture from their first year to their last year at PCC. The Ujima Program Academic Coaching staff is well prepared to work with students from diverse communities. These interactions serve as a valuable resource in the development of student success. Through personal and social engagement strategies, Ujima students (also known as Ujima Queens and Kings) are exposed to campus wide events and activities that enrich leadership skills, builds collaboration among groups and aids in increased retention and persistence rates of our students. Within this learning community students experience the benefits of cohort learning models, dedicated Ujima courses, passionate Ujima teaching faculty and a core group of counselors and support staff (the Ujima Squad) that constantly work together as advocates for student success. Ujima students are prepped to accomplish their educational and career goals in the academic and global communities. Practicing the philosophy of achievement through collective work and responsibility. For additional information please visit the Ujima Program website <http://www.Pasadena.edu/student-services/ujima/> or contact Gena Lopez M.S. at gllopez@pasadena.edu (626) 585-7255.

Veterans Resource Center

Room W108, (626)585-7226 ext. 4

The Veterans Resource Center (VRC) at Pasadena City College provides a comprehensive program of services for our student veterans.

The Center provides the essential components in academic support services for student veterans and faculty to complement classroom learning and college success.

There is a computer lab, assistive technology software, women veterans programs, new student veteran orientations, individual and group tutoring, mentors, academic and personal counseling and relevant support programs. We also offer wellness workshops and activities. There is also a student veterans club.

The VRC provides a relaxing place for student veterans to meet, do homework, get help with their classes, find a mentor, receive the latest veteran benefits information, coordinate with a veteran's network, attend workshops, and meet with veterans' service providers.

The VRC is a centralized resource hub, easily accessible and widely available to all student veterans and student military members and whose primary goal is to assist veterans for a successful transition to academic life.

Extended Opportunity Programs and Services - Room L107, (626) 585-7439

The purpose of EOP&S is to actively encourage the enrollment and retention of students who are economically and educationally disadvantaged, and to facilitate their successful participation in meaningful educational opportunities. EOP&S provides such services as outreach, recruitment, tutoring, counseling and limited financial assistance.

Cooperative Agencies Resources for Education - Room L107, (626) 585-7439

C.A.R.E. is an EOP&S Program designed to recruit and assist single parents with children under the age of fourteen who would like to attend college on a full-time basis. C.A.R.E. provides such services as counseling, career assessment, self-development workshops, and financial assistance.

Program for Academic Support Services (P.A.S.S.) - Room D112, (626) 585-7815

The Program for Academic Support Services (PASS) is funded by the U.S. Department of Education to increase the retention, graduation and transfer rates of low-income, first generation and disabled college students. PASS assists participants with counseling, academic preparation, skill development and the degree/transfer process from Pasadena City College to a four-year institution. PASS services focus on a holistic approach to student development and student success. Participants will gain knowledge and skills to achieve their educational goals and ultimately obtain a Bachelor's degree.

CalWORKs Program - Room L107, (626) 585-7060

With funding from the California Community College Chancellor's Office and in partnership with the Los Angeles Department of Social Services, the PCC CalWORKs Program is designed to assist eligible students phase off public cash assistance (welfare) and become self-sufficient.

Eligible students must be currently enrolled, receiving cash assistance and have children under 18. PCC CalWORKs students are enrolled in county-approved education/training programs and have the opportunity to participate in work-study employment that will not reduce their cash aid. The program assists students with processing county paperwork, individual counseling, personal and job development, and some financial assistance with books, edu-

cational supplies, transportation and childcare fees. Access our website by going to www.pasadena.edu/student-services/calworks.

FINANCIAL AID

L-114, (626) 585-7401

Email- finaid@pasadena.edu

On the web- <https://pasadena.edu/admissions-and-aid/financial-aid/index.php>

PCC's Title IV Code- 001261

The Office of Financial Aid is committed to removing financial barriers that prevent or limit access to aid resources for all student populations.

Most financial aid awards are based on financial need which is the difference between the cost of attendance and the student/family's expected contribution. To be considered for federal, state, or institutional aid, students are required to complete one or more of the following financial aid applications:

Applications

The Free Application for Federal Student Aid (FAFSA) is the primary application for all sources of federal and state financial aid. Students should apply at www.fafsa.gov in October of each year for the next academic school year

The Board of Governors Fee Waiver (BOGW) application is used to cover enrollment fees at PCC. Students must be California residents and meet other program requirements. Students can download a copy of the fee waiver application from the PCC website; however, the best and easiest way is to complete the FAFSA. PCC will use the FAFSA information to determine BOGW eligibility. The application is on the at web at <https://pasadena.edu/admissions-and-aid/financial-aid/forms.php>

The California Dream Act Application or **CADAA** is the financial aid application for Assembly Bill (AB) 540 eligible students. The California Dream Act allows undocumented and nonresident documented students who meet certain provisions to apply for and receive private scholarships, state-administered financial aid, Board of Governors Fee Waivers, and Cal Grants. For more information about aid and eligibility requirements, see the **Aid for Dreamers** section below. To complete the application, go to <https://dream.csac.ca.gov/>

With the exception of scholarships, Federal financial aid is not available for international students.

Federal Financial Aid Eligibility Requirements for U.S. Citizens and Eligible Non-Citizens

- demonstrate *financial need* (for most programs);
- have a valid Social Security number (with the exception of students from the Republic of the Marshall Islands, Federated States of Micronesia, or the Republic of Palau);
- be registered with Selective Service, if male (register between the ages of 18 and 25);
- be enrolled or accepted for enrollment as a *regular student* in an eligible degree or certificate program;
- maintain *satisfactory academic progress*

Aid Programs

Financial aid is available from federal and state agencies in the form of grants, loans and Federal Work-Study to assist in meeting the educational costs associated with attending PCC. By completing the FAFSA, a student can be considered for one of more of the following programs:

Federal Aid

- **Federal Grants** – financial aid that does not need to be repaid.
 1. **Federal Pell Grant**, unlike a loan, does not have to be repaid. Federal Pell Grants are need-based and awarded only to undergraduate students who have not earned a bachelor's or a professional degree
 2. **Federal Supplemental Educational Opportunity Grant (FSEOG)** is a grant for undergraduate students with exceptional financial need.
- **Federal Work-Study** – a work program that allows students to earn money to help pay for school while developing valuable job skills.
- **Federal Loans** – money borrowed to help meet educational expenses. Loans must be repaid with interest. Through the William D. Ford Federal Direct Loan Program, eligible students borrow directly from the U.S. Department of Education.

Types of Federal Loans

1. **Subsidized loan** – a loan based on financial need for which the federal government pays the interest that accrues while the borrower is in an in-school, grace, or deferment status. For Direct Subsidized Loans first disbursed between July 1, 2012, and July 1, 2014, the borrower will be responsible for paying any interest that accrues during the grace period. If

the interest is not paid during the grace period, the interest will be added to the loan's principal balance.

- 2. Unsubsidized loan** – a loan for which the borrower is fully responsible for paying the interest regardless of the loan status. Interest on unsubsidized loans accrues from the date of disbursement and continues throughout the life of the loan.
- 3. Federal PLUS loan** – a loan available to parents of dependent undergraduate students for which the borrower is fully responsible for paying the interest regardless of the loan status.

State Aid

- **Cal Grant**- state grants that are need and merit based. GPA verification is required

Types of Cal Grants

- 1. Cal Grant High School Entitlement Award** - for current high school seniors and recent high school graduates
- 2. Cal Grant Transfer Entitlement Award** - for students who plan to transfer directly from a California Community College to a 4-Year University
- 3. Cal Grant Competitive Awards** - for students who are not eligible for the Cal Grant Entitlement awards
- 4. Cal Grant C Award** - for students who are pursuing an Associate Degree or Certificate
 - **Full-Time Student Success Grant (FTSSG)** - a state grant available to full-time Cal Grant B recipients. Students that attend full-time are eligible to receive up to \$600 per year to assist with program completion
 - **California Chafee Grant**- need-based grant available to students that are or were in foster care as a dependent or ward of court. This grant requires an additional application
 - **Board of Governors Waiver (BOGW)** - a program funded by the state of California to waive in full the amount of enrollment fees to eligible students who are California residents

Effective fall 2016, students are required to meet certain academic progress standards to receive the BOGW:

- 1) Academic – Sustain a GPA of 2.0 or higher.** If the student's cumulative GPA falls below 2.0 for two consecutive primary terms (fall/spring semesters, or fall/winter/spring quarters), the student may lose the fee waiver eligibility.
- 2) Progress – Complete more than 50% of student's coursework.** If the cumulative number of units the student completes is not more than 50% in two

consecutive primary terms (fall/spring semesters, or fall/winter/spring quarters), the student may lose the fee waiver eligibility.

- 3) Combination of Academic and Progress Standards.** Any combination of two consecutive terms of cumulative GPA below 2.0, and/or cumulative unit completion of not more than 50% may result in loss of fee waiver eligibility.

Aid for Dreamers (California Dream Act)

Under the **California Dream Act**, undocumented students may qualify for the following programs:

- Cal Grant, Chafee Grant, Middle Class Scholarship
- Board of Governors Waiver (BOGW)
- EOP&S
- Some institutional scholarships
- Some private scholarships administered by outside agencies

To be considered for Cal Grant, Chafee Grant, Middle Class Scholarship, EOP&S, undocumented students must complete the California Dream Act Application (CADAA). The application can be found at <https://dream.csac.ca.gov/>. The CADAA can only be completed by students who meet the following AB 540 requirements:

- Attended a California high school for at least three years, OR
- Attainment of credits in California from a California high school equivalent of at least three or more years of full-time high school coursework and a total of three or more years of attendance in California Elementary schools, California secondary schools, or a combination of those schools.
- Graduated or will graduate from a California high school or attainment of General Education Development (GED), High School Equivalency Test (HiSET), or Test Assessing Secondary Completion (TASC), AND
- Will register or enroll in an accredited and qualifying California college or university, AND
- If applicable, complete an affidavit to legalize immigration status as soon as the student is eligible, AND
- Do not hold a valid non-immigrant visa (F, J, H, L, A, B, C, D, E, etc.)*
*If the student has Temporary Protected Status or hold a U visa, select "Yes"

Other Types of Aid and Resources

- **Scholarships.** PCC awards over \$600,000.00 in scholarships each academic year. For information on scholarships and how to apply, visit the PCC

Foundation on the web at <https://pasadena.edu/foundation/>

- **The Bureau of Indian Affairs (BIA)** awards grants to needy students who possess at least 25 percent American Indian, Eskimo or Aleut blood as recognized by a tribal group. Contact the Bureau of Indian Affairs for information about the BIA Grant. For more information, visit the BIA at <http://www.bia.gov/>

Financial Aid Glossary

- **EFC** – the EFC, or expected family contribution, is a measure of the financial strength of the student's family and is calculated when the student completes the FAFSA. The EFC is used to determine aid eligibility and financial need.
- **Satisfactory Academic Progress (SAP)** – to receive financial aid, the student must make Satisfactory Academic Progress (SAP) toward a degree or certificate. To make SAP, the student must: maintain a cumulative (GPA) of 2.00, complete at least 67% of the units attempted, and complete his/her educational program in a maximum timeframe of no more than 150% of the program's actual length.
- **Loan Default** – failure to repay a loan according to the terms agreed to in the promissory note. For most federal student loans, the student will default if he/she has not made a payment in more than 270 days. The student may experience serious legal consequences if he/she defaults.
- **Deferment** – a postponement of payment on a loan that is allowed under certain conditions and during which interest does not accrue on a Direct Subsidized Loans and/or a Subsidized Federal Stafford Loans. All other federal student loans that are deferred will continue to accrue interest. Any unpaid interest that accrued during the deferment period may be added to the principal balance (capitalized) of the loan(s)
- **Forbearance** – a period during which monthly loan payments are temporarily suspended or reduced. The lender may grant a forbearance if the student is willing but unable to make loan payments due to certain types of financial hardships. During forbearance, principal payments are postponed but interest continues to accrue. Unpaid interest that accrues during the forbearance will be added to the principal balance (capitalized) of the loan(s), increasing the total amount owed.
- **Consolidation** – the process of combining one or more loans into a single loan. As a result of consolidation, the student will have to make only one payment each month on the federal loans, and the amount of time to repay the loan will be extended.

- **Financial Aid Overpayment** – an overpayment occurs when the student receives more financial aid funds than he/she was eligible for. Overpayments are often the result of changes in enrollment; e.g., full-time to half-time status, complete withdrawal from all classes. An overpayment can also occur when the student's financial information changes after a grant or loan payment has been made.
- **Return to Title IV** – when the student withdraws during the payment/enrollment period, PCC uses a federal formula to calculate the amount of federal student aid the student has earned to that point. If the amount disbursed is greater than the amount earned, the unearned funds must be returned.
- **Lifetime Eligibility Used (LEU)** – the amount of all Federal Pell Grant aid (in percentage) awarded to the student, divided by the amount of Pell Grant the student would have been eligible to receive based on full-time enrollment. The amount of Pell Grant a student may receive over his or her lifetime is limited by federal law to be the equivalent of six years of Pell Grant funding

For additional information about financial aid and the programs and services we offer, visit us on the web at <https://pasadena.edu/admissions-and-aid/financial-aid/index.php>

Disabled Student Programs and Services (DSPS) - Room D209, (626) 585-7127

Disabled Student Programs and Services is designed to enable students with verified disabilities to have access to all of the College's programs and activities for which they qualify.

Supportive educational services may include: test accommodations, interpreting services, real-time captioning, access to printed material in alternate formats, assistive technology training, learning disabilities assessment, specialized counseling, registration assistance and consultation with faculty and staff. For more information, please visit the DSP&S website www.pasadena.edu/student-services/dsps.

Student Health Services -

Room D105, (626) 585-7244

(Hours vary depending on intersession/semester)

Student Health Services includes first aid and emergency services, treatment of short-term illnesses, sexual health counseling and treatment, and education in health promotion and health protection. Students who have significant health conditions are strongly encouraged to inform the Student Health Services staff of their health needs.

Confidential health services are provided by a professional staff of health counselors, registered nurses, registered dietitians, nurse practitioners and physicians.

An overview of low cost and no cost services:

- First aid and emergency care
- Tuberculosis screening and testing
- Immunizations, prescription and over-the-counter medications
- Laboratory services
- Nutritional counseling
- Smoking cessation services
- Sexual health screening and treatment
- Women's health care (PAP smears, birth control)
- Health clearance for health sciences programs
- Health promotion and disease prevention activities and education
- Substance abuse prevention information
- Referral to community health resources and agencies

For more information, please visit: www.pasadena.edu/healthservices.

Psychological Services -

Room L108, (626) 585-7273

Psychological services are provided by the counseling psychology staff to give more specialized help than can be made available through regular counseling channels. Services include individual counseling, crisis intervention, information, and, when appropriate, referrals to community agencies.

The services emphasize short-term consultations on specific problems affecting success in college. Students may schedule a confidential appointment with a counseling psychology staff member by coming to L108, Psychological Services. For more information, please visit www.pasadena.edu/studentervices/psychservices.

Child Development Center

The Child Development Center, located at 1324 East Green Street, Pasadena, CA 91106, operates under the supervision of the Division of Social Sciences. It provides student parents who are enrolled at Pasadena City College and at the Community Education Center the opportunity to pursue their educational goals while their children are receiving quality child care in an enriched educational program. PCC faculty, staff, and community members are also eligible to use the Center. The Center serves as a laboratory facility for students in the Child Development Program at the College.

For more information about fees and enrollment, contact the Center at (626) 585-3180.

GI Bill® Benefits Processing -

Room L113, (626) 585-7294

Pasadena City College is approved as an institution for higher learning for veterans and veterans' dependents entitled to educational assistance.

Veterans enrolling at Pasadena City College and intending to use VA educational benefits for the first time are required to submit the following documents to the veterans clerk in room L113 before they will be certified for benefits:

1. Member 4 copy of Certificate of Release or Discharge from Active Duty (DD214).-
2. Official transcripts from all colleges attended.
3. Veteran's Statement of Responsibility (obtained from the veterans clerk in L113).
4. Certificate of Eligibility for GI Bill® benefits, or verification of application for benefits.
5. Other documents requested by the veterans clerk necessary to complete the application for benefits.

In addition to the academic standards required of all students, certain additional restrictions apply to students receiving Veteran Benefits Administration (VA) educational benefits. In accordance with VA regulations, a student on academic probation will be terminated from receiving VA benefits after two semesters on probation.

There are several education programs available for veterans, reservists and dependents. The benefits for each program are different.

Post 9/11 (CH 33) students receive a Monthly Housing allowance (MHA) if attending at more than 50% of full-time in approved courses. Students also receive an allowance for books and supplies up to \$1,000 per year depending upon units taken. Some fees will be paid by the VA directly to the College for courses that are requirements for the student's educational program. The covered fees are the Enrollment fee, Course fees and the Health fee. All other tuition and fees are the responsibility of the student.

Chapter 33 recipients training at 50% of full-time or less will receive payments for books and supplies. The VA will also pay some fees. These fees will be paid by the VA directly to the College for courses that are requirements for the student's educational program. The covered fees are the Enrollment fee, Course fees and the Health fee. All other tuition and fees are the responsibility of the student. No Monthly Housing Allowance is paid to CH 33 participants for training at 50% of full-time or less.

For students receiving Montgomery GI Bill-Active Duty (CH 30), Montgomery GI Bill-Selective Reserve (CH 1606), Reserve Educational Assistance Program (CH 1607),

and Survivors' and Dependents' Educational Assistance Program (CH 35) benefits, a monthly assistance allowance is available for full-time, three-quarter-time or half-time students. Chapters 30, 1606, and 1607 recipients training at less than half-time will receive a onetime payment for the amount they have paid in tuition and fees. No monthly assistance is paid to Chapter 30, 1606 or 1607 participants for less than half-time enrollment. Chapter 35 recipients enrolled for less than half-time will receive the total they have paid in tuition and fees. The total will be divided by the number of months enrolled and the resulting amount will be sent monthly.

Students using Vocational Rehabilitation and Employment (CH 31) benefits are paid either a Monthly Housing Allowance or a monthly subsistence allowance depending on eligibility. Contact your VA Vocational Rehabilitation Counselor (VRC) for more information. This allowance is available for students attending at a half-time or more rate. The VA pays the school directly for all tuition, fees, books, parking and the allowed amount for supplies.

The Veterans Access, Choice, and Accountability Act of 2014 was signed into law in August 2014. As a result of this Act, certain veterans and their dependents are now eligible to have their out-of-state tuition, and fees associated with that tuition, waived for terms beginning after July 1, 2015. This waiver applies to the following groups:

1. Veterans who:
 - Were discharged within 3 years of the beginning of the term.
 - Had a length of active duty service that was 90 days or more.
 - Live in California (regardless of legal state of residence).
 - Are eligible to use benefits under the Post-9/11 GI Bill (CH 33) or the Montgomery GI Bill-Active Duty (CH 30).
2. Dependents (spouse or child of a veteran) who have had GI Bill® benefits transferred to them from the veteran and the following conditions are met:
 - The veteran who transferred the benefit was discharged within 3 years of the beginning of the term.
 - The veteran had a length of active duty service that was 90 days or more.
 - The dependent lives in California (regardless of legal state of residence).
 - The dependent is eligible to use Post 9/11 benefits through Transfer of Entitlement.

3. Dependents (spouse or child of a veteran) eligible for the Marine Gunnery Sergeant John David Fry Scholarship benefits and the following conditions are met:
 - The date of death of the service member on whom the spouse/child was dependent is within 3 years of the beginning of the term.
 - The service member served at least 90 days on active duty.
 - The dependent lives in California (regardless of legal state of residence).
 - The dependent is eligible to use the Marine Gunnery Sergeant John David Fry Scholarship benefit.

Students who believe they are eligible for this waiver should contact the GI Bill® processing desk at (626) 585-7294 or come to the veteran's window in building L room 113. Office hours are 10:00 am - 4:00pm Monday through Friday.

Veterans must bring their Member 4 copy of their DD214 and their Certificate of Eligibility for the Post 9/11 or MGIB-AD. Dependents must bring the Member 4 copy of the DD214 of the veteran upon whom they are dependent and the dependent's Certificate of Eligibility for the Post 9/11 GI Bill transfer of entitlement.

Reserve Officers Training Corps

Pasadena City College students wishing to participate in a Reserve Officers Training Corps program may enroll concurrently in such a program in a neighboring institution.

Project L.E.A.P. (Links to Educational Achievement and Progress) - (626) 585-7981

Project L.E.A.P. is a mentoring program developed by Pasadena City College Partnership for Excellence Program. It is designed to increase the retention rate of probationary, under-represented students and returning students.

Students are matched one-on-one with volunteer mentors who meet with them two to three times a month (weekly if needed) to listen, care, motivate, and encourage them to maximize their potential. Mentors in the program are administrative staff, faculty and classified staff who represent a cross section of the campus community. In addition to meetings between mentors and students, a guidance seminar and special programs are offered to foster student success.

STUDENT ACTIVITIES AND ORGANIZATIONS

Office of Student Life

Room CC105

Located in the Campus Center, the Office of Student Life offers a wide variety of activities, programs and services to assist students in achieving a balanced educational experience. The Office includes Student Activities, the Cross-Cultural Center, the Volunteer Center, Service Learning, Commencement, Project LEAP, the Pep Squad, the PCC Flea Market, and the Campus Connections. To respond to the needs and interests of students, annual cross-cultural and student leadership residential retreats are conducted each year. The Student Life Office provides an array of student leadership opportunities, involves students in college governance, provides support and guidance in co-curricular activities, and produces and supports cultural awareness activities and services. Further, the office sponsors and assists in educational, recreational and club programs and events, offers volunteer opportunities on campus and in the community, provides financial assistance in the funding of programs and individual student scholarships, and more. Small emergency and book loans are also available.

Definitions:

Consciousness of Self – means being aware of the beliefs, values, attitudes and emotions that motivate one to take action.

Congruence – refers to thinking, feeling and behaving with consistency, genuineness, authenticity and honesty towards others. Congruent persons are those whose actions are consistent with their most deeply held beliefs and convictions.

Commitment – is the psychic energy that motivates the individual to serve that drives the collective effort. Commitment implies passion, intensity, and duration.

Intercollegiate Athletics

The College offers intercollegiate competition in the following sports:

	Men	Women
Baseball	X	
Badminton		X
Basketball	X	X
Cross Country	X	X
Football	X	
Soccer	X	X

Softball		X
Swimming	X	X
Track & Field	X	X
Volleyball		X
Water Polo		X

Athletic teams at Pasadena City College are members of the South Coast Conference. Football stands alone as part of the Southern California Football Association, American Division Metro Conference. Both are affiliated with the California Community College Athletic Association.

Student Government

Student government at Pasadena City College is an integral part of the educational program. It gives students the opportunity to develop leadership skills, enhance cultural awareness, work with others in formal and social situations, enhance interpersonal communications skills, pursue special interests, develop critical thinking skills, and support involvement opportunities for all PCC students.

Student government is not intended to take the place of other educational endeavors. Instead, its purpose is to enrich the student's total educational experience. It is intended to complement coursework and other activities. Students are urged to improve study habits and to manage their time well.

The structure of the government is based on its major functions: activities production, representation, legislation, and administration and finance. Student government includes the ASPCC Executive Board, the Supreme Council, Commissioners, and various committees. As well, the student member of the Board of Trustees plays an active role in student government.

Clubs and Organizations

Pasadena City College offers a broad spectrum of involvement opportunities through approximately 65 student clubs and organizations. There are recreational, vocational, political, cultural, religious, educational and service clubs, as well as other interest groups. Students enrolled at PCC are encouraged to consider membership in the clubs and organizations of their choice. Students may form additional organizations to meet special needs or interests. All student organizations must have a faculty advisor and be chartered by the InterClub Council, as outlined in Associated Students policies. Information and required forms are available in the Office of Student Life located in the Campus Center, CC105.

Commencement

Held in the College's Robinson Stadium, commencement exercises take place during the last week of the Spring

semester. The formal ceremony, followed by a hosted reception, is a special tradition at Pasadena City College. An official diploma cover is presented to each graduate participating in the ceremony. The diploma, certifying that requirements for the Associate in Arts or the Associate in Science Degree have been met, is mailed to the graduate as soon as possible after the close of the semester.

Commencement is an impressive tradition. Members of the graduating classes from the Fall, Winter, Spring and Summer terms are encouraged to participate in the annual event.

Campus Publications

The *Campus Crier* is published regularly during the Fall and Spring semesters, for all students and personnel. The Crier provides timely information on official deadlines, financial aid and scholarship announcements, special events, club meetings, and more.

The *Guide to Leadership and Involvement* is designed to guide student leaders, prospective student leaders, and student clubs and organizations in producing successful activities and programs. As a companion to the Advisors Handbook, it covers areas to be considered when planning an event – financial aspects, scheduling, publicity set-up, preparation, evaluation and follow-up – and it includes useful sections with necessary forms, contact telephone numbers, and more.

The College newspaper, the *Courier*, is published weekly by the Visual Arts and Media Studies Division (except during examination weeks) and is distributed to students and faculty on Thursdays. Students who wish to work on the Courier must enroll in the appropriate journalism class.

Inscape, an anthology of student literary work, publishes meritorious stories, essays and poems each year. Under the direction of the English Division, it is edited by a board of student editors and draws its written and art materials from the entire student body.

Spotlight is a slick feature magazine published each year by students in the magazine and small publications class. Students must sign up for Jour 005 to work as writers or editors on *Spotlight*.

Performing Arts - Room CA119, (626) 585-7216

Forensics

Forensics, or competitive intercollegiate speech and debate, provides students at Pasadena City College with an opportunity to compete with major colleges and universities at local, state and national tournaments. Students will develop speaking, research and critical thinking skills as

they participate in individual events, debate and Reader's Theater. The program is open to all students with or without prior experience in speech or Forensics.

Music

The Pasadena City College Music Department offers a wide variety of instrumental and vocal performance ensembles including wind and marching bands, the Tournament of Roses Honor Band, symphony orchestra, large and small choral groups, opera and musical theater productions, large and small jazz ensembles, ethnic music ensembles, jazz combos and chamber ensembles for strings, woodwinds, brass, percussion, piano, guitar. Under the imaginative leadership of prominent directors, these ensembles have created a reputation for musical excellence.

The Music Dept. offers a complete catalog of music courses from beginning instrumental techniques and appreciation courses to the in-depth music theory, history and performance courses that support the Associate in Arts Degree in Music for music majors. With additional courses in composition, music technology, recording, music business, education, and performance skills, PCC's Music Dept. provides a comprehensive set of courses for students at all levels of experience.

Theater Arts

The Pasadena City College Theatre Arts Department focuses on training the next generation of theatre artists through a multi-discipline approach and collaborative performance. Students work on all facets of six major stage productions, four workshop productions, an annual spring musical, and musical theatre and student directing workshops. From design to directing, budgeting to marketing, and acting to writing, theatre students have access to hands-on education in all parts of theatre craft.

Dance

The Dance Department offers a wide variety of classes, including dance techniques classes in the areas of ballet, modern, jazz and tap; social dance, salsa and Latin social dance; dance history; and dance production and choreography. Students in the production classes present a formal dance concert each semester.

LEARNING RESOURCES

Learning Assistance Center -

Room D300, (626) 585-7230

The Learning Assistance Center (LAC) provides academic support services for Pasadena City College students and faculty to complement classroom learning and college success. Located on the 3rd floor of the D building (D300),

the LAC operates Monday through Thursday 7am-9:45pm, Friday 7am-3:45pm, and Saturday 9am-2:45pm. Students are required to present a valid PCC Lancer Card to utilize center services.

Tutoring for a wide variety of subjects is provided, free of charge, on a walk-in basis. Certified peer tutors assist students with learning skills and course-related assignments. Subjects tutored include math and statistics, accounting, English, ESL, and foreign languages. Tutoring for courses in the Natural, Social, and Computer Sciences is available as well. Students enrolled in Career and Technical Education programs and courses receive tutoring in the LAC and in labs and classrooms across the campus. Visit the LAC website (www.pasadena.edu/student-services/lac) for updated schedules and other useful information including online 24/7 tutoring options.

Center resources include a 50-computer network with applications, Internet access, and basic skills software (English, Math, and English as a Second Language). A number of assistive devices are available to students with disabilities. A wide variety of multimedia materials for ESL, foreign languages, and study skills are available for on-site use. Students and faculty can access handouts for English skills and learning strategies at the entrance to the center. Professional full-time staff and a trained team of student workers are on hand to assist students with direction to appropriate learning strategies and resources.

Library - LL, (626) 585-7221

The Shatford Library is PCC's gateway to a world of quality information resources where students can access a substantial collection of print and online resources that have been carefully selected to support the academic curriculum.

The Library's online catalog and subscription databases are available through the College web site at: <http://www.pasadena.edu/library>. Current students, faculty and staff can access these databases from off campus using their PCC LancerPoint ID username and password. Reference and research help is available in-person and online through the library's website. Librarians teach information literacy workshops, a credit class in library and research skills, as well as certificate programs in Library Technology and Digitization Skills. The library has a quiet study floor, wireless access, group study rooms, laptops for students to use in the building, three large student computer labs, a variety of software applications, printing and photocopying.

Library Borrowing Privileges

Library borrowing privileges are granted to all current PCC students, faculty and staff with a PCC Lancer ID. In addition, borrowing privileges are extended to adult residents of the Pasadena Area Community College District and to people who work in the District. Register at the Circula-

tion Desk with a driver's license and one other item showing the same address as your driver's license, such as a recent utility bill or bank statement. Students who attend high school within the District's boundaries may register for borrowing privileges at the Circulation Desk with a current high school ID card.

Library telephone numbers:

Reference Desk	(626) 585-7360
Circulation desk	(626) 585-7174
Computer Labs	(626) 585-3363
General Information	(626) 585-7221

Tutorial Services

Tutoring is provided for students in a variety of locations on campus, as well as online, 24/7. The Learning Assistance Center (LAC) offers tutoring to all students declared as Career and Technical Education (CTE) majors or working on certificate programs. The LAC also offers tutoring for transfer and basic skills courses in subjects such as accounting, business, mathematics, economics, statistics, English, ESL, and foreign languages, as well as computer sciences. Tutoring support is available to eligible students through the Teaching and Learning Center (TLC), and TRIO programs. Several academic areas provide tutoring assistance and supplemental instruction, such as the Writing Center, Math Resource Center, Social Sciences Learning Center, the Academic Zone, and the Natural Science study centers. Tutoring is performed by qualified student peers and designated staff. These services are designed to meet the needs of the individual student and to develop learning communities.

Computer Learning Center -

Room D101-104 and W101, (626) 585-7357

During day, evening, and weekend hours, the Computer Learning Center (CLC) labs in D101, D104, and W101 provide PCC students with access to the campus network which includes a wide variety of applications and instructional software. The online course management system, Canvas, is available through the network, as are student services resources for financial aid, counseling, registration, etc. In addition, students can utilize the Web to carry out college-related assignments requiring Internet access. Faculty can reserve time in computer classrooms D101 and W101 for group instruction or orientation. Students may receive guidance in exploring their personal learning styles, time management and study strategies offered through workshops and personal appointments. Walk-in tutoring for specific Computer Science courses is also available at scheduled times.

Staging Services - Room C230, (626) 585-7260

Staging Services supports the instructional programs of the College by providing technical assistance to the various departments. Staging Services is responsible for the operation of Sexson Auditorium, the Forum and all of the other lecture halls, as well as other special events both on campus and at the Community Education Center. In addition to meeting the needs of the instructional program, Staging Services supports the cultural activities of the surrounding community by providing facilities and assistance to off-campus organizations.

Video Production Services

Video Production Services is responsible for all College video productions. Services range from the documentation of campus events to the production of department and college promotional productions.

Video Production Services also assists in the editing of educational video productions by either overseeing or training faculty.

For more information, please call Public Relations at (626) 585-7250.

SUPPORT SERVICES

Food Services

A wide selection of dining options are available campus-wide.

The ground floor of the Campus Center houses The Piazza Dining Room for students, faculty and staff. The Piazza serves made-to-order breakfasts, including a custom breakfast burrito bar. The Piazza offers an Italian Pasta Line and fresh pizza, Baked Potato Bar, Fast and Casual Asian Entrée line, a full service panini and deli sandwich counter, and The Daily Grill for burgers and more. A full line of popular beverages and bakery items are also in the Piazza. The Lancer's Pass is located in the center of campus, adjacent to the Aquatic Center, for hot entrees, beverages, snacks and sandwiches. The Java Hut, located near the Science Village, offers gourmet coffees, sandwiches, selected cold beverages, and coffeehouse snacks. Dining facilities in the Physical Education complex for Robinson Stadium and the Hutto-Patterson Gymnasium provide concession services during selected events.

Full-service catering, from casual menu service to fine dining, is available for College functions and on-campus events.

Bookstore -

Room B101, (626) 585-7378

The Pasadena City College Bookstore is the place where students and faculty members may purchase books, sup-

plies, gifts, Logo merchandise, spirit items, Lancerwear clothing, and more. Online purchases may be made by visiting the Online Bookstore: <http://bookstore.pasadena.edu/>. Profits from the Bookstore help support the Student Service Fund, the College Service Fund, and Associated Students.

Transportation and Parking -

Room B210, (626) 585-7223

The College is located near downtown Pasadena and is easily accessible by car, bus or the Gold Line train. On-campus parking is limited and is available by displaying a semester or daily permit. Handicapped parking is available for people displaying a handicapped placard or handicapped license plates in addition to the semester or daily permit. Shuttle service is available every thirty minutes for transportation between PCC (Lots 6, 7), Allen Station Gold Line, and the Community Education Center.

Bicycle parking racks are available throughout the campus for students and staff to secure their bicycles. Bicycles shall not be secured to any other objects on campus such as poles, fences, and trees.

Pasadena City College Police Department -

Room B210, (626) 585-7484

The Pasadena City College Police Department is staffed with sworn Police Officers, the hours of operation is 24 hours a day and 7 days a week, including holidays. The Department is located in the B Building (room B210). The Department is responsible for providing police services, enhancing safety, and enforcing traffic and parking laws. Students who have a concern for their safety while on campus are encouraged to contact the Department for assistance. Emergency telephones are located in all elevators, parking lots, and most buildings. Please do not hesitate to use these telephones if you have a concern for your safety. The Department offers an escort service for students and staff from classrooms to vehicles. Students and staff are encouraged to use this available service. The District's crime awareness and crime statistics, otherwise known as the "Clery Report," are available in the B Building, room B210 and can also be located on the campus website under "Clery Report."

Parking Permits – Room B210, (626) 585-7441

Semester parking permits for staff and students are available for purchase online (www.pasadena.edu/getparking/). A temporary parking pass will be issued at the time of the purchase and the actual permit will arrive via mail within 5 business days. A limited number of parking permits will be available for over-the-counter sales. Parking permits can be purchased at the front counter of Campus Police, B Building, Room 210, or at the Foothill Campus two to three weeks prior to the beginning of each semester/intersession. Staff parking permits will be available at

the front counter of Campus Police. Exact cash or checks are accepted. Students and visitor may also purchase daily parking permits for \$2.00 a day from the parking permit machines located in every level of the parking lots. More information and the fee schedule are available online at www.pasadena.edu/student-services (click on Parking).

Lost and Found –

Room B210, (626) 585-7484 ext. 5265

Items found on campus may be turned in 24 hours a day to the Lost and Found in the Police Department in Room B210. Office hours for inquiring about retrieving lost property are Monday through Thursday 10:00 a.m. to 2:00 p.m. The Lost and Found Department actively tries to reunite lost items with their owners by using contact information provided in the Student Registration System. It is your responsibility to keep your contact information current and, if possible, on your property. Please put your name, phone, and/or email address on all of your property so it may be returned to you in a timely manner.

Smoking on Campus

The Pasadena Area Community College District Board of Trustees adopted Policy No. 5575 which prohibits smoking inside any District owned, or District occupied building or vehicle. The policy also prohibits outdoor smoking on District owned property.

Housing

The College maintains no dormitories and assumes no responsibility for off-campus student housing. Housing information is available in the Office of Student Life, located in the Campus Center, CC105.

ACADEMIC INFORMATION

Attendance

Students at Pasadena City College are expected to attend every class meeting. It is especially important to attend the first two class meetings or make prior arrangements with the instructor because nonattendance may result in being dropped from the class. See “Academic or Administrative Drop” section.

Course Examinations

Final semester examinations are required in each course. All students must take these examinations at the scheduled time and place.

Examinations, other than the final examination, are given during class with the requirement that a midsemester grade can be determined and reported to the student.

Distance Education -

(626) 585-7189

Distance Education courses offer students flexibility and access to PCC courses, which can be taken either fully online, partially online (hybrid) or by video (telecourse). Course content and required participation remain the same as traditional on-campus classes. However for distance education courses, all or part of the instruction takes place within the College’s learning management system, Canvas, which is accessed via the Internet. Students can use their own computer or a campus lab computer to access and participate in the courses. Available distance education courses can be found in the Schedule of Classes. For more information go to <http://online.pasadena.edu/learnmore/what-is-distance-education/>.

Independent Study

Under the independent study program, the student may pursue topics or problems of special interest beyond the scope of a regular course under the supervision of a faculty advisor. The work is of a research or creative nature, and normally culminates in a research paper, production or comprehensive examination. Regular progress meetings and reports are required throughout the semester. Completion of the project is required before credit is earned. Before registering for independent study, the supervising instructor and division dean must approve the student’s plan or project.

Textbooks

Students are required to buy books needed for courses and may do so at the College Bookstore. Although costs vary depending upon the classes in which students enroll, expenses for books generally range from \$300 to \$500 per semester. Supplies for specialized curricula such as drafting, cosmetology, nursing, photography and sign arts will require additional expenditures.

Open Educational Resources (OER) are textbooks and course materials that can be accessed online for free. Classes at PCC are increasingly using OER to reduce the overall cost of college. Starting Spring 2018, course sections that are using OER can be found through the online Schedule of Classes. For more information about OER at PCC, see: libguides.pasadena.edu/oer.

PCC Honors Transfer Program

The PCC Honors program is designed to engage and challenge motivated students to prepare them for successful transfer from community college to university. The program offers special sections of a wide variety of UC transferable courses that fulfill general education requirements for transfer. These Honors classes are open only to students participating in the program and offer a

variety of special opportunities, including student research projects, special field trips, service learning, and other enhanced learning enrichment. Completing the Honors Transfer Program strengthens transfer applications and gives students priority consideration for transfer to many universities.

To be part of Honors program, a student must be eligible for English 001A and have a GPA of 3.2 or above either from high school (unweighted) or college with 12 units or more of UC transferable courses completed. Honors students must maintain a 3.2 or above GPA in UC-transferable courses while at PCC and enroll in at least one Honors course per semester until the program is completed. Completion of the program requires a total of 15 units of Honors coursework with a grade of "B" or better in all courses. Completing the Honors program is noted on the college transcript and strengthens a student's transfer application to any university and gives students priority consideration for transfer to participating universities (UCLA, UC Irvine, UC Riverside, Pomona, Occidental, Mills College, others). For more information contact the Honors program at honors@pasadena.edu or visit the program website: <http://www.pasadena.edu/honors>

Honors

Dean's Honors is posted to the student's transcript each semester. It includes all students whose semester grade-point average is 3.500 or higher, with A, B, or C grades in 12 or more units of courses other than those in the 400 series.

Administration Honors are awarded to graduates who have completed at least 36 units at Pasadena City College and who have achieved a grade-point average of 3.670 or above in work at Pasadena City College and in all work attempted. Courses taken on a pass/no pass (P/NP) basis are not included in the required 36 units at Pasadena City College. Non-degree applicable courses numbered 400 and above are also excluded from the required 36 units.

Valedictorian Award recognition is given to the graduate(s) with the highest grade-point average among the recipients of Administration Honors.

Alpha Gamma Sigma is a California state honor organization the purpose of which is to encourage and recognize scholarship on the community college level. Pasadena City College has the Alpha Chapter. Counseling Services is responsible for providing students with the membership requirements.

Dean's Honors, Administration Honors and Alpha Gamma Sigma are recorded on the student's transcript.

Study Abroad Programs -

Room C245, (626) 585-3365

The College offers both short-term and semester-long Study Abroad Programs in a variety of study locations. Information about these programs is available on the College website, the Schedule of Classes and from the Study Abroad Office.

Fall Semester Study Abroad: Florence, Italy. PCC offers a semester of study in the Renaissance city of Florence, Italy. Students select a program of 11-20 units of transferable credit. Field-study excursions include such places as Rome, Siena, and Pisa. Students live in shared apartments. The program is accepted by the PCC Honors Program. For more information, call (626) 585-3365 or visit www.pasadena.edu/study-abroad.

Spring Semester Study Abroad: Oxford, England. PCC offers a semester of study in the rich cultural environment of Oxford, a center of learning since the 13th century. The program offers 15 to 18 transferable units and includes field-study excursions to such places as London, Bath, and Stonehenge. Students live in British home stays. The program is accepted by the PCC Honors Program. For more information, call (626) 585-3365 or visit www.pasadena.edu/study-abroad.

Winter and Summer Study Abroad Programs. PCC offers 2-6 week summer study abroad programs in various locations. Previous programs have traveled to Spain, Ireland, Viet Nam, China, Costa Rica, Austria, Mexico, and South Africa. For information about future programs and study locations, call (626) 585-3365 or visit www.pasadena.edu/study-abroad.

SPECIAL INTEREST PROGRAMS

From Page to Performance

Offered through the English Division and conducted in the Renaissance setting of the Oregon Shakespeare Festival in Ashland, Oregon, this one-week summer program includes theater tickets for plays, backstage tours, and daily class sessions with professional actors and directors from the 150-member company. Students can earn one unit of transfer credit or take the course on a credit/no credit basis.

Theater in London

Offered through the English Division, this one-week program takes place in London, England, during spring break. Students attend plays, have escorted tours in London, including backstage tours, and spend one day visiting

a site in the English countryside. Students can earn one unit of transfer credit.

Theater in New York

Offered through the English Division, this one-week program takes place in the heart of Broadway during spring break. Students attend plays, meet with faculty for post-theater discussions, and tour Manhattan and its various neighborhoods. Students can earn one unit of transfer credit.

MESA Program - Room IT224, (626) 585-3085

The Mathematics, Engineering, Science Achievement (MESA) program is designed to assist educationally disadvantaged students transfer to obtain degrees in science technology, engineering, and math (STEM) from four-year institutions. MESA is an academic-centered program with a holistic approach that uses various components to support educationally and financially disadvantaged students majoring in (STEM). The program's components including academic workshops/tutoring, field trips, mentoring, cultural exchange, and professional development through research opportunities help build an academically-based peer community to provide students with motivation and support to pursue careers in STEM. This community of learners sets MESA apart from other programs. The MESA Lab is located in IT224. Eligibility includes (but is not limited to): financial need, academic disadvantage such as first generation college status, and STEM major declaration. MESA is open to Dream Act qualified students, and applications are only available online during the summer months. For more information, see the webpage, www.pasadena.edu/mesa or email mesa@pasadena.edu.

Teaching and Learning Center

Room V102, (626) 585-3046

PCC's Teaching and Learning Center (TLC) was created in 2000 to serve the needs of basic skills math, English, and ESL students and faculty. Since then, the center's programs and services have expanded to include a variety of summer bridge/first-year experience programs for all new students, including XL, and International Students. The TLC, including a computer lab, tutoring services, and offices for program and support staff, is located in V102.

Pathways Center

Room V102, (626) 585-3046

PCC's Pathways Center, located in V102, provides resources and services for Pathways students, including a computer lab, coaching and tutoring services, and offices for program and support staff.

GRADING SYSTEM

Unit of Credit

The standard unit represents one hour per week of classroom work or its equivalent carried for one semester of not less than 16 weeks of class work. The unit is also referred to as the semester hour.

In the case of academic subjects, the general rule is that not less than two hours (120 minutes) per week of preparation outside class are expected for each unit of class work. This conforms to the provision in the Education Code that "one credit hour of community college course work is approximately three hours of recitation, study or laboratory work per week throughout a term of 16 weeks."

In some courses, such as physical education, drafting, and laboratory, more than one hour in class each week is required for each unit. Course descriptions show the minimum number of hours that must be completed in order to earn the number of units of credit associated with each course.

Grades and Grade Points

Pasadena City College uses the letter system of grading to evaluate the quality of work done by students. The interpretation of each grade or symbol, with its value in grade points, is described below.

Grade or Symbol	Meaning	Grade Points Per Semester Unit
A Excellent	HONOR GRADE indicating EXCELLENCE earned as a result of consistently superior examination scores; consistently accurate and prompt completion of assignments; ability to deal resourcefully with abstract ideas; superior mastery of pertinent skills; promise of success in a field relating to the subject.	4
B Good	HONOR GRADE indicating COMPETENCE earned as a result of high examination scores; accurate and prompt completion of assignments; ability to deal well with abstract ideas; commendable mastery of pertinent skills; promise of continued success in sequential courses.	3
C Satisfactory	STANDARD COLLEGE GRADE indicating SUCCESSFUL PERFORMANCE earned as a result of satisfactory examination scores; generally accurate and prompt completion of assignments; ability to deal with abstract ideas; fair mastery of pertinent skills; sufficient evidence of ability to warrant entering sequential courses. A "C" is the minimum course grade necessary to meet a prerequisite.	2

- D Less Than Satisfactory** 1
SUBSTANDARD GRADE indicating the MEETING OF MINIMUM REQUIREMENTS ONLY earned as a result of low examination scores; generally inaccurate, incomplete or late assignments; inadequate grasp of abstract ideas; barely acceptable mastery of pertinent skills; insufficient evidence of ability to make advisable the enrollment in sequential courses. A grade of "D" would indicate the student is not likely to be successful in a higher level course and would not meet prerequisite requirements.
- F Failing** 0
NON-PASSING GRADE indicating FAILURE TO MEET MINIMUM REQUIREMENTS earned as a result of non-passing examination scores; inaccurate, incomplete or late assignments; failure to cope with abstract ideas; inadequate mastery of pertinent skills, repeated absence from class.
- I Incomplete** 0
This symbol identifies UNFINISHED WORK OTHERWISE PASSING at a "C" or better level, indicating that an important assignment such as term paper, final examination or experiment is missing (for illness or other sufficient reason) but can be submitted to complete the course. An "I" is not assigned as a withdrawal grade and is not considered in grade-point average but it is included in the computation of progressive probation. A course for which an "I" has been assigned must be completed within one year from the end of the semester in which the "I" grade was assigned. After one year, a default grade will be assigned.
- W Withdrawn** 0
A symbol recorded for a course when a student voluntarily withdraws; student is dropped from class by instructor; or petition is approved for a withdrawal. It is not considered in grade-point average but it is included in the computation of progressive probation.
- MW Military Withdrawal** 0
A symbol used to record a student withdrawal due to unexpected military obligations.
- P Passing** 0
PASSING GRADE, level of "C" or better, not considered in grade-point average but it is included in the computation of progressive probation.
- NP No Pass** 0
CREDIT NOT ALLOWED; performance less than average quality; not considered in grade-point average but it is included in the computation of progressive probation.
- IP In Progress** 0
Indicates work in progress but not considered in grade-point average. This symbol is intended for

courses which may extend beyond the end of the normal semester.

- RD Report Delayed** 0
Used when there is a delay in reporting grades. It is a temporary notation not considered in the grade-point average.

Grade-Point Average

The grade-point average (GPA) is computed by dividing the total quality points earned by the total number of GPA hours. As an example, if in any given semester the number of quality points earned is 28 and the total number of GPA hours is 14, the quality-point average is 2.000.

Pass/No Pass Grading

Most, but not all courses of the College are offered on a pass/no pass grading basis. The following provisions shall apply for pass/no pass credit grading:

1. A maximum of 12 units may be taken on this basis, with a limit of one class per semester.
2. Pass/no pass classes must be taken in areas outside the student's Baccalaureate Degree major.
3. The decision to take a class on a pass/no pass basis can be made through the first 28% of the course duration. For semester-length courses this is Friday of the fourth week. Request deadlines in short-term classes and Summer session are considerably earlier; check with the Registration Office, the online schedule, and the course CRN details for exact dates.
4. The pass/no pass grading option is not available through online registration. You must go to the Admissions and Records Office to complete a Request For Pass/No Pass Grading Form.
5. A grade of "P" (pass) represents satisfactory achievement which would have been graded C or better on the regular grading scale. A grade of "NP" (no pass) indicates unsatisfactory achievement which would have been graded with a D or lower on the regular grading scale.
6. Sequential courses may be taken on a pass/no pass basis.
7. Instructors are notified as to which students have elected the pass/no pass option in their courses at the time of grading.

8. Any restriction listed above does not apply when a class is offered only on a pass/no pass basis.
9. The request for pass/no pass grading is final and may not be reversed.

Incomplete Grades

A grade of "I" is given by a instructor only in cases where a student is doing passing work at C or higher level, but for reasons beyond the student's control, is unable to complete the requirements of the course. The student must contact the instructor before the end of the semester and make arrangements for completing the required assignments.

When a grade of "I" is given, a "Contract for the Assignment of an Incomplete Grade" must be completed and signed by the instructor and the student. This contract lists specific conditions for removal of the "I" and the default grade to be recorded if the conditions are not met within one year from the end of the semester in which the "I" was assigned. A student must complete the remaining course assignments within one year, or the default grade will be recorded on the transcript. **Re-enrollment in the class as a way to make up the "I" is not allowed except in exceptional situations, such as a laboratory class.** When required work is made up, the grade earned is entered on the student's transcript. "I" grades are not used in computing the grade-point average.

To meet graduation requirements, a student must achieve a minimum C average (2.000 GPA) for all lower division college units attempted in degree applicable courses, including transferred courses and grades. Students should be aware that "I" grades are computed as F grades when a student's records are being evaluated for graduation. A student's overall degree applicable GPA must be 2.000 to be eligible to graduate.

Authority on Grades

The instructor is the final authority on assignment of grades. When reported to the Admissions and Records Office, grades represent the instructor's final decision as to a student's achievement. Grades are not given as a warning, punishment or reward and are not subject to revision for purposes of determining eligibility for office or honors, college transfer or for any other reason except the subsequent discovery of an error (as a result of mistake, fraud, bad faith, or incompetence). Any change of grade submitted after the normal two-year holding period for backup materials will require documentation as to the nature of the error in the first grade.

Grade Reports

At mid-semester the instructor may issue progress reports to students in LancerPoint. Final semester grades for all courses taken during the semester, regardless of the end date of the course, are available to students on the Web at the end of the semester.

Grade Appeal Process

The purpose of the academic grade appeal procedures is to provide a process by which a dispute in the assigned final grade for a course may be resolved in a full and efficient manner as provided in section 76224a of the California Education Code and section 55760a in the California Code of Regulations. The Grade Appeal Process can be found in the PACCD procedures No. 4051.10. The process and appropriate forms are available in the Office of the Vice President of Instruction (C231). The student must initiate any request for a grade change within the next regular semester following the award of the original grade.

PROBATION, DISMISSAL AND READMISSION

Academic Probation

A student who has attempted at least 12 semester units as shown by the official academic record shall be placed on academic probation if the student has earned a GPA below 2.000 in all units which were graded.

Although a student on probation is limited to a maximum load of 12 units per semester, such students should consider limiting their enrollment to fewer units. Academic probation may be removed and regular status attained by achieving a cumulative grade-point average of 2.000 or higher. Probationary status is based upon grades received during or after Spring 1982.

Academic Dismissal

A student who is on academic probation shall be subject to dismissal if the student earned a cumulative GPA of less than 1.750 in all units attempted in each of 3 consecutive semesters. Dismissal calculations are based upon classes taken from Spring 1982 to the present. If a student has a semester grade-point average of 2.000 or higher in the semester in which the student would be dismissed, the student will not be dismissed but instead will continue on probation. Students are notified of their dismissal by email and LancerPoint. Dismissal students who are enrolled for the following semester are withdrawn from a primary term.

A dismissed student may petition for readmission after a lapse of one semester or more. The student must present

positive evidence of a serious intent to succeed and have a realistic academic goal identified. If the petition is granted, the student will be admitted on a second stage academic probation and may have enrollment limitations. If the student is subsequently dismissed a second time due to continued substandard academic performance, a petition for readmission will not be considered until two or more semesters have lapsed. If readmitted following a second dismissal, the student will be placed on a second stage academic probation. If the student is subsequently dismissed a third time, a petition for readmission will not be considered until five years have lapsed.

Probation for Unsatisfactory Citizenship

Each student should be thoroughly familiar with the Standards of Student Conduct and with regulations of the College. Students attending the College are expected to maintain satisfactory standards of citizenship at all times on the campus and in the community. Satisfactory citizenship includes conduct which respects the rights of all individuals, which avoids actions disruptive to the ongoing educational program and which does not violate specific prohibitions outlined in the Education Code.

When it is indicated that citizenship is unsatisfactory, the student may be subject to the following: reprimand, disciplinary probation, administrative class withdrawal, suspension or expulsion, as conditions warrant. Unsatisfactory citizenship includes, among other things, cheating, plagiarism, hazing and conduct disruptive to the teaching-learning process. In addition, falsification of information provided to the Admissions and Records Office is basis for dismissal from a class or from the College. Individuals engaged in destructive activities involving any kind of physical or psychological mistreatment of students are subject to prosecution under the California State Law banning hazing and to dismissal from the College. Penalties for individuals, organizations and institutions can be severe.

Progress Probation

A student who has enrolled in a total of at least 12 semester units as shown by the official academic record shall be placed on progress probation when the percentage of all units in which a student has enrolled and for which entries of "W," "I," "NP" and "NC" are recorded reaches or exceeds fifty percent (50 percent).

Although a student on progress probation is limited to a maximum load of 12 units per semester, such students should consider limiting their enrollment to fewer units. A student on progress probation because of an excess of units for which entries of "W," "I," "NP" and "NC" are recorded shall be removed from probation when the percentage of units in this category drops below fifty per-

cent (50%). Probation calculations are based upon courses taken from Spring 1982 to the present.

Progress Dismissal

A student who has been placed on progress probation shall be subject to dismissal if the percentage of units in which the student has been enrolled for which entries of "W," "I," "NP" and "NC" are recorded in at least 3 consecutive semesters reaches or exceeds fifty percent (50%).

Dismissal calculations are based upon classes taken from Spring 1982 to the present. Students will be notified of the progress dismissal by email and LancerPoint. Students enrolled for the following semester will be withdrawn from the College.

After a lapse of one semester or more, a dismissed student may petition for readmission. The student must present positive evidence of a serious intent to succeed and have a realistic academic goal identified. If the petition is granted, the student will be admitted on progress probation and may have enrollment limitations. If the student is subsequently dismissed a second time, a petition for readmission will not be considered until two or more semesters have lapsed. If readmitted, following a second dismissal, the student will be placed on a second stage progress probation. If the student gets dismissed a third time, a petition for readmission will not be considered until five years have lapsed.

Repetition of Courses

Repetition of courses (other than those noted below in Courses Repeatable for Credit below) is subject to the following conditions:

1. A student may not repeat a class in which he or she earned a grade of C, CR, P, or better unless he/she is eligible to repeat the class under one of the exceptions listed below under "Repetition of Courses".
2. A student is allowed up to three enrollments to earn a successful passing grade (A, B, C, or P) for a class. (For course repetition purposes, the defining characteristic of an enrollment is that it results in an entry on the student's permanent record, of a letter grade(A, B, C, D, F, W, I, NP), whether or not credit is received. Students may petition for a fourth attempt if they are able to provide verifiable documentation of extenuating circumstances of accident, illness or other circumstances beyond the student's control. Consult the college website (<http://www.pasadena.edu/admissions/academicinfo/petition.cfm>) or the Petitions Office in L113 for more information.

3. No student may enroll in two sections of the same course in the same part of term for any one semester, regardless of whether or not the course is repeatable for credit.
4. For courses in which D, F, W, or NP grades were earned, a C or better must be earned to have the substandard grade disregarded from calculating in the GPA. Although the original substandard grades will not be calculated in the student's GPA, they will appear on the student's transcript and will not be removed. The student's transcript is considered a true history of coursework completed at PCC.

Exceptions to Course Repetition

Students may petition to repeat a class they have passed with a grade of C/P/Cr or higher if they meet one of the following criteria and are able to provide the required verifiable documentation:

Repeating a Course Due to Significant Lapse of Time

Students may petition only one (1) time to repeat a course in which a grade of C, P, CR or higher was earned by meeting the following conditions:

1. The course was successfully completed more than thirty-six (36) months prior, and
2. One of the following is true:
 - a) the District has established a recency prerequisite for the course or;
 - b) another institution of higher education to which the student seeks to transfer has established a recency requirement which the student will not be able to satisfy without repeating the course in question.
 - i. A student may petition to repeat a course where less than 3 years has elapsed if documents show that repetition is necessary for the student's transfer to the institution of higher education

Repetition Due to Legally Mandated Training Requirement

Students may repeat a course any number of times where repetition is required to meet a legally mandated training requirement as a condition of continued paid or volunteer employment, regardless of the grade recorded each time.

Students will be required to verify the legally mandated training requirement for becoming employed or to maintain their volunteer or paid employment status by providing both of the following:

1. Written evidence that the course is legally mandated for the student's current paid or volunteer employment. (e.g. a copy of building code statutes that require certain courses to be current for licensing purposes.) and
2. Written evidence from the student's employer or prospective employer stating that repetition of the course is required for the student to get or keep a paid or volunteer job, or evidence that the student is licensed to perform in a certain field (e.g. an EMT license, CPR certificate)
3. Other types of documentation may be considered by the designated approving administrator.

The term "legally mandated" is interpreted to mean "required by statute or regulation as a condition of paid or volunteer employment" and excludes administrative policy or practice. All grades and units received pursuant to this section will be included in calculation of the grade point average.

Repetition Due to Significant Change in Industry or Licensure Standard

Students are permitted to repeat courses any number of times where it is determined that there has been a significant change in industry or licensure standards and that the student will not be able to get or keep employment without repeating the course. This exception does not permit students to repeat a class to gain a promotion, or to voluntarily improve their skills. All grades and units received pursuant to this section will be included in calculation of the grade point average.

Students are required to verify that they meet the criteria for course repetition under this provision by providing the following:

1. Written evidence of the change in industry or licensure standards (e.g. updated requirements for renewal of a license or certification; a letter from an instructor verifying that software has changed substantially since the student completed the course) and
2. Written evidence from the student's employer or prospective employer stating that the student must take the course again to get or keep employment or a professional license.
3. Other types of documentation may be considered by the designated approving administrator.

Courses Repeatable for Credit: Certain courses may be repeated for additional experience and credit, and are so identified in their course descriptions by a “maximum credit” notation. A student may enroll in one of these exception courses once per semester and as many times as allowable until the maximum credit is earned. A student who receives a substandard grade in such a course may repeat the course for purposes of removing the substandard grade from calculating in the GPA (see above), as long as he or she has not reached the maximum number of enrollments allowed; if the student has already reached the maximum number of enrollments allowed, he or she must petition to repeat the course again.

Academic Renewal

The purpose of Academic Renewal, Title 5 (Sections 55764 and 55765 of the California Code of Regulations), is to disregard students’ previously recorded substandard academic performance when such work does not reflect current demonstrated ability. As a result, Academic Renewal allows students the benefits of their current level of ability and performance and does not permanently penalize them for poor performance in past semesters. Academic Renewal encourages students to continue their efforts toward their educational objectives when the weight of previously recorded substandard work would otherwise make the achievement of those objectives unlikely.

Academic Renewal is intended only to facilitate graduation from Pasadena City College (2.000 grade-point average) and/or enable qualified students to transfer to a four-year college or university. It is not applicable to students who wish to raise their grade-point averages beyond these stated goals.

1. A student may be granted Academic Renewal only once in an academic career at the College.
2. A student may request Academic Renewal for not more than two semesters of work accomplished at PCC. Course work completed at PCC as well as other accredited colleges or universities will be considered in the Academic Renewal evaluation.
3. If and when the petition is granted, the student’s PCC Permanent Record will be annotated so that it is readily evident to all users of the record that no units taken during the disregarded term(s), even if satisfactory grades were received, will apply toward units for graduation or any other educational objective. All work will remain legible on the record, ensuring a true and complete academic history.
4. The student seeking Academic Renewal is responsible for presenting evidence to the effect that the previously recorded work was substandard academic

performance (less than 2.000) and is not reflective of more recently demonstrated academic ability. Evidence of recent academic ability may include one of the following:

- a. 15 semester units attempted with a minimum 3.000 GPA.
 - b. 30 semester units attempted with a minimum 2.500 GPA.
 - c. 45 semester units attempted with a minimum 2.000 GPA.
5. Student must present evidence that he or she is enrolled in a defined educational program.
 6. There must be a minimum 18-month time lapse between the end of the most recent semester to be renewed and the date of initiation of the request for such renewal.
 7. Courses within the approved academic renewal term will count in course repetition.
 8. Academic Renewal by Pasadena City College does not guarantee that other institutions outside the District will approve such action. This determination will be made by the respective transfer institutions.

Petitions for Academic Renewal are submitted to the Petitions Committee online to petitions@pasadena.edu or to the petitions drop box outside the Admissions and Records Office (L113).

Transcripts of Record

At the request of a student and in the absence of any outstanding financial obligation to the College (see “Financial Obligations of Students” section), official transcripts of record bearing the seal of the College and signature of the Senior Vice President/Assistant Superintendent will be forwarded to designated institutions or individuals. Such requests may be submitted online (www.pasadena.edu).

Under no circumstances will partial transcripts of the record earned at Pasadena City College be sent either to the student or to another institution.

Pasadena City College will accept responsibility for providing transcripts of record for course work completed at Pasadena City College only.

Transfer Course Work

Only those lower division college level courses transferred from accredited colleges and universities are evaluated for applicability to the Associate in Arts or Associate in Science Degree. There is no guarantee that courses taken at another college will be accepted for credit at Pasadena

City College. Many factors are considered when evaluating a course for credit such as: the accreditation status of the college, the course content, educational quality and rigor, level of credit earned and appropriateness of the other college courses to programs offered at Pasadena City College. A passing score on a competency examination administered by Pasadena City College may be required before credit is granted for courses in mathematics or English taken at other colleges. Transcripts from other accredited colleges are not evaluated until the student has completed 15 units at Pasadena City College. Students may request an evaluation in the Counseling Office. Official transcripts of all previous college work must be submitted to the Admissions and Records Office.

To graduate, a student must achieve at least a C average (2.000 GPA) for all lower division college units attempted, including transferred grades and a 2.000 GPA in all courses taken at Pasadena City College which can be counted toward the degree for which the student has applied. (See Catalog sections on "The Associate in Arts Degree" and "The Associate in Science Degree.") Grade points in excess of those used in calculating a 2.000 GPA for units attempted at another collegiate institution cannot be used in calculating the C average at Pasadena City College. Grade points earned at other institutions, however, may be counted the same as Pasadena City College grade points in awarding scholarships and loans, in determining membership in honor societies.

Credit by Examination and Advanced Placement

Advanced Placement Policy

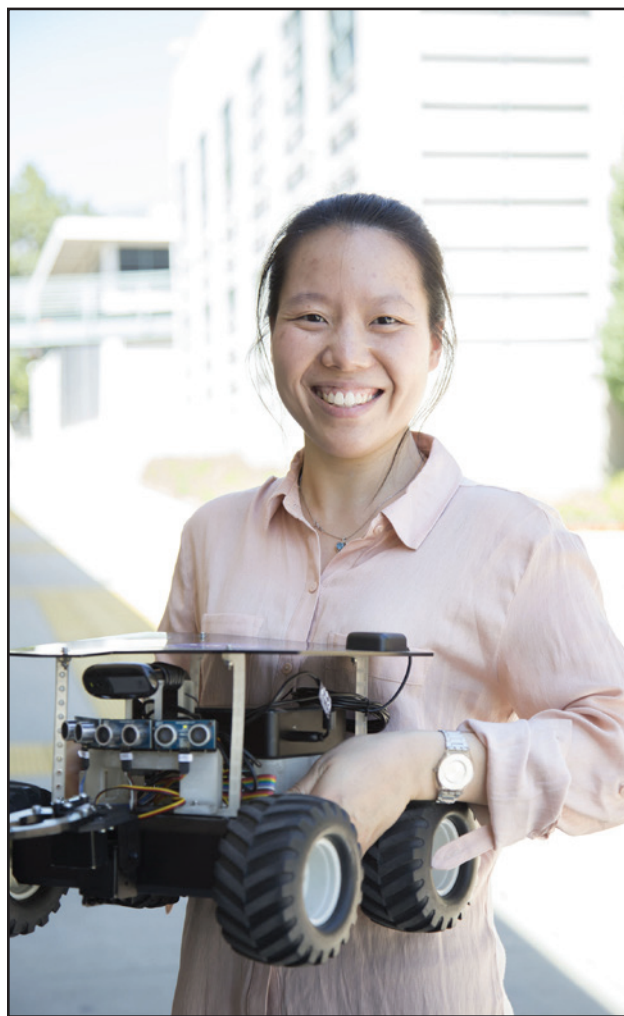
Students who have completed Advanced Placement Examinations of the College Entrance Examination Board (Box 592, Princeton, New Jersey 08540) shall receive credit for Pasadena City College courses as listed below. A grade of "Pass" will be assigned to each student who obtains a score of 3, 4, or 5, except as noted. Credit earned by Advanced Placement may be counted towards Associate Degree requirements, IGETC, and CSU General Education Breadth Requirements. The UC Policy for AP credit can be found at: <http://admission.universityofcalifornia.edu/counselors/exam-credit/ap-credits/index.html>. The CSU also has a system-wide policy for these and other AP exams for awarding transfer credit for admission. The CSU policy for AP can be found at <http://www.calstate.edu/transfer/requirements/advanceplacementapcourses.shtml>.

The units earned from Advanced Placement do not apply toward the Pasadena City College residency requirements for graduation. (See page 28.) To request credit, students must submit official copies of Advanced Place-

ment Examination test scores with a Student Petition form to the Office of the Vice President for Student and Learning Services, L112. The list on the following pages has been approved by PCC's Curriculum and Instruction Committee with restrictions as indicated:

College Credit for Advanced Placement (AP) Tests

Students may earn credit for College Entrance Examination Board (CEEB) Advanced Placement (AP) Tests with scores of 3, 4, or 5. AP credit can be used to meet IGETC, CSU GE, and Associate degree general education and/or major requirements. Students must have the College Board (<http://www.apscore.collegeboard.org/scores>) send AP exam results to the Admissions and Records Office (unopened hand carried copies will be accepted) for use on the Associate degree or transfer patterns. Course credit and units granted at Pasadena City College may differ from course credits and units granted by a transfer institution or by another community college.



EXAM	PCC (MAJOR AND/OR GE)	CSU GE BREADTH AREA ¹ AND MINIMUM UNITS EARNED ²	CSU-UNITS EARNED TOWARD TRANSFER	IGETC	UC-UNITS EARNED TOWARD TRANSFER
Art History	Score of 4 or 5 – Art 001A or 001B (3 semester)	Area C1 or C2 3 semester	6 semester	Area 3A or 3B 3 semester	8 quarter/5.3 semester
Art (Studio)	Drawing Portfolio – Art 011A (3 semester)	N/A	3 semester	N/A	8 quarter/5.3 semester Maximum 8 quarter for all 3 AP Art Studio exams
Art (Studio)	Studio Art Portfolio – Art Elective Credit for 2D Design or 3D Design subject to division recommendation (3 semester per exam)	N/A	3 semester		8 quarter/5.3 semester Maximum 8 quarter for all 3 AP Art Studio exams
Biology	Score of 3, 4, or 5 – Biology 011 (4 semester)	Area B2 and B3 4 semester	6 semester	Area 5B and 5C 4 semester	8 quarter/5.3 semester
Calculus AB	Score of 3 or 4 – Math 009 (5 semester) and placement into Math 005A Score of 5 – Math 005A (5 semester) and placement into Math 005B	Area B4 3 semester	3 semester*	Area 2A 3 semester	4 quarter/2.7 semester**
Calculus BC	Score of 3 or 4 – Math 005A (5 semester) and placement into Math 005B Score of 5 – Math 005B (5 semester) and placement into Math 005C	Area B4 3 semester	6 semester*	Area 2A 3 semester	8 quarter/5.3 semester**
Calculus BC/AB Subscore of 3 ³		N/A	3 semester*	Area 2A 3 semester	
AP CALCULUS AND COMPUTER SCIENCE EXAM LIMITATIONS					
	*Only one AP exam in Calculus or Computer Science may be used toward CSU baccalaureate **Maximum 8 quarter/5.3 semester for both				
Chemistry ⁴	Score of 3 or 4 – Chemistry 022 (4 semester) and placement into Chemistry 001A Score of 5 – Chemistry 001A (5 semester)	Area B1 and B3 4 semester	6 semester	Area 5A and 5C 4 semester	8 quarter/5.3 semester
Chinese Language & Culture	Score of 3 – Chinese 001 (5 semester) Score of 4 – Chinese 002 (5 semester) Score of 5 – Chinese 003 (5 semester)	Area C2 3 semester	6 semester	Area 3B and 6A 3 semester	8 quarter/5.3 semester
Computer Science A	Score of 3, 4, or 5 – CS 001 (5 semester)	N/A	3 semester***	N/A	2 quarter/1.3 semester
Computer Science AB	Score of 3, 4, or 5 – CS 002 (5 semester)	N/A	6 semester***	N/A	4 quarter/2.7 semester****
AP COMPUTER SCIENCE AND CALCULUS EXAM LIMITATIONS					
	Only one AP exam in Computer Science or Calculus may be used toward CSU baccalaureate *Maximum 4 quarter/2.7 semester for both				
Economics - Macroeconomics	Score of 3, 4, or 5 – Economics 001A (3 semester)	Area D 3 semester	3 semester	Area 4 3 semester	4 quarter/2.7 semester

EXAM	PCC (MAJOR AND/OR GE)	CSU GE BREADTH AREA ¹ AND MINIMUM UNITS EARNED ²	CSU-UNITS EARNED TOWARD TRANSFER	IGETC	UC-UNITS EARNED TOWARD TRANSFER
Economics - Microeconomics	Score of 3, 4, or 5 – Economics 001B (3 semester)	Area D 3 semester	3 semester	Area 4 3 semester	4 quarter/2.7 semester
English - Language & Composition	Score of 3, 4 or 5 – English 001A (4 semester)	Area A2 3 semester	6 semester	Area 1A 3 semester	8 quarter/5.3 semester*****
English - Literature & Composition	Score of 3, 4 or 5 – English 001A (4 semester)	Area A2 and C2 6 semester	6 semester	Area 1A or 3B 3 semester	8 quarter/5.3 semester*****
AP ENGLISH EXAM LIMITATIONS					
*****Maximum 8 quarter/5.3 semester for both					
Environmental Science	Score of 3, 4, or 5 – Envs 001 (4 semester) <i>(formerly Biology 37/Physical Science37)</i>	Area B1 and B3 4 semester	4 semester	Area 5A and 5C 3 semester	4 quarter/2.7 semester
French Language and Culture	Score of 3 – French 001 (5 semester) Score of 4 – French 002 (5 semester) Score of 5 – French 003 (5 semester)	Area C2 3 semester	6 semester	Area 3B and 6A 3 semester	8 quarter/5.3 semester
French Literature		Area C2 3 semester <i>(if taken prior to Fall 2009)</i>	6 semester	Area 3B and 6A 3 semester	8 quarter/5.3 semester
German Language & Culture	Score of 3 – German 001 (5 semester) Score of 4 – German 002 (5 semester) Score of 5 – German 003 (5 semester)	Area C2 3 semester	6 semester	Area 3B and 6A 3 semester	8 quarter/5.3 semester
Government and Politics - Comparative Government	Score of 3, 4, or 5 – Political Science 002 (3 semester)	Area D 3 semester	3 semester	Area 4 3 semester	4 quarter/2.7 semester
Government and Politics - U.S. Government	Score of 3, 4, or 5 – Political Science 001* (3 semester)	Area D and US 2** 3 semester	3 semester***	Area 4 3 semester	4 quarter/2.7 semester
AP GOVERNMENT AND POLITICS EXAM LIMITATIONS					
*Also requires passing California state and local exam - Social Sciences Division **Does not fulfill American Institutions California Government requirement ***Student can satisfy the American Institutions-California Government requirement after transfer					
History - European	Score of 3, 4, or 5 – History 001B (3 semester)	Area C2 or D 3 semester	6 semester	Area 3B or 4 3 semester	8 quarter/5.3 semester
History - U.S.	Score of 3, 4, or 5 – History 007A (3 semester)	Area C2 or D and US 1 3 semester	6 semester	Area 3B or 4 3 semester	8 quarter/5.3 semester
History - World		Area C2 or D 3 semester	6 semester	Area 3B or 4 3 semester	8 quarter/5.3 semester
Human Geography		Area D 3 semester	3 semester	Area 4 3 semester	4 quarter/2.7 semester

EXAM	PCC (MAJOR AND/OR GE)	CSU GE BREADTH AREA ¹ AND MINIMUM UNITS EARNED ²	CSU-UNITS EARNED TOWARD TRANSFER	IGETC	UC-UNITS EARNED TOWARD TRANSFER
Italian Language & Culture	Score of 3 – Italian 001 (5 semester) Score of 4 – Italian 002 (5 semester) Score of 5 – Italian 003 (5 semester)	Area C2 3 semester	6 semester	Area 3B and 6A 3 semester	8 quarter/5.3 semester
Japanese Language & Culture	Score of 3 – Japanese 001 (5 semester) Score of 4 – Japanese 002 (5 semester) Score of 5 – Japanese 003 (5 semester)	Area C2 3 semester	6 semester	Area 3B and 6A 3 semester	8 quarter/5.3 semester
Latin – Literature or Vergil		Area C2 3 semester	6 semester	Area 3B and 6A 3 semester	4 quarter/2.7 semester
Music Theory	Score of 3, 4, or 5 – Music 001A (3 semester)	Area C1 3 semester <i>(if taken prior to Fall 2009)</i>	6 semester	N/A	8 quarter/5.3 semester (Full Music Theory Exam required)
Physics B* (Replaced by Physics 1 & 2, effective 2014-15)	Score of 3, 4, or 5 – Physics 010 (3 semester)	B1 and B3 4 semester	4 semester****	Area 5A and 5C 4 semester	8 quarter/5.3 semester****
Physics 1 ⁴	Score of 3, 4, or 5 – Physics 002A (3 semester)	B1 and B3 4 semester	4 semester****	Area 5A and 5C 4 semester	8 quarter/5.3 semester****
Physics 2 ⁴	Score of 3, 4, or 5 – Physics 002B (3 semester)	B1 and B3 4 semester	4 semester****	Area 5A and 5C 4 semester	8 quarter/5.3 semester****
Physics C- Mechanics ⁴	Score of 3, 4, or 5 – Physics 031A (4 semester)	Area B1 and B3 4 semester*	4 semester****	Area 5A and 5C 3 semester	4 quarter/2.7 semester****
Physics C- Electricity/ Magnetism ⁴	Score of 3, 4, or 5 – Physics 031B (4 semester)	Area B1 and B3 4 semester*	4 semester****	Area 5A and 5C 3 semester	4 quarter/2.7 semester****
AP PHYSICS EXAM LIMITATIONS					
	****Maximum 4 semester toward GE and 6 semester toward CSU baccalaureate *****Maximum 8 quarter/ 5.3 semester for all Physics exams				
Psychology	Score of 3, 4, or 5 – Psychology 001 (3 semester)	Area D 3 semester	3 semester	Area 4 3 semester	4 quarter/2.7 semester
Spanish Language & Culture	Score of 3 – Spanish 001 (5 semester) Score of 4 – Spanish 002 (5 semester) Score of 5 – Spanish 003 (5 semester)	Area C2 3 semester	6 semester	Area 3B and 6A 3 semester	8 quarter/5.3 semester
Spanish Literature & Culture		Area C2 3 semester	6 semester	Area 3B and 6A 3 semester	8 quarter/5.3 semester
Statistics	Score of 3 or 4 – Statistics 015 or 018 (4semester) Score of 5 – Statistics 050 (4 semester) Maximum credit - one Statistics course only	Area B4 3 semester	3 semester	Area 2 3 semester	4 quarter/2.7 semester

- ¹ Areas of GE Breadth (A1 through E) are defined in EO 1033. Areas of American Institutions (US-1 through US-3) are set forth in Sections IA and IB of EO 405, and at www.assist.org.
- ² These units count toward eligibility for admission. The units may not all apply toward certification of the corresponding GE-Breadth area. See Executive Orders 1033 and 1036 for details.
- ³ Students who take the Calculus BC examination and earn a subscore of 3 or higher on the Calculus AB portion will receive UC credit for the Calculus AB examination, even if they do not receive a score of 3 or higher on the BC examination
- ⁴ **Advisory to Pre-med Students:** Even though AP scores may place students into a higher level chemistry or physics course, many medical schools do not accept AP credit in lieu of college level course credit to fulfill admissions requirements. Students interested in medical school should consult directly with the medical schools they are considering for information on their credit policies. Students may also want to refer to www.aamc.org or www.aacom.org.

Traditional Associate degree: Students should be aware that AP test credit is evaluated by corresponding it to an equivalent PCC course, e.g., History 7A. A student who receives AP credit and then takes the equivalent PCC course will have the unit credit for such duplication deducted prior to being awarded the Associate degree. Credit by Advanced Placement exam is noted and listed on a student's transcript, with units assigned and a grade of "Passing".

CSU GE: The Advanced Placement examinations may be incorporated into the certification of CSU General Education-Breadth requirements by any certifying institution. All CSU campuses will accept the minimum units shown and apply them toward fulfillment of the designated General Education-Breadth area if the examination is included as part of a full or subject-area certification. Please note that individual CSU campuses may choose to grant more units than those specified toward completion of General Education-Breadth requirements.

IGETC: AP exams must be used in area indicated regardless of where the certifying CCC's discipline is located.

College Level Examination Program

The College will grant a maximum of 6 units elective credit based on scores recommended by the American Council of Education in each General Examination of the College Level Examination Program (CLEP) of the College Entrance Examination Board (Box 1821, Princeton, New Jersey 08540). Subject credit, rather than elective credit, may be granted upon recommendation of the division.

College Level Examination Program (CLEP) IN CSU General Education (G.E.) Breadth Certification

Some CLEP exams may be used on the CSU General Education Breadth Certification. Students must have the College Board (<https://clep.collegeboard.org>) send CLEP exam results to the Admissions and Records Office (un- opened hand carried copies will be accepted) for use on the CSU G.E. pattern. CLEP exams may not be used on IGETC, the UC system does not recognize the exams. CLEP units will not be posted to the PCC transcript.

CLEP transfer credit for CSU admission is determined by the CSU system. The CSU policy for CLEP on the CSU General Education Breadth Certification can be found on the CSU system website. See Use of Advanced Placement, International Baccalaureate, and CLEP: <http://www.calstate.edu/transfer/requirements/thecollegelevelexaminationprogramclep.shtml>.

EXAM		CSU G.E. BREADTH AREA OR AMERICAN INSTITUTIONS ¹ (CSU - units earned toward breadth certification)	CSU-UNITS EARNED TOWARD TRANSFER ²
CLEP American Government	50	Area D - 3 semester units (<i>does not meet CSU American Institutions Requirement</i>)	3 semester units
CLEP American Literature	50	Area C2 - 3 semester units	3 semester units
CLEP Analyzing and Interpreting Literature	50	Area C2 - 3 semester units	3 semester units
CLEP Biology	50	Area B2 - 3 semester units (<i>no lab</i>)	3 semester units
CLEP Calculus	50	Area B4 - 3 semester units	3 semester units
CLEP Chemistry	50	Area B1 - 3 semester units (<i>no lab</i>)	3 semester units
CLEP College Algebra	50	Area B4 - 3 semester units	3 semester units
CLEP College Algebra - Trigonometry	50	Area B4 - 3 semester units	3 semester units
CLEP College Mathematics	50	n/a	0
CLEP Economics Principles of Macroeconomics	50	Area D - 3 semester units	3 semester units
CLEP Economics Principles of Microeconomics	50	Area D - 3 semester units	3 semester units
CLEP English Composition (no essay)	50	n/a	0
CLEP English Composition with Essay	50	n/a	0
CLEP English Literature	50	Area C2 - 3 semester units	3 semester units
CLEP Financial Accounting	50	n/a	3 semester units
CLEP French ³ Level I	50	n/a	6 semester units
CLEP Freshman College Composition	50	n/a	0
CLEP German ³ Level I	50	n/a	6 semester units
CLEP History, United States I	50	Area D + US History 1 - 3 semester units Requirement for CSU	3 semester units
CLEP History, United States II	50	Area D + US History 1 - 3 semester units Requirement for CSU	3 semester units
CLEP Human Growth and Development	50	Area E - 3 semester units	3 semester units
CLEP Humanities	50	Area C2 - 3 semester units	3 semester units
CLEP Information Systems and Computer Applications	50	n/a	3 semester units
CLEP Introduction to Educational Psychology	50	n/a	3 semester units
CLEP Introductory Business Law	50	n/a	3 semester units
CLEP Introductory Psychology	50	Area D - 3 semester units	3 semester units

EXAM		CSU G.E. BREADTH AREA OR AMERICAN INSTITUTIONS ¹ (CSU - units earned toward breadth certification)	CSU-UNITS EARNED TOWARD TRANSFER ²
CLEP Introductory Sociology	50	Area D - 3 semester units	3 semester units
CLEP Natural Sciences	50	Area B1 or B2 - 3 semester units (<i>no lab</i>)	3 semester units
CLEP Pre-Calculus	50	Area B4 - 3 semester units	3 semester units
CLEP Principles of Accounting	50	n/a	3 semester units
CLEP Principles of Management	50	n/a	3 semester units
CLEP Principles of Marketing	50	n/a	3 semester units
CLEP Social Sciences and History	50	n/a	0
CLEP Spanish ³ Level I	50	n/a	6 semester units
CLEP Trigonometry	50	Area B4 - 3 semester units	3 semester units
CLEP Western Civilization I	50	Area C2 or D6 - 3 semester units	3 semester units
CLEP Western Civilization II	50	Area D - 3 semester units	3 semester units

¹ Areas of GE Breadth (A1 through E) are defined in EO 1033. Areas of American Institutions (US-1 through US-3) are set forth in Sections IA and IB of EO 405, and at www.assist.org.

² These units count toward eligibility for admission. The units may not all apply toward certification of the corresponding GE-Breadth area. See Executive Orders 1033 and 1036 for details.

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 be applied 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.

International Baccalaureate (IB) on the IGETC General Education (G.E.) Pattern

A score of 5, 6 or 7 on Higher Level exams is required for IGETC G.E. certification. IB units will not be posted to the PCC transcript.

Students must have the International Baccalaureate Organization (www.ibo.org) send IB exam results to the Admissions and Records Office (un-opened hand carried copies will be accepted) for use on the IGETC general education patterns.

INTERNATIONAL BACCALAUREATE (IB) EXAM	IGETC AREA
IB Biology HL	5B
IB Chemistry HL	5A
IB Economics HL	4
IB Geography HL	4
IB History (any region) HL	3B or 4*
IB Language A: Literature (any language, except English) HL	3B and 6A
IB Language A: Language and Literature (any language, except English) HL	3B and 6A
IB Language A: Literature (any language) HL	3B
IB Language A: Language and Literature (any language) HL	3B
IB Language B (any language) HL	6A
IB Mathematics HL	2A
IB Physics HL	5A
IB Psychology HL	4
IB Theatre HL	3A

*IB exam may be used in either area regardless of where the certifying CCC's discipline is located.

Example: History at a CCC is approved for Area 3B. The History IB may be used in Areas 3B or Area 4.

Actual IB transfer credit awarded for these and other IB exams for admission is determined by the UC system. The UC Policy for IB credit can be found on the UC system website: <http://admission.universityofcalifornia.edu/counselors/exam-credit/ib-credits/index.html>

International Baccalaureate (IB) on the CSU General Education (G.E.) Breadth Certification

A score of 4, 5, 6, or 7 is required for CSU G.E. Breadth Certification. IB units will not be posted to the PCC transcript.

Students must have the International Baccalaureate Organization (www.ibo.org) send IB exam results to the Admissions and Records Office (un-opened hand carried copies will be accepted) for use CSU G.E. Breadth Certification.

INTERNATIONAL BACCALAUREATE (IB) EXAM	PASSING SCORE	CSU G.E. BREADTH AREA	CSU-UNITS EARNED TOWARD G.E. BREADTH CERTIFICATION	CSU-UNITS EARNED TOWARD TRANSFER
IB Biology HL	5	B2	3	6
IB Chemistry HL	5	B1	3	6
IB Economics HL	5	D	3	6
IB Geography HL	5	D	3	6
IB History (any region) HL	5	C2 or D	3	6
IB Language A Literature HL	4	C2	3	6
IB Language A Language and Literature HL	4	C2	3	6
IB Language A1 (any language) HL	4	C2 (If taken prior to Fall 2013)	3	6
IB Language A2 (any language) HL	4	C2 (If taken prior to Fall 2013)	3	6
IB Language B (any language) HL	4	n/a	0	6
IB Mathematics HL	4	B4	3	6
IB Physics HL	5	B1	3	6
IB Psychology HL	5	D	3	3
IB Theatre HL	4	C1	3	6

Actual IB transfer credit awarded for these and other IB exams for admission is determined by the CSU. The CSU Policy for IB credit can be found on the CSU system website. See Use of Advanced Placement, International Baccalaureate, and CLEP Examinations at: <http://www.calstate.edu/transfer/requirements/internationalbaccalaureateib.shtml>.

Credit-by-Examination – Pasadena City College Courses

Granting of credit-by-examination must meet the following criterion:

1. The student is currently enrolled and attending the College in at least one graded course (the requested credit-by-exam course does not meet these criteria).
2. The course is listed in the *PCC College Catalog* and is not primarily of an activity nature and is not in the qualifying or remedial category. Credit-by-examination is not available for the native language of a student or for subjects which appear on the student's high school transcript. Credit is not available for any course which is lower in a sequence than a course in which credit has already been granted. Unique situations may be referred to the Petitions Committee.
3. The student is in good standing, has all required transcripts on file at the College and has completed 15 or more units in residence with an overall 2.000 or higher grade-point average.
4. The student has never failed the course and has not been enrolled in the class during the semester for which the examination is being requested.
5. The student may attempt credit-by-examination only once in a particular course.
6. Maximum credit-by-examination for courses of the College is 12 units. The credit will be recorded in the term in process when the examination results are submitted to the Admissions and Records Office. Credit will not be posted to prior terms.
7. Credit by examination courses are graded on a pass or no pass basis.
8. Approval is required from the division dean responsible for the area in which credit will be given and the Director of Admissions and Records.

Students will be required to pay all applicable fees (enrollment, non-resident tuition, etc.) at Student Business Services before any credit-by-examination is taken.

Recording and Utilization of Credit-by-Examination, CLEP and AP

Credit will be recorded with a grade of P after the student satisfactorily completes 15 or more units at Pasadena City College. It may be utilized in meeting requirements for the Associate in Arts or Associate in Science Degree. Units granted will not be used in determining eligibility for College activities, or in certifying for financial aid, Veteran's Educational Assistance, or in certifying enrollment to an outside agency.

Transfer students should be aware that four-year colleges may have different criteria for recognizing elective academic credit from non-classroom sources and that a new evaluation of experiences will often be required upon transfer.

Credit for Military Training and Experience:

Pasadena City College strives to serve our nation's military members by offering a comprehensive review of all previous academic and military education and training to earn maximum credit toward degree and certificate programs at Pasadena City College.

Depending on your military training, Pasadena City College can apply college credit to your degree program.

- For service members and veterans of the U.S. Army, submit an AARTS transcript. <https://aartstranscript.army.mil/>
- For service members and veterans of the U.S. Navy & Marine Corps, submit a SMART transcript. https://www.navycollege.navy.mil/smart_info.cfm
- For service members and veterans of the U.S. Air Force, submit a transcript from the *Community College of the Air Force*. <http://www.au.af.mil/au/ccaf/>
- For service members and veterans of the U.S. Coast Guard, submit a transcript from the U.S. Coast Guard Institute. <http://www.uscg.mil/hr/cgi/i>
- For service members who left the military before 1986, the college can apply credits from a notarized DD 214.

Evaluation of Credit From Military and Other Service

All veteran students wishing to receive veteran educational benefits must submit for evaluation official transcripts of all prior college and military training before benefits will be processed. Documentation of military training (DD2586 Army/American Council on Education Registry Transcript [AARTS], DD295, DD214, Community College of the Air Force transcript) should be submitted to the Admissions and Records Office, Building L, Room 113.

Credit for experiences in the military service (to a maximum of 16 units) and USAFI/DANTES tests may be allowed as recommended by the American Council on Education and in accordance with the provisions of the *Pasadena City College Catalog*.

Maximum Credit-by-Examination and Other Nontraditional Education

A student may be granted no more than 30 units through any combination of credit-by-examination (AP, CLEP, or PCC examinations) and evaluation of military service.

Credit Limitations in Basic Skills

Students are limited to enrolling in a maximum of 30 units of Basic Skills courses (e.g., those numbered 400 and above.) Students enrolled in ESL courses and students who have learning disabilities are exempt from this limitation.

Credit Limitations in Foreign Language

Students will not receive credit in elementary courses (semesters 1 and 2) of a foreign language offered at PCC if that language is the primary language in which they received their secondary education. Students may petition for exceptions based on special circumstances.

Auditing of Classes

Policy No. 4071: It is the policy of the Pasadena Area Community College District to allow students to audit courses when space is available in course sections and students seeking to enroll for credit are not displaced. Students who are enrolled in classes to receive credit for ten or more semester credit units shall not be charged a fee to audit three or fewer semester units during a primary semester. No student auditing a course shall be permitted to change his/her enrollment in that course to receive credit for the course. The fee for auditing courses shall be no more than the amount established by the California Education Code. The Superintendent/President shall establish procedures regarding compliance with statutory and regulatory criteria for auditing courses.

Financial Obligations of Students

Students or former students are expected to meet proper financial obligations due to the District. Pursuant to California Education Code, Section 72237, college services such as grades, transcripts, diplomas, registration privileges or any combination thereof may be withheld from any student or former student who has not made satisfactory arrangements to meet his/her financial obligation to the District.

Student Records

The following are College policies relating to the Family Educational Rights and Privacy Act of 1974, Public Law P.L. 93-380, and Chapter 816, Statutes of 1975, State of California.

I Definition of Education Records

Education records consist of those files maintained by the following offices: Admissions and Records, Assessment, Financial Aid, Counseling, Health Services, Office of Student Services and those files maintained for individual students by academic divisions.

II Access to Education Records

All students have the right to inspect and review their records. A student who follows the established procedure of the Admissions and Records Office shall be granted access to his or her records within 15 days of the request. Expressly **exempt from the right of review and inspection** are the following materials:

- A. Financial records of the parents of the students.
- B. Confidential letters and statements of recommendation which were placed in the education records prior to Jan. 1, 1975.
- C. Records of instructional, supervisory, counseling and administrative personnel which are in their sole possession and are not accessible or revealed to any other person except a instructor substituting for the one in sole possession.
- D. Records of students made and maintained by the College Health Center and the Learning Disabilities Center, which are used in the treatment of students and which are not available to persons other than those providing such treatment; except that such records can be reviewed by an appropriate professional of the student's choice.

III Procedure for a Student's Access to Records

- A. A student may review his or her records upon appropriate identification and in conference with a College Counselor or other certificated Student Services staff member.
- B. A former student may request in writing a review of his or her records. The request should be directed to the Director of Admissions and Records who is the designated "Records Officer" acting for the President of the College.
- C. Any student request for review shall be granted within 15 days following the request.

IV Procedure for Challenge of Accuracy or Content of Education Records

- A. Informal
A student may submit to the Director of Admissions and Records a Student Petition to chal-

lenge the accuracy or content of education records maintained by the College. The Student Petition must be supported with verifying documentation. The Petition Committee will rule on the request and notify the student. Any student not satisfied with the decision of the Petitions Committee may discuss the matter with the Vice President of Student Services.

B. Formal

If the student is not satisfied with the determination made by the Vice President of Student Services, the student may, within 30 days, appeal the decision in writing to the President of the College.

V Release of Education Records Information

A. Any release of a student's education records, with the exceptions listed, must be with the student's written consent or request.

B. Directory information – In accordance with the Federal Family Educational Rights and Privacy Act of 1974 and the California Educational Code, Pasadena City College will make public upon request and without student consent certain "directory information." This information consists of the following: a student's name; city of residence; major field of study; participation in officially recognized activities and sports; if a member of an athletic team, weight, height and age; dates of attendance; degree and awards received; and the most recent previous educational institution attended by the student. Any student desiring to withhold directory information and who did not indicate such at the time of admission to the College may submit a written request to the Admissions and Records Office in the L Building.

The College is required to release student names, addresses, and telephone numbers to armed forces recruiters, per the Solomon Act, without first obtaining a student's permission. In addition, the College is required to release information to the U.S. Department of Education and the Federal Internal Revenue Service regarding fees paid and financial aid received based on the Hope and Opportunity for Post-secondary Education Act of 1997. Information is also released to the National Student Clearinghouse.

C. Without the student's written consent and upon authorization of the Director of Admissions and Records or his/her designee, the College may re-

lease copies of, or otherwise divulge, material in student education records to the following agencies and individuals who are expressly forbidden from permitting access of said education records to third parties:

1. College and District staff with a need to know. Authorized representatives of the Comptroller General of the United States, the Secretary of Education, an administrative head of an education agency, state education officials, or their respective designees of the United States Office of Civil Rights, where such information is necessary to audit or evaluate a state or federally supported education program or pursuant to a federal or state law provided that, except when collection of personally identifiable information is specifically authorized by federal law, any data collected by such officials shall be protected in a manner which will not permit the personal identification of students or their parents by other than those officials. Such personally identifiable data shall be destroyed when no longer needed for such audit, evaluation and enforcement of federal legal requirements.
2. Other state and local officials or authorities to the extent that information is specifically required to be reported pursuant to state law adopted prior to Nov. 19, 1974.
3. Officials of other public or private schools or school systems, including local county, or state correctional facilities where educational programs are provided, where the student seeks or intends to enroll, or is directed to enroll, subject to the rights of students.
4. Agencies or organizations in connection with a student's application for, or receipt of, financial aid; provided that information permitting the personal identification of students may be disclosed only as may be necessary for such purposes as to determine the eligibility of the student for financial aid, to determine the amount of the financial aid, to determine the conditions which will be imposed regarding the financial aid, or to enforce the terms or conditions of the financial aid.
5. Accrediting organizations in order to carry out their accrediting functions.

6. Organizations conducting studies for, or on behalf of, educational agencies or institutions for the purpose of developing, validating, or administering predictive tests, administering student aid programs and improving instruction, if such studies are conducted in such a manner as will not permit the personal identification of students or their parents by persons other than representatives of such organizations. Such information will be destroyed when no longer needed for the purpose for which it is collected.
7. Appropriate persons in connection with an emergency if the knowledge of such information is necessary to protect the health or safety of a student or other persons, or subject to such regulations as may be issued by the Secretary of Education.
8. Those who have obtained a subpoena or judicial order. The student is given notice by mail of the College's compliance with the order.

VI Record of Access

The College will maintain an access list which includes the identity of persons who have requested and have been denied or who have had access to student records, the dates of said requests, and the reasons for such access. The access list is not required of College officials.

VII Transfer of Information by Third Parties

Education records or personal information transferred to a third party will include a notice that such party shall not permit access by any other party without the written consent of the student.

VIII Notice of Student Rights

Students will be informed at least annually through the Pasadena City College Catalog of their rights under the Act.

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Policies and Regulations



SECTION III

POLICIES AND REGULATIONS

BP 3430 Prohibition of Harassment

All forms of harassment are contrary to basic standards of conduct between individuals and are prohibited by state and federal law, as well as this policy, and will not be tolerated. Pasadena Area Community College District (District) is committed to providing an academic and work environment that respects the dignity of individuals and groups. The District shall be free of sexual harassment and all forms of sexual intimidation and exploitation including acts of sexual violence. It shall also be free of other unlawful harassment, including that which is based on any of the following statuses: national origin, religion, age, gender, gender identity, gender expression, race or ethnicity, color, medical condition, genetic information, ancestry, sexual orientation, marital status, physical or mental disability, pregnancy, military or veteran status, or because one is perceived to have one or more of the foregoing characteristics, or based on one's association with a person or group with one or more of these actual or perceived characteristics.

Any student or employee who believes that he/she has been harassed or retaliated against in violation of this policy should immediately report such incidents to the Executive Director of Human Resources, or an administrative official such as the Vice President/Assistant Superintendent, Assistant Vice President, or the President/Superintendent. Supervisors are mandated to report all incidents of harassment and retaliation that come to their attention.

Employees who violate the policy and procedures may be subject to disciplinary action up to and including termination. Students who violate this policy and related procedures may be subject to disciplinary measures up to and including expulsion.

The District's harassment and discrimination policy and procedure are available in the Human Resources Office – Room C204, and can be found on the District website at http://www.pasadena.edu/ipro/documents/BP_3430_Prohibition_of_Harassment_revised_7_16_2014.pdf (BP-340 Prohibition of Harassment Policy) and http://www.pasadena.edu/IPRO/documents/AP_3430_Prohibition_of_Harassment.pdf (AP Prohibition of Harassment Procedure)

BP 3410 Nondiscrimination

Pasadena Area Community College District (District) is committed to equal opportunity in educational programs, employment, and all access to institutional programs and activities. The District, and each individual who represents the District, shall provide access to its services, classes, and programs without regard to national origin, religion, age, gender, gender identity, gender expression, race or ethnicity, color, medical condition, genetic information, ancestry, sexual orientation, marital status, physical or mental disability, pregnancy, military or veteran status, or because he/she is perceived to have one or more of the foregoing characteristics, or based on his/her association with a person or group with one or more of these actual or perceived characteristics.

The District's nondiscrimination policy and procedure are available in the Human Resources Office – Room C204, and can be found on the District website at http://www.pasadena.edu/ipro/documents/BP_3410_Nondiscrimination_revised_7_16_2014.pdf (BP 3410 Nondiscrimination Policy) and http://www.pasadena.edu/IPRO/documents/AP_3410_Nondiscrimination_2001.pdf (BP 3410 Nondiscrimination Procedure)

BP 3420 Equal Employment Opportunity

Pasadena Area Community College District (District) affirms that diversity in the academic environment fosters cultural awareness, mutual understanding, harmony and respect, and suitable role models for all students. To that end, the District and Board of Trustees support the intent set forth by the California legislature to assure that efforts are made to build a community in which opportunity is equalized, and which fosters a climate of acceptance, with inclusion of faculty and staff from a wide variety of backgrounds. The District and Board is committed to promoting the total realization of equal employment through maintaining the District Equal Employment Opportunity (EEO) Plan.

The EEO Plan is available in the Human Resources Office – Room C204, and can be found on the District website at <http://www.pasadena.edu/HR/documents/FinalEEOPlan6-16-14.pdf> and the District's equal employment policy is available at http://www.pasadena.edu/ipro/documents/BP_3420_Equal_Employment_Opportunity.pdf (Equal Employment Opportunity Policy)

Academic Regulations

Academic Freedom

Policy No. 3100: It is the policy of the Pasadena Area Community College District that academic freedom is a right enjoyed by all members of the Pasadena City College community: faculty (tenured, non-tenured, and adjunct), students, classified and administrative staff, and Trustees. Academic freedom is defined as the freedom to teach and learn in an atmosphere of free inquiry and expression. The right to academic freedom, however, cannot be separated from the equally important responsibility, which each individual has, to uphold professional ethics or, in the case of students, to abide by the Policy on Student Conduct and Academic Honesty.

The District encourages and supports a healthy and constructive debate of campus issues, and respects the right of all members of the Pasadena City College community to freely evaluate, criticize, and/or advocate personal points of view regarding such issues. However, every member of the College community also has the right to work and study in an environment that is free from unlawful discrimination and harassment.

The right to academic freedom shall be protected and supported through the establishment and use, when necessary, of appropriate due process procedures.

Student Conduct and Academic Honesty

Policy No. 4520: It is the policy of the Pasadena Area Community College District that PCC seeks to maintain a safe, orderly, and constructive campus environment in which there is freedom to learn and respect for the dignity of all members of the College community. Students are expected to be responsible, honest, and non-violent in exercising their rights to free inquiry and free speech.

The Student Conduct Code identifies conduct that is prohibited by College policy. Students who violate the Student Conduct Code will be subject to disciplinary action under the Student Discipline Process Procedures. Disciplinary sanctions depend on the nature of the offense, the past pattern of behavior of the student, and other relevant factors. In addition, student drug or alcohol offenses or other criminal acts, may be referred to law enforcement officials.

Grievance and Complaint Procedures

The purpose of this procedure is to provide a prompt and equitable means of resolving student grievances. These procedures shall be available to any student who reasonably believes a College decision or action has adversely affected his or her status, rights or privileges as a student. Student grievance resolution information is found in the *Manual for Student Conduct, Due Process, and Dispute Resolution*. Students may obtain a copy of this manual from the Vice President of Student and Learning Services Office in Room L112.

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Transfer Information



SECTION IV

TRANSFER INFORMATION

Counseling and Career Services

Prospective transfer students are encouraged to meet with a counselor in order to develop and refine educational plans and career goals. PCC counselors are highly trained and experienced professionals who are also well-informed in many fields of study and who work closely with PCC instructional divisions in order to provide students with current information about course offerings, curriculum changes, and transfer requirements. Each counselor is well-equipped to assist students in planning transfer-related coursework.

In addition to serving students in the Counseling Center, the counseling faculty offers a number of counseling courses as part of the College's curriculum. These courses include skill-building activities to enhance program planning, personal and professional development, study and time management skills, and strategies for problem-solving and decision making.

The Counseling and Career Services office is located in room L-104 of the Student Services Center.

The Transfer Center

The Pasadena City College Transfer Center has resources and services to make the transition from PCC to a four-year college or university easier. Representatives from many public and private universities, including UCLA, USC, CSU Los Angeles, Cal Poly Pomona, CSU Northridge, and UC Riverside meet regularly with prospective students to advise them regarding admissions, program planning, and other support services. The Transfer Center also contains resources in text, software, and videotape for student use in planning transfer programs.

Several transfer-related workshops as well as regularly scheduled orientations are offered throughout the year to assist and inform students about transfer issues and application procedures. Presentations on selected topics critical to the transfer process are conducted by personnel from four-year institutions and PCC staff regularly, during both day and evening hours. Topics covered include how to select a college, university admission requirements, common

transfer terms, and other areas critical to the transfer process. The Transfer Center also hosts transfer information fairs on the PCC campus and provides frequent university campus tours, which give students an opportunity to meet with college and university admissions representatives.

For additional information on these and other transfer-related activities, visit the Transfer Center, located in L110, in the PCC Student Services Center.

ASSIST (www.assist.org)

Project ASSIST (Articulation System Stimulating Inter-institutional Student Transfer) is a Web-based articulation and transfer planning system that provides a wide variety of information about California's public institutions of higher education. ASSIST addresses student concerns about transferring between institutions by providing specific information that indicates which PCC courses are transferable and how they can be applied at any number of CSU and UC campuses. In many instances, ASSIST also offers current major-specific information which may be helpful to students planning lower-division coursework for transfer into specific majors at a CSU or UC campus. ASSIST also provides access to system-wide general education patterns such as the IGETC (Intersegmental General Education Transfer Curriculum) and the CSU General Education Course List, as well as general education patterns for selected CSU and UC campuses. Because Assist.org is considered the official repository of articulation information, it may be considered the primary source of articulation information; all other sources should be consistent with the information on Assist.

The Internet address for the ASSIST website is www.assist.org. Students may access this website in the PCC Transfer Center, or they may retrieve ASSIST information by meeting with a counselor.

TRANSFER VOCABULARY

Articulation Agreements – Guides to equivalency between PCC courses and those at many CSU, UC, and California independent colleges and universities.

Basic Skills Courses, Precollegiate – Courses numbered in the 400s, 300s or 100s designed as preparation for college-level work. PCC offers these courses in reading, writing, English as a second language, other English skills, and mathematics.

Certification – The process in which four-year institutions recognize the general education courses taught at California community colleges as meeting particular general education (GE) requirements.

C-ID – The Course Identification Numbering System. C-ID is a supranumber that identifies a lower-division, transferable course commonly articulated between the California Community Colleges and universities (including Universities of California, the California State Universities, as well as with many of California's independent colleges and universities). The C-ID number means that any other course elsewhere, bearing the same number, will be accepted by the institution.

Corequisite – A course in which a student is required to enroll at the same time that he or she is enrolled in another course. In the corequisite course, the student acquires certain skills, concepts and/or information which are essential to success in the concurrent course.

Elective – A course which is not specifically required for a major, but which may be taken by choice for unit credit.

General Education (GE) Requirements – A specific group of courses taken outside of a student's major to meet the need for broad knowledge of the world and to satisfy either PCC degree requirements or requirements for transfer to UC, CSU, or an independent college or university.

Grade-Point Average (GPA) – The GPA is on a 4-point scale and is computed by dividing the total grade points earned by the number of units attempted. For example, if the number of grade points earned is 28 and the number of units attempted is 14, then the GPA would be 2.0.

High-Unit Majors – High-unit majors are those areas of study that place more emphasis on preparatory courses within the major rather than the completion of general education courses. Usually these are majors in the physical and life sciences and engineering. Examples of these majors include: biology, chemistry, physics, geology, mechanical engineering, civil engineering, computer science, mathematics, and many others.

Students who choose a high-unit major should place their primary focus on completion of courses in mathematics and the appropriate science courses. General education

courses based on the Intersegmental General Education Transfer Curriculum (IGETC) should be completed as they can be fitted into one's schedule. It is not necessary to complete all GE courses prior to transfer, but upon transfer it will be required that a student complete the general education requirements of the particular school where they have been accepted.

Impacted Major or Program – An impacted major or program at a four-year college or university is one where more applications are received from students than the campus can enroll. As a result, sometimes those high-demand majors or programs may have additional admission or selection criteria. See a counselor for additional information.

Independent Institutions – Private colleges and universities such as USC or Art Center, as opposed to public institutions such as CSUs or UCs.

Prerequisite – A condition of enrollment, such as satisfactory completion of another course (defined as a grade of A, B, C, or "P" (Pass) that must be met before a student can register for a course or educational program. By meeting the prerequisite, the student demonstrates readiness for that course or program.

Recommended Preparation – A Recommended Preparation statement in a course description means that a student is advised, but not required, to complete the identified course(s) prior to enrollment in another course or educational program.

TAG – Transfer Admission Guarantee agreement. These are an alternative to completing the normal transfer pattern. Various CSU and UC schools provide plans whereby a student agrees to complete a specific set of courses and a minimum grade point average with the provision that he/she will be accepted to a particular school upon successful completion of the plan. Information about TAGs is available in the Transfer Center and in the Counseling Division.

Transferable Course – A course accepted for credit toward a bachelor's degree at a four-year institution.

- **CSU Transferable** courses are baccalaureate level and will transfer for credit to all CSU campuses. Courses are designated in the catalog and schedule of classes as *Transfer Credit: CSU*. The units may also count toward the AS, AA, and AD-T degrees at PCC.

- **UC Transferable** courses are baccalaureate level and will transfer for credit to all UC and CSU campuses. Courses are designated in the catalog and schedule of classes as *Transfer Credit: CSU/UC*. The units may also count toward the AS, AA, and AD-T degrees at PCC.

Transcript – The official historical record of a student’s high school or college work.

UC Credit Limitation – UC limits credit for some transferable courses. Students contemplating transfer to a UC campus should consult with a PCC Counselor, and/or view PCC’s list of UC transferable courses at www.assist.org. Find Pasadena City College. Find UC transferable courses.

UC Transfer Paths – If you’re unsure which UC campus you will attend, or if you want to prepare for as many UC campuses as possible, the UC Statewide Transfer Preparation Paths will help you identify coursework that will prepare you for multiple UC campuses. These “paths” summarize the requirements and major preparation coursework at each UC campus for similar majors, and highlight the common requirements shared by a majority of UC campuses. The **UC Statewide Transfer Preparation Paths** provides information about Transfer Admission Eligibility, general education, what’s generally required for a UC degree, and becoming a competitive applicant. Information can be accessed at: <http://admission.universityofcalifornia.edu/transfer/preparation-paths/index.html>

Undergraduate, Lower Division – Fewer than 60 semester units towards completing general education requirements. Lower division courses are usually taken during the first and second years of study at a university.

Undergraduate, Upper Division – 60 or more semester units with concentration in an academic major. Upper division courses are usually taken during the third and fourth years of study at a university.

Unit – The amount of college credit given for a course based upon the number of hours the course meets weekly. One (1) unit represents one hour per week of actual class time in a lecture or discussion section.

TRANSFER-RELATED WEBSITES

The following websites provide links with many college and university home pages:

California Colleges

<http://www.californiacolleges.edu>

The University of California

<http://admission.universityofcalifornia.edu>

The California State University

<http://www.calstate.edu>

<http://www.csumentor.edu/>

The Association of Independent California Colleges and Universities (AICCU)

<http://www.aiccu.edu>

Historically Black Colleges, Hispanic Serving Institutions, and Tribal Colleges

Historically Black Colleges:

<https://sites.ed.gov/whhbcu/one-hundred-and-five-historically-black-colleges-and-universities/>

Hispanic Serving Institutions:

http://www.hacu.net/hacu/US_Members.asp

American Indian Higher Education Consortium:

<http://www.aihec.org/>

Princeton Review’s College Service

<http://www.princetonreview.com>

US News & World Report College Rankings

<http://www.usnews.com/education>

SPECIFIC TRANSFER INFORMATION FOR EDUCATION AND PREPROFESSIONAL PROGRAMS

EDUCATION

(TEACHER PREPARATION PROGRAMS)

The Federal No Child Left Behind Act (NCLB) of 2001 contains specific teacher requirements that must be met by all public school teachers who teach “core” academic subjects. All teachers must meet the Highly Qualified Teacher (HQT) requirement. The State of California, in compliance with the federal mandate, revised the requirements to teach in California.

ELEMENTARY SCHOOL EDUCATION

Currently, students who wish to teach may choose from two options. The first option is a five-year traditional program leading to a Preliminary Multiple Subject Teaching Credential or Preliminary Education Specialist Credential after the baccalaureate degree. In the second option, students may find it possible to complete the requirements for the bachelor’s degree and preliminary credential in a standard four-year, full-time college program and may be employed after graduation. These programs are referred to as Blended or Integrated Teacher Education

Programs (ITEP) and are available at several universities and colleges. These types of programs provide avenues for students to complete their baccalaureate degree and receive a Preliminary Multiple Subject Teaching Credential or Preliminary Education Specialist Credential at the same time. Students will complete their professional education courses AND student teaching while completing their bachelor's degree. Attainment of one of the preliminary credentials and successful passing of State-mandated standardized tests allows for immediate employment as a classroom teacher after graduation. The most common majors for students interested in pursuing elementary school teaching are Child Development and Liberal Studies. However, a Bachelor's degree, in any undergraduate degree, as well as passing State-mandated tests, will allow a student to be eligible to enter a teaching credential program.

Currently, PCC works in partnership with Cal State Los Angeles (Major areas: Child Development, Liberal Studies, Mexican American Studies and Urban Learning); Cal State Fullerton (Liberal Studies and Child and Adolescent Development); Cal State Northridge (Liberal Studies and Child and Adolescent Development); Cal Poly Pomona (Liberal Studies and Gender, Ethnicity and Multicultural Studies – GEMS and Early Childhood Studies; University of California, Riverside (Liberal Studies); Mount St. Mary's College (Liberal Studies); Pacific Oaks College (Human Development and Early Childhood Education); and University of La Verne (Liberal Studies). Additionally, some of these same campuses also offer Child Development majors and other CSU and independent colleges and universities offer majors in both Child Development and Liberal Studies.

MIDDLE SCHOOL AND HIGH SCHOOL EDUCATION

For teaching at the high school level, a Single Subject Teaching Credential and a B.A. degree with subject matter preparation in the subject is required. After transfer, students will be informed by the college or university as to whether they will be required to take the Single Subject CSET (California Subject Examination for Teachers) test or whether their subject matter preparation can be met by their major coursework in order to be eligible for the teaching credential program. Typically, students major in the discipline they will teach and progress to the Single Subject Credential Program after the completion of a baccalaureate degree. For example, students wishing to teach high school English, usually major in English. There are however a few programs where the process of starting the Single Subject Teaching Credential begins prior to completing the baccalaureate degree. Currently, Pasadena City College has a Blended partnership for the Single

Subject Teaching Credential with CSULA in the subject area of Natural Sciences; a STEP plan in the subject area of English with CSUF and an Integrated plan with a major in Mathematics and Science at UCR.

Specific program and major course requirements for the various colleges/universities are available on the Pasadena City College Transfer Requirements Tool: <http://pasadena.edu/academics/transfer-center/transfer-tool.php>, ASSIST: <http://assist.org>, the Pasadena City College Teacher Preparation website: <http://pasadena.edu/academics/divisions/social-sciences/areas-of-study/education/pathways.php> or visit the Social Sciences Division in C321 or Counseling and Career Services in L104.

I TEACHING CREDENTIALS

Multiple Subject: For instruction in multiple subjects as commonly taught in California elementary schools. The Multiple Subject Teaching Credential authorizes its holder to teach all areas of curriculum for grades K – 8 in a self-contained classroom.

Middle (Junior) School Teaching with a Multiple Subject Credential: Some students decide to teach at the middle school level after earning a B.A. degree in, for example, Liberal Studies and a Multiple Subjects Teaching Credential. In order to teach at the middle school level, a student must meet the NCLB Highly Qualified Teacher (HQT) requirements in the area they wish to teach. To meet the HQT requirements a student must: a) complete subject matter preparation in the major area of 32 units (which is considered to be equivalent to a B.A. degree); and b) pass the CSET (California Subject Examination for Teachers) exam to establish subject matter competency. If a student has earned units in a concentration/ depth area of the Liberal Studies major which is one that is taught in the middle school, such as mathematics, English, Government, etc., the additional units in the area may not be as many as 32 because subject matter and major prerequisites may have already been earned prior to the B.A. degree. A student wishing to teach Middle School is generally encouraged to pursue a Single Subject Credential in order to meet the requirement for being highly qualified in their respective discipline.

Middle and High School with a Single Subject Credential: The Single Subject Credential authorizes its holder to teach the subject for which they have qualified. It is for instruction in a single subject as commonly taught in California junior (middle) and senior high schools. Areas for single “core” subjects of

instruction (per NCLB) are: Arts, Foreign Languages, English, Reading and Language Arts, Mathematics, Sciences, and Social Sciences, which include History, Geography, Economics, and Government. Other majors may include: Physical Education, Industrial Arts, Home Economics, and Agriculture. Caution is advised for students who choose a general major in Social Sciences, to assure that the major has State approval and fulfills the "Highly Qualified" mandate of the federal government.

Education Specialist Credential: For instruction in one of the following areas: communication handicapped, mild/moderate disabilities, moderate/severe disabilities, physically handicapped, visually handicapped.

Excerpt taken from: Education Specialist Credential/State of California Commission on Teacher Credentialing

Authorization State of California Commission on Teacher Credentialing 1900 Capitol Avenue Sacramento, CA 95811-4213 Email: credentials@ctc.ca.gov Website: www.ctc.ca.gov

EDUCATION SPECIALIST INSTRUCTION CREDENTIAL

Requirements for Teachers Prepared in California for the Preliminary and Clear Credentials

The Commission issues a two-level special education teaching credential. Regulations approved in 2010 established two new levels for candidates completing the program standards approved in 2008 and 2009. The new levels will be 'preliminary' and 'clear'. A Preliminary Education Specialist Instruction Credential is the first document issued after an individual has met basic credential requirements. The Clear credential is issued once all credential requirements have been completed.

Authorization (see Terms and Definitions)

The Education Specialist Instruction Credential authorizes the holder to conduct Educational Assessments related to student's access to the academic core curriculum and progress towards meeting instructional academic goals, provide instruction, and Special Education Support to individuals in the area of specialization listed on the credential in the following settings:

- Resource rooms or services
- Special education settings

- General education settings
- Special schools
- Home/hospital settings
- State hospitals
- Development centers
- Correctional facilities
- Non-public, non-sectarian schools and agencies
- Alternative and non-traditional instructional public school settings other than classroom

Autism Spectrum Disorders

Autism Spectrum Disorders (ASD) content is included in the new preliminary Education Specialist Instruction Teaching Credential programs for all specialty areas. The preliminary and clear credential authorizes the holder to provide autism instructional services to students within the specialty area(s) of their credential. The ASD authorization appears as a separate authorization on the Education Specialist Instruction Credential.

Teaching English Learners

The Education Specialist Preliminary Teacher Preparation Program includes content for teaching English learners that authorizes the credential holder to provide instruction for English language development and specially designed academic instruction in English within the subject area and grade level authorization of the Education Specialist Instruction Teaching Credential.

Specialty Areas

- **Mild/Moderate Disabilities (M/M)**
Includes specific learning disabilities; mild to moderate intellectual disabilities; other health impairments; serious emotional disturbance; and authorizes service in grades K-12 and in classes organized primarily for adults through age 22.
- **Moderate/Severe Disabilities (M/S)**
Includes autism; deaf-blindness; moderate to severe intellectual disabilities; multiple disabilities; serious emotional disturbance; and authorizes service in grades K-12 and in classes organized primarily for adults through age 22.
- **Deaf and Hard of Hearing (DHH)**
Includes deafness; hearing impairment; deaf-blindness; and authorizes service to individuals ages birth through 22.
- **Visual Impairments (VI)**
Includes blindness; visual impairment; deaf-blindness; and authorizes service to individuals ages birth through 22.

- **Physical and Health Impairments (PHI)**
Includes orthopedic impairment; other health impairment; multiple disabilities; traumatic brain injury; and authorizes service to individuals ages birth through 22.
- **Early Childhood Special Education (ECSE)**
Includes the mild/moderate and moderate/severe disabilities listed above and traumatic brain injury; authorizes service to children ages birth to pre-kindergarten only.
- **Language and Academic Development (LAD)**
Authorizes the holder to provide instructional services to students with academic communication and language needs to children in preschool, kindergarten, in grades 1 - 12 through age 22, and classes organized primarily for adults, but does not take the place of speech and language services as defined in Education Code section 56333.

An added authorization in Early Childhood Special Education is also available to individuals who hold a preliminary, Level I, professional clear, clear, Level II, or life special education teaching credential, and who complete a program through a Commission-approved program sponsor.

The ECSE Added Authorization authorizes the holder to provide special education services in the area of mild/moderate or moderate/severe disabilities for students ages birth to pre-K as determined by the local level special education assessment.

College and University Level: At the college/university level a teaching credential is not issued by the State. A minimum of a Master's degree is necessary in the subject matter to be taught. A Ph.D. is usually required for teaching at the university level.

Attainment of credentials requires:

To be eligible to apply to a teaching credential program, a student must have a 2.75 G.P.A. in the last 90 units of their coursework and receive a passing score on the California Basic Education Skills Test (CBEST) and a passing score on the appropriate **California Subject Examination for Teachers (Multiple Subject CSET or Single Subject CSET, dependent upon credential program).**

1. A baccalaureate degree in a federal/State approved major (other than education) from an approved institution.
2. Completion of subject matter-preparation and a program of professional education including student teaching.

3. Passage of the State mandated standardized examinations with some exceptions.

II SPECIALIST CREDENTIAL

Specialist Credentials are advanced credentials which require a valid teaching credential as a prerequisite. They authorize teaching in specific specialization areas at any grade level, pre-school through secondary and adult education.

Areas of Specialization are:

1. Early Childhood (Currently, a Multiple Subject Teaching Credential is *not* required to teach pre-school)
2. Bilingual/Cross-Cultural Studies
3. Mathematics
4. Reading and Language Arts
5. Agriculture

III SERVICES CREDENTIAL

The State of California provides for five categories of non-teaching credentials, which authorize their holders to provide specific non-classroom services to public schools. All require advanced preparation after the baccalaureate degree. Service credentials are issued in:

1. Counseling Services
2. Psychological Services
3. Social Work Services
4. Administrative Services
5. Health Services (School Nurse)
6. Library Services
7. Clinical-Rehabilitative Services (primarily speech and hearing therapists and audiologists, orientation and mobility specialists)

NOTE: A teaching credential may not be earned at a community college but may be attained at both public and independent colleges and universities. Current information may be obtained at the Teacher Preparation Office (C350) or at California Commission on Teacher Credentialing: <http://www.ctc.ca.gov>

PRE-PROFESSIONAL PROGRAMS:

The information below is intended to provide a general list of courses that are required by most graduate level/professional programs. Requirements can vary from school to school. Students are urged to contact the specific schools they are considering for up-to-date information. This list of classes should be combined with requirements for general education and major requirements to achieve a Bachelor's degree prior to entry to a professional program.

Students are advised to meet with a counselor in L104 to make an education plan that will insure coverage of all essential areas of study.

- Pre-Chiropractic
- Pre-Dentistry
- Pre-Law
- Pre-Medicine
- Pre-Optometry
- Pre-Pharmacy
- Pre-Physical Therapy
- Pre-Physician Assistant
- Pre-Veterinary Medicine

The general information provided here reflects those courses that may be completed at Pasadena City College in preparation for these fields of study.

CHIROPRACTIC (pre-chiropractic classes)

Chiropractic is a distinct profession in the field of health based on the principle of neurogenic control of physiological processes. The educational program is designed to instruct students in nutritional, manipulative, psychological and allied approaches to healing. Preparation for the major generally includes such coursework as biology, chemistry, anatomy, physics, psychology, and English composition.

Lower-division requirements may vary among colleges of chiropractic. In Southern California there is one chiropractic school: Southern California University of Health Sciences. For more specific details, students should see a counselor in order to plan a program to complete the necessary coursework before transfer. Students should also visit: www.scuhs.edu or www.NaturalHealers.com

Pre-Chiropractic courses at PCC typically include the following:

- Anatomy 025 & Physiology 001
- Biology 010A, 010B, 010C
- Chemistry 001A, 001B, 008A, 008B
- English 001A or 001AH
- Physics 031A, 031B (or 002A, 002B or 001A, 001B, 001C)
- Psychology 001 or 001H

DENTISTRY (pre-dental classes)

There are six dental schools in California: the University of California, Los Angeles; the University of California, San Francisco; the University of Southern California, Loma Linda University, University of the Pacific, and Western University of Health Sciences. Dentistry requires excellent scholastic ability and a high degree of manipulative skill. Except in unusual cases, three or four years of pre-dental work are required, making dentistry a seven- or eight-year

program. Lower-division requirements for the major may differ widely among four-year colleges and universities. For more specific details, students should plan to meet with a counselor to plan transfer coursework, and should also visit the following website: www.adea.org or www.ada.org

Pre-Dental courses at PCC typically include the following:

- Biology 010A, 010B, 010C
- Chemistry 001A, 001B, 008A, 008B
- Math requirements will vary from school to school
- Physics 031A, 031B (or 002A, 002B or 001A, 001B, 001C)
- Recommended: Art 032A; Art 038A

LAW (pre-law classes)

The majority of law schools require a bachelor's degree prior to entry. However, there is no set of specific pre-law courses. Law school admission personnel commonly ask pre-law students to choose a major in which a student will develop writing and critical thinking skills. Therefore, many pre-law students choose to finish a bachelor's degree in fields like political science, history, philosophy, and English. However, a student may pursue a degree in business, psychology, biology, or any major that he or she believes is best in terms of preparation for future study and life-long goals. For more information, students may wish to visit: www.americanbar.org, or stu.findlaw.com

Pre-Law courses at PCC typically include the following:

- English 001C, 001CH
- Philosophy 003, 007, 025, 030, 033
- Physical Science 002

MEDICINE (pre-med classes)

There are more than ten medical schools in California: The Universities of California at Davis, Irvine, Los Angeles, Riverside, San Diego, and San Francisco; the University of Southern California; Loma Linda University; Stanford University; the Western University of the Health Sciences, and Touro University. The study of medicine requires excellent scholastic ability and good human interaction and communication skills. Except in unusual cases, four years of pre-med work are required, making medicine an eight-year program. Preparatory classes for this field of study may differ among medical schools. For more specific details, students should plan to meet with a counselor to plan transfer coursework, and should also visit the following websites: www.aamc.org/amcas, www.aacom.org, www.emcat.com, or www.amsa.premed.

Pre-Med courses at PCC typically include the following:

Biology 010A, 010B, 010C
Chemistry 001A, 001B, 008A, 008B
Physics 031A, 031B (or 002A, 002B or 001A, 001B, 001C)
Math requirement will vary from school to school
Recommended for MCAT beginning in 2015:
Psychology 001 or 001H, Sociology 001

OPTOMETRY (pre-optometry classes)

Optometry curricula are four years in duration and require three to four years of preparatory college work, much of which may be completed at Pasadena City College. There are three schools in California: the University of California, Berkeley; the Southern California College of Optometry; and Western University. Many students interested in pursuing optometry receive undergraduate degrees in such majors as biological sciences prior to admission. For more information, students should visit: www.opted.org, www.aapt.org. Also, students should see a counselor.

Pre-Optometry courses at PCC typically include the following:

Anatomy 025 & Physiology 001
Biology 010A, 010B, 010C
Chemistry 001A, 001B, 008A, 008B
English 001A or 001AH, and English 001B or 001BH
Physics 031A, 031B (or 002A, 002B or 001A, 001B, 001C)
Mathematics 005A
Microbiology 002
Psychology 001 or 001H
Statistics 018, or 050

PHARMACY (pre-pharm classes)

There are eight schools of Pharmacy in California: the University of California, San Francisco; the University of California, San Diego; the University of the Pacific; the University of Southern California; Western University of Health Sciences; Touro University; Loma Linda University; and California Northstate College. As of February 2015, three schools in pre-candidate status include California Health Sciences University (Clovis), Keck Graduate Institute (Claremont), and West Coast University (Los Angeles). Pharmacy curricula are four years in duration and require three to four years of preparatory college work that may be completed at Pasadena City College. Lower-division requirements for the major may vary among these four colleges and universities. For more specific details, students should see a counselor and visit www.aacp.org, www.pharmacas.org, or www.pharmacy.ca.gov, or www.pcatweb.info

Pre-Pharmacy courses at PCC typically include the following:

Anatomy 025 & Physiology 001
Biology 010A, 010B, 010C
Chemistry 001A, 001B, 008A, 008B
Economics 001A, 001B
English 001A or 001AH, 001B or 001BH
Mathematics 005A
Microbiology 002
Physics 031A, 031B (or 002A, 002B or 001A, 001B, 001C)
Psychology 001 or 001H
Speech 001 or 010

PHYSICAL THERAPY

(pre-physical therapy classes)

Physical Therapy is the treatment of disease or injury by the use of physical means such as heat, cold, sunlight, water, electricity, massage, and exercise. Physical therapists help people overcome or adjust to disabilities caused by illness, injury, or birth defects. They also plan and administer treatments, on referral by physicians.

Physical therapy programs are master's and doctoral degree programs. Entrance requirements are highly competitive and vary widely among schools. Generally, a bachelor's degree in any field is required for admission. Physical therapy schools in California approved by the American Physical Therapy Association include Azusa Pacific University; Chapman University; Loma Linda University; the University of Southern California; the University of the Pacific; Western University of Health Sciences; Samuel Merritt College; Mount Saint Mary's College; the University of California, San Francisco; and California State Universities at Fresno, Long Beach, Northridge, and Sacramento. For more specific details, student should see a counselor and visit www.apta.org.

Pre-Physical Therapy courses at PCC typically include the following:

Anatomy 025 & Physiology 001
Biology 010A, 010B, 010C
Chemistry 001A, 001B (or 002A, 002B)
Computer Information Systems 001 or 010
Economics 001A or 001B
Mathematics 003, 007A, 007B or 005A
Microbiology 002
Physics 031A, 031B (or 002A, 002B or 001A, 001B, 001C)
Psychology 001 or 001H, 024
Speech 001 or 010
Statistics 018 or 050

PHYSICIAN ASSISTANT (pre-PA classes)

There are 9 fully accredited physician assistant programs in California: the University of California, Davis; Stanford University; the University of Southern California; Loma Linda University; Western University of Health Sciences; Samuel Merritt College; Riverside Community College; San Joaquin Valley College; and Touro University. Most of these programs are master's degree programs; others offer bachelor or associate degrees. A physician assistant is a skilled health care professional who, under the supervision of a physician, performs a variety of medical, diagnostic, and therapeutic services. A bachelor's degree or higher is recommended but not required to practice in this profession. Physician Assistants must pass preadmission competency tests in the sciences as well as the National Certifying Examination. A grade of C or better is required in all prerequisite courses. Lower-division requirements for the major may differ widely among four-year colleges and universities. For more specific details, students should see a counselor and visit www.aapa.org, www.caspaonline.org, or www.paeaonline.org.

Pre-Physician Assistant courses at PCC typically include the following:

Anatomy 025 & Physiology 001
Biology 010A, 010B, 010C
Chemistry 001A, 001B (or 002A & 002B)
English 001A or 001AH, and English 001B or 001BH
Mathematics 003 or 007B or 005A
Microbiology 002
Anthropology 002 or 002H
Psychology 001 or 001H
Sociology 001

VETERINARY MEDICINE (pre-veterinary classes)

This profession offers opportunities in private practice, government service, state or municipal service, teaching and commercial work, such as production and testing of vaccines and serums. Veterinary medicine or science deals with prevention, control, care, and treatment of disease of domesticated animals and poultry, and supply and control of food and other products derived from them for human use. State laws regulate the practice of veterinary medicine and must be complied with before veterinarians can legally practice. An undergraduate major should be selected on the basis of individual interest and aptitude; there is no advantage gained toward admission by selecting one major over another. Experience with animals is considered an important part of the professional training. There are two veterinary medicine programs in California: the University of California, Davis and Western

University of the Health Sciences. Candidates must complete the equivalent of at least three full academic years of college or the baccalaureate degree before applying to the professional school. Students should see a counselor for specific information, and visit www.avma.org, www.aavmc.org, or www.aavsb.org. www.vetmed.ucdavis.edu, or www.westernu.edu.

Pre-Veterinary courses at PCC typically include the following:

Biology 010A, 010B, 010C
Chemistry 001A, 001B, 008A, 008B
Physics 031A, 031B (or 002A, 002B or 001A, 001B, 001C)
Statistics 050

Academic Programs Leading To A Degree or Certificate



SECTION V

ACADEMIC PROGRAMS LEADING TO A DEGREE OR CERTIFICATE

REQUIREMENTS FOR THE CERTIFICATE OF ACHIEVEMENT

Students interested in developing advanced levels of proficiency in a career and technical area may pursue a Certificate of Achievement, which requires the completion of 18 units or more. Pasadena City College currently offers 73 Certificate of Achievement Programs in 37 subject areas. Employer feedback suggests that strong academic skills are critical for success in today's high-performance workplace. It is, therefore, strongly recommended that students also complete the requirements for the Associate in Science Degree (see page 89). Students may earn only one Associate in Science Degree with a Certificate of Achievement.

Some programs will include certain subjects required by the College or by state law. Beyond these minimum requirements, programs will vary widely depending upon the vocational or professional goal of the student. Students who change their vocational goals during their course of study may find it impossible to complete the curriculum in the customary span of time and may need to take additional courses. Students should consult counseling services for information about specific requirements, any pre-requisites or co-requisites, and to develop an education plan that will assist them in reaching their goal. Upon completion of the specified curriculum for a Career Technical Education program students may petition in the appropriate division office for issuance of the Certificate of Achievement. Students may earn multiple Certificates of Achievement.

All courses are described in **Section VII, Course Descriptions**. In instances where the help of a counselor is necessary for proper understanding of requirements, the student should not hesitate to contact the office of Counseling and Career Services. For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.pasadena.edu/CTE.

OCCUPATIONAL SKILLS CERTIFICATES

Students, who want to develop job skills in a special area of occupational education in a short period of time, can earn an Occupational Skills Certificate, which requires 17 units or less.

REQUIREMENTS FOR ASSOCIATE DEGREES

Pasadena City College offers the following Associates degrees:

- Associate in Arts Degree (**AA**), (p.85)
- Associate in Arts for Transfer (**AA-T**), (p.94)
- Associate in Science for Transfer (**AS-T**), (p.94)
- Associate in Science Degree (**AS**) with the Certificate of Achievement (p.89)

- 1) **General Education Requirements:** a broad exposure to a variety of areas of study
- 2) **Major Preparation:** an in-depth study of a particular field or area of emphasis
- 3) **Electives:** courses selected by a student to meet the required units for a degree

These are the rules pertaining to degrees:

- All of the Associate degrees require at least sixty (60) units.
- Upon completion of requirements, a student will be granted an Associate in Arts, Associate in Arts for Transfer, or an Associate in Science for Transfer and/or an Associate in Science Degree with Certificate of Achievement.
- Students may earn multiple Associate in Arts degrees as long they complete the major requirements for the various degrees.
- Students may earn only one Associate in Science (AS) degree with a Certificate of Achievement. (NOTE: Students may earn multiple Certificates of Achievement).

- *Responsibility for filing a petition for graduation rests with the student, and all transcripts for high school and prior college work attempted must be on file for the petition to be considered.*
- File the petition for graduation in the Counseling Division by the published deadline date.

REQUIREMENTS FOR THE ASSOCIATE IN ARTS DEGREE (AA)

The Associate in Arts is awarded by Pasadena City College in recognition of completion of a minimum of 60 units which include the following:

- Major or area of emphasis in one of the disciplines listed below.
- One of the following general education patterns:
 - a. Traditional AA Degree – The PCC general education pattern, which is detailed in the section below.
 - b. The CSU General Education Requirements (CSU Breadth) detailed on page 98.
 - c. The Intersegmental General Education Transfer Curriculum (IGETC) detailed on page 96.

The Associate in Arts is awarded in the following disciplines:

- Architecture
- Business
- Chinese
- Communication Arts
- Engineering and Technology
- English – Literature
- French
- Gender, Ethnicity, and Multicultural Studies
- German
- Humanities
- Italian
- Japanese
- Kinesiology and Wellness
- Linguistics
- Music
- Natural Sciences
- Russian
- Social and Behavioral Sciences
- Spanish
- Speech Communication
- Studio Arts

GENERAL INFORMATION

1. A minimum of 60 units, 18 of which must be in one major or area of emphasis.
2. Only courses numbered 001–099 may be counted toward the 60 units.
3. All competency and general educational requirements must be completed.
4. A minimum grade point average of 2.00 must be obtained in courses numbered 001 to 099 completed at PCC and in comparable courses completed at other regionally accredited institutions.
5. At least 15 units of the required 60 units, in courses numbered 001–099, must be completed at PCC. No more than 6 units may be transferred from another college if earned after the student's last enrollment at PCC. Active-duty service members can complete PCC's academic residency at any time they are enrolled. Reservists and National Guardsmen on active-duty are covered in the same manner.
6. Courses **may not** be counted more than once to meet the general education requirements (Areas A-G). A course may be used to satisfy the requirements of a major as well as the general education requirements, but the units shall count only once.
7. The AA general education pattern explained below does not prepare students for transfer. Students who intend to transfer to a CSU, UC, or private school are advised to complete the CSU general education requirements, IGETC, or the unique general education pattern of the private school.

COMPETENCY REQUIREMENTS

1. **Reading** – One course (with grade C or better) from the following: English 001A, 001AH, 001AS, 001C, 001CH, 014, 100, 130, any English course which fulfills Area C (Humanities), or by satisfactory score on equivalency exam.
2. **Written Expression** – One course (with grade C or better) from the following: English 001A, 001AH, 001AS, or by satisfactory score on equivalency exam.
3. **Mathematics** – Complete one course (with grade C or better) from one of the following: Business 014A, 014B, Computer Science 045, Mathematics 131, 139, 141, 150, Statistics 015, 018, 050, or a Math course

that fulfills the general education requirement in Critical Thinking or by satisfactory score on an equivalency exam.

4. **Diversity** – Complete three (3) units in courses designated as either “Global Studies” or “Ethnic and Gender Studies” as listed in this *College Catalog* starting on page 79. The courses which can satisfy the diversity requirement and are also general education are designated by the (†) symbol in the list below.

GENERAL EDUCATION REQUIREMENTS

A. Natural Sciences (By local rule, the course must include a laboratory component. Lecture and lab must be in the same discipline..... 3 units

Anatomy 025
 Anthropology 001†, 001H† and 001L
 Astronomy 001
 Biology 002, 003, 004, 010A, 010B, 011, 011H, 014, 016, 030, 038, 039
 Chemistry 001A, 001B, 002A, 002B, 008A, 008B, 022
 Environmental Studies 001, 003, 030, 040
 Geography 001 and 001L
 Geology 001, 001F, 002, 002F, 003, 003F, 004 and 040, 006, 012 and 012F or 012L, 021 and 021L, 022 and 040, 030A-L, 040
 Microbiology 002
 Physical Science 003 and 003L
 Physics 001A, 001B, 001C, 001D, 002A, 002B, 010 and 010L, 031A, 031B
 Physiology 001

B. Social and Behavioral Sciences 3 units

Anthropology 001†, 001H†, 001L, 002†, 002H†, 003, 004, 005, 006, 009, 012†, 031†
 Child Development 015
 Communication 001
 Economics 001A, 001B
 English 012†
 Environmental Studies 002
 Geography 002†, 003†
 Gerontology 001
 History 001A†, 001B†, 002A†, 002B†, 005A†, 005B†, 007A, 007B, 008†, 009A†, 009B†, 012†, 016†, 018†, 019†, 025B†, 025D, 025F, 025I, 027A†, 027B†, 029A†, 029B†, 030†, 031†, 041†
 Linguistics 012†, 014, 016, 017
 Political Science 001, 002, 006, 007, 021, 022
 Psychology 001, 001H, 002, 005, 021, 021H, 022, 023, 024, 025, 029†, 031†, 033, 041†

Sociology 001, 002, 014†, 015, 016, 022, 024, 029†, 031†, 041†
 Social Sciences 017
 Speech 013

C. Humanities 3 units

American Sign Language 001, 002
 Arabic 001, 002
 Armenian 001, 002
 Architecture 024A, 024B
 Art 001A, 001B, 001C, 002†, 003A†, 003B†, 004A†, 004B†, 004C†, 004D, 005, 007†, 008†, 009†
 Chinese 001, 002, 002A, 003, 004, 005, 010†, 012†, 022, 050
 Cinema 007A, 007B, 025
 Dance 021A†, 021B†
 English 001B, 001BH, 005A, 005B, 009, 010, 011, 012†, 024, 025A, 025C†, 025D, 025E, 025F, 025G, 025H†, 025I†, 025J, 026, 030A, 030B, 030C, 044A†, 044B†, 044C†, 045A, 045B, 046A†, 046B†, 047†, 048†, 049A, 050†, 051†, 052†, 053, 054, 057, 058, 059, 060, 061, 078A, 078B, 082A, 082B, 082C
 French 001, 002, 003, 004, 006, 010†, 012, 016, 050
 German 001, 002, 003, 004, 005†, 010†, 012
 Humanities 001, 002, 003, 004
 Italian 001, 002, 003, 004, 010†, 012, 050†
 Japanese 001, 002, 003, 004, 005†, 010†, 012†
 Latin 001, 002
 Linguistics 010, 011, 012†
 Music 007A, 007B, 021†, 022, 023†, 024A, 24B, 025†, 027†, 028
 Philosophy 001, 001H, 003, 007, 008, 020A†, 020B†, 031†, 037
 Photography 010, 025 (Cinema 025)
 Portuguese 001, 002, 003, 004
 Religious Studies 001, 002†, 003†
 Russian 001, 002, 003, 004, 011†
 Spanish 001, 002, 002A, 003, 004, 005†, 006A†, 006B†, 012, 025†, 042A†, 042B†, 044A†, 044B†, 050
 Theater Arts 001, 005A, 005B, 007A (Cinema 007A), 007B (Cinema 007B)
 Television and Radio 019

D. Language and Rationality. 9 units 3 units each

1. **English Composition** 3 units
 English 001A, 001AH, 001AS, 001B, 001BH, 001C, 001CH
2. **Oral Communication** 3 units
 Speech 001, 010

3. **Critical Thinking** 3 units
 **Business 014A, 014B
 Computer Information Systems 062
 Computer Science 002, 006, 008, 045
 English 001C, 001CH
 **Mathematics 003, 005A, 005B, 005C, 007A,
 007B, 009, 010, 015, 022, 055, 055H
 Philosophy 025, 030, 033
 Physical Science 002
 Speech 006, 012
 **Statistics 015, 018, 050
 **These courses also meet the mathematics
 competency requirement

E. American Institutions 6 units

1. History 007A, 007B, 025B[†], 029A[†], 029B[†], 031[†],
 or 041[†] 3 units
 AND
 2. Political Science 001 3 units

F. Health Education. 2 units

- College 001
 Counseling 012
 Health Education 002A, 002E, 044
 Nutrition 011

G. Physical Activity/Kinesiology. 2 units

A maximum of 4 units of Physical Education/Kinesiology Activity or Dance Activity (Dance 002, 021A, 021B and 025 are excluded) may be counted toward the degree. Music 061 may be substituted for 1 unit of PE/Kinesiology activity each semester. Exemption is granted if the student has a physical limitation and submits a physician's recommendation which is approved by PCC Health Services.

Diversity Requirements

PCC Policy #4060 on Degrees, Certificates and Transfer Certifications states that a student who applies for either an AA or AS degree "must demonstrate competency in reading, writing, mathematics **and diversity.**" The Diversity Requirement **states that a student must complete** 3 units in courses designated as either "Global Studies" or "Ethnic and Gender Studies."

GLOBAL STUDIES

Pasadena City College and the community it serves have long been identified as closely tied to international, cultural and educational affairs. The College provides outstanding opportunities for students wishing to emphasize international education.

1. Africa:

- Anthropology 001, 001H (Physical Anthropology)
 Art 002 (History of African and African-American Art)
 History 002A-B (History of World Civilizations
 To/From 1500)
 History 024A (Special Topics in History-Africa)
 History 027A (Traditional Africa)
 History 027B (Modern Africa)

2. Asia:

- Art 003A-B (History of Asian Art)
 Chinese 008A-B (Introduction to Chinese
 Conversation - Mandarin)
 Chinese 009A-C (Chinese Conversation - Mandarin)
 Chinese 010 (Chinese Civilization)
 Chinese 012 (Chinese Literature in Translation)
 English 048 (Asian Literature)
 History 002A-B (History of World Civilization
 To/From 1500)
 History 018 (History of South Asia, Southeast Asia
 and the Pacific)
 History 019 (History of China, Japan, and Korea)
 History 024B (Special Topics in History – Asia)
 History 024G (Special Topics in History-World)
 Japanese 005 (Reading and Composition)
 Japanese 008A-B (Introduction to Japanese
 Conversation)
 Japanese 009A-C (Japanese Conversation)
 Japanese 010 (Japanese Civilization)
 Japanese 011 (Inside Japan)
 Japanese 012 (Japanese Literature in Translation)
 Music 027 (Asian Music)
 Music 038C (Chinese Music Ensemble)
 Religious Studies 002 (Comparative Religions:
 Far East)

3. Europe:

- Art 004B (History of European Medieval Art)
 Art 004C (History of European Renaissance and
 Baroque Art)
 Anthropology 030E (Anthropological Field Studies –
 England)
 Anthropology 030F (Anthropological Field Studies –
 Italy)
 English 044A-C (Masterpieces of Literature)
 English 046A-B (English Literature)
 French 009A-B (French Conversation)
 French 010 (French Civilization)
 German 005 (Introduction to German Literature)
 German 008 A-C (Introduction to German
 Conversation)
 German 010 (German Civilization)
 History 001A-B (History of European Civilization
 To/From 1715)

History 002A-B (History of World Civilizations To/From 1500)
 History 005A-B (History of Great Britain To/From 1714)
 History 024C (Special Topics in History – Europe)
 History 024G (Special Topics in History – World)
 Italian 008A-B (Introduction to Italian Conversation)
 Italian 010 (Italian Civilization)
 Italian 050 (Italian Film as Dramatic Literature)
 Music 021 (Music Appreciation)
 Philosophy 020A (History of Ancient Philosophy)
 Philosophy 020B (History of Modern Philosophy)
 Religious Studies 003 (Comparative Religions: Near East)
 Russian 011 (Russian Civilization)
 Spanish 005 (Introduction to Spanish Literature)
 Spanish 006A (Introduction to Spanish-American Literature)
 Spanish 006B (Introduction to Spanish-American Literature)
 Spanish 009A-C (Spanish Conversation)
 Spanish 025 (Spanish Composition)
 Spanish 042 A-B (Civilization of Spain and Portugal)

4. Latin America:

Art 007 (Pre-Columbian Art)
 Art 008 (History of Mexican and Chicano Art)
 Dance 004H (World Ethnic Dance: Spain/Portugal)
 History 008 (History of California)
 History 009A (Latin America: Pre-Columbian to 1825)
 History 009B (Latin America: 1825 to the Present)
 History 024D (Special Topics in History – Latin America)
 History 024G (Special Topics in History – World)
 History 030 (History of Mexico)
 Spanish 044 A-B (Civilization of Latin America)

5. Middle East:

Art 004A (History of Ancient Art in the West)
 Art 009 (History of Islamic Art)
 History 016 (History of the Middle East)
 History 024E (Special Topics in History – Middle East)
 Religious Studies 003 (Comparative Religions: Near East)

ETHNIC AND GENDER STUDIES

Pasadena City College promotes cross cultural understanding and an appreciation of diversity in all its forms. The courses listed below have been identified as providing that understanding and appreciation. Students wishing

to study American Indian, Asian American, Chicano and African American cultures are referred to the following general education courses:

(Courses preceded with an asterisk () are college courses approved by the California State Department of Education for school staff preparation in the history, culture and current problems of racial and ethnic minorities in accordance with Article 3.3, Education Code Section 13344.1.)*

1. African American Studies:

*Art 002 (History of African and African-American Art)
 *English 050 (Afro-American Literature)
 History 029A (African American History to 1865)
 History 029B (African American History from 1865)
 *Music 025 (Afro-American Music)
 *Psychology 029 (Psychology of the Afro-American)
 *Sociology 029 (Sociology of the African-American)

2. Asian American Studies:

English 052 (Asian American Literature)
 *History 041 (History of Asian Pacific Americans)
 *Psychology 041 (Psychology of the Asian American)
 *Sociology 041 (Sociology of the Asian American)

3. Chicano/Latina/o Studies:

*Anthropology 031 (Mexican and Chicano Culture)
 *Art 008 (History of Mexican and Chicano Art)
 *English 047 (Mexican and Chicano Literature)
 History 008 (History of California)
 *History 031 (History of Mexican Americans in the United States)
 *Philosophy 031 (Contemporary Chicano Philosophy)
 *Psychology 031 (Studies in Chicano Behavior)
 *Sociology 031 (Chicano Sociology)
 *Spanish 031 (Language of the Barrio)

4. Cross Cultural Studies:

Anthropology 002, 002H (Cultural Anthropology)
 Child Development 024E (Special Topics – Multicultural Issues)
 Dance 021A-B (Dance History: Cultural and Social Heritage)
 English 012/Linguistics 012 (Intercultural Communications)
 English 025I (Post-Colonial Literatures)
 Geography 002 (Cultural Geography)
 Geography 003 (World Regional Geography)
 Linguistics 012 (Intercultural Communication)
 Music 023 (Music Cultures of the World)
 Sociology 014 (Introduction to Ethnic Studies)

5. Gender Studies:

- English 025C (Images of Women in Literature)
- History 025B (Women in American Society)

6. Health Sciences Diversity Courses:

- Anesthesia Technician 118 (Anesthesia Technician Clinical Seminar)
- Dental Assisting 110 (Introduction to Dental Essentials)
- Dental Assisting 111 (Applied Human Behavior)
- Dental Assisting 123A (Chairside Techniques)
- Dental Hygiene 104B (Clinical Dental Hygiene Theory and Practice)
- Dental Hygiene 104C (Clinical Dental Hygiene Theory and Practice)
- Dental Hygiene 109 (Dental Health Education and Communication)
- Dental Hygiene 119A (Community Dental Health)
- Dental Hygiene 121 (Clinical Practice in Alternative Settings)
- Gerontology 001 (Introduction to Gerontology)
- Gerontology 022 (Directed Studies in Gerontology)
- Medical Assisting 111A (Medical Office Procedures I)
- Nursing 050 (Foundational Nursing Care)
- Nursing 051 (Beginning Nursing)
- Nursing 052 (Intermediate Nursing Care)
- Nursing 053 (Advanced Medical-Surgical Nursing)
- Nursing 125 (Fundamental of Vocational Nursing – Theory)
- Nursing 126 (Intermediate Vocational Nursing – Theory)
- Radiologic Technology 113A/B (Clinical Learning Experience)

7. Native American Studies:

- Anthropology 012 (American Indian Cultures)
- *English 051 (Native American Mythology and Literature)
- *History 012 (The North American Indian)

REQUIREMENTS FOR THE ASSOCIATE IN SCIENCE DEGREE

GENERAL INFORMATION

1. A minimum of 60 units and completion of a Certificate of Achievement.
2. Only courses numbered 001-199 may be counted towards the general education requirements as indicated in Areas A-G.

3. Courses numbered 001-399 may be counted towards the 60 units.
4. All competency and general educational requirements must be completed.
5. A minimum grade point average of 2.00 both in courses numbered 001 to 399 completed at PCC and in comparable courses completed at other regionally accredited institutions.
6. At least 15 units of the required 60 units, in courses numbered 001-399, must be completed at PCC. No more than 6 units may be transferred from another college if earned after the student’s last enrollment at PCC.
7. Courses may not be counted more than once to meet the general education requirements (Areas A-G). A course may be used to satisfy both the requirements of a major and of general education requirements, but the units shall count only once.

COMPETENCY REQUIREMENTS

1. **Reading** – One course (with grade C or better) from the following: English 001A, 001AH, 001AS, 001C, 001CH, 014, 100, 130, any English course which fulfills Area C (Humanities), or by satisfactory score on equivalency exam.
2. **Written Expression** – One course (with grade C or better) from the following: English 001A, 001AH, 001AS, or by satisfactory score on equivalency exam.
3. **Mathematics** – One course (with grade C or better) from the following: Business 014A, 014B, Computer Science 045, Math 131, 139, 141, 150, Statistics 015, 018, 050, or a math course which fulfills the general education requirement in Critical Thinking, or by satisfactory score on equivalency exam.
4. **Diversity** – Complete three (3) units in courses designated as either “Global Studies” or “Ethnic and Gender Studies” as listed in the following section. The courses which can satisfy the diversity requirement and are also general education are designated by the (†) symbol in the lists below.

GENERAL EDUCATION REQUIREMENTS:

- A. Natural Sciences (Lecture and lab must be in the same discipline) 3 units**
 Anatomy 025
 Anthropology 001†, 001H* and 001L

Astronomy 001
 Biology 002, 003, 004, 010A, 010B, 011, 014, 016,
 030, 038, 039
 Chemistry 001A, 001B, 002A, 002B, 008A, 008B, 022
 Environmental Studies 001, 003, 030, 040
 Geography 001 and 001L
 Geology 001, 001F, 002, 002F, 003, 003F, 004 and
 040, 006, 012 and 012F or 012L, 021 and 021L,
 022 and 040, 030A-L, 040
 Microbiology 002
 Physical Science 003 and 003L
 Physics 001A, 001B, 001C, 001D, 002A, 002B, 010
 and 010L, 031A, 031B
 Physiology 001, 100

B. Social and Behavioral Sciences 3 units

Anthropology 001[†], 001H[†], 001L, 002[†], 002H[†], 003,
 004, 005, 006, 009, 012[†], 031[†]
 Child Development 015
 Communication 001
 Economics 001A, 001B
 English 012[†]
 Environmental Studies 002
 Geography 002[†], 003[†]
 Gerontology 001
 History 001A[†], 001B[†], 002A[†], 002B[†], 005A[†], 005B[†],
 007A, 007B, 008[†], 009A[†], 009B[†], 012[†], 016[†], 018[†],
 019[†], 024A[†], 024B[†], 024C[†], 024D[†], 024E[†], 024F,
 024G[†], 025B[†], 025D, 025F, 025I, 027A[†], 027B[†],
 029A[†], 029B[†], 030[†], 031[†], 041[†]
 Linguistics 012[†], 014, 016, 017
 Political Science 001, 002, 006, 007, 021, 022
 Psychology 001, 001H, 021, 021H, 022, 023, 024,
 025, 029[†], 031[†], 033, 041[†], 120
 Sociology 001, 002, 014[†], 015, 016, 022, 024,
 029[†], 031[†], 041[†], 130 (2 units)
 Social Sciences 017
 Speech 013

C. Humanities 3 units

American Sign Language 001, 002, 010C, 010D
 Arabic 001, 002
 Architecture 024A, 024B
 Armenian 001, 002
 Art 001A, 001B, 001C, 002[†], 003A[†], 003B[†], 004A[†],
 004B[†], 004C[†], 004D, 005, 007[†], 008[†], 009[†], 104,
 105, 106
 Chinese 001, 002, 002A, 003, 004, 010[†], 012[†], 022,
 050
 Cinema 007A, 007B, 025
 Dance 021A[†], 021B[†]
 English 001B, 001BH, 005A, 005B, 009, 010, 011,
 012[†], 024, 025A, 025C[†], 025D, 025E, 025F, 025G,
 025H, 025I[†], 025J, 026, 030A, 030B, 030C, 034,

035, 036, 037, 044A[†], 044B[†], 044C[†], 045A, 045B,
 046A[†], 046B[†], 047[†], 048[†], 049A, 049B, 050[†], 051[†],
 052[†], 053, 054, 057, 058, 059, 060, 061, 078A,
 078B, 082A, 082B, 082C, 119
 French 001, 002, 003, 004, 006, 010[†], 012, 016, 050
 German 001, 002, 003, 004, 005[†], 010[†], 012
 Humanities 001, 002, 003, 004
 Italian 001, 002, 003, 004, 010[†], 012, 050[†]
 Japanese 001, 002, 003, 004, 005[†], 010[†], 011, 012[†]
 Latin 001, 002
 Linguistics 010, 011, 012[†]
 Music 007A, 007B, 021[†], 022, 023[†], 024A, 024B,
 025[†], 027[†], 028
 Philosophy 001, 001H, 003, 007, 008, 020A[†], 020B[†],
 031[†], 037
 Photography 010, 025 (Cinema 025)
 Portuguese 001, 002, 003, 004
 Religious Studies 001, 002[†], 003[†]
 Russian 001, 002, 003, 004, 011[†]
 Spanish 001, 002, 002A, 003, 004, 005[†], 006A[†],
 006B[†], 012, 025[†], 031[†], 042A[†], 042B[†], 044A[†],
 044B[†], 050
 Theater Arts 001, 005A, 005B, 007A (Cinema 007A),
 007B (Cinema 007B)
 Television and Radio 019

D. Language and Rationality 9 units . . (3 units each)

1. **English Composition** 3 units
 Business 011A
 English 001A, 001AH, 001AS, 001B, 001BH,
 001C, 001CH
2. **Oral Communication** 3 units
 Speech 001, 002, 010, 121
3. **Critical Thinking** 3 units
 **Business 014A, 014B
 Computer Information Systems 062
 Computer Science 002, 006, 008, 045
 English 001C, 001CH
 **Mathematics 003, 005A, 005B, 005C, 007A,
 007B, 009, 010, 015, 022, 055, 055H,
 131, 139, 141, 150
 Philosophy 025, 030, 033
 Physical Science 002
 Speech 006, 012
 **Statistics 015, 018, and 050
 **These courses also meet the mathematics
 competency requirement

E. American Institutions 3-6 units
May be satisfied by one of the following options:

OPTION I (one History and one Political Science course - 6 units)
History 007A, 007B, 025B[†], 025D, 029A[†], 029B[†], 031[†], or 041[†]..... 3 units
AND
Political Science 001 or 007 3 units

OPTION II (one course - 3 units)
American Institutions 125..... 3 units

F. Health Education. 2 units

Biology 003
College 001
Counseling 012
Dental Hygiene 109[†]
Health Education 002A, 002E, 044
Nursing 050[†], 051[†], 052[†], 053[†], 125[†], 126[†], 127, 137, 138
Nutrition 011
Physiology 001, 100

G. Physical Activity/Kinesiology 2 units

A maximum of 4 units of Physical Education/Kinesiology Activity or Dance (Dance 002, 021A, 021B, and 025 are excluded) may be counted toward the degree. Music 061 may be substituted for 1 unit of PE/Kinesiology Activity each semester. Exemption is granted if the student has a physical limitation and submits a physician's recommendation which is approved by PCC Health Services.

MAJOR REQUIREMENTS:

Major..... 18 units

Students must select a major from among the choices listed in the PCC Catalog listed under Degrees and Certificates beginning on page 83. Completing multiple Certificates of Achievement in the same field of study does not result in multiple Associate in Science degrees being awarded.

Diversity Requirements

PCC Policy #4060 on Degrees, Certificates and Transfer Certifications states that a student who applies for either an AA or AS degree "must demonstrate competency in reading, writing, mathematics **and diversity.**" The Diversity Requirement **states that a student must complete** 3 units in courses designated as either "Global Studies" or "Ethnic and Gender Studies."

GLOBAL STUDIES

Pasadena City College and the community it serves have long been identified as closely tied to international, cultural and educational affairs. The College provides outstanding opportunities for students wishing to emphasize international education.

1. Africa:

Anthropology 001, 001H (Physical Anthropology)
Art 002 (History of African and African-American Art)
History 002A-B (History of World Civilizations To/From 1500)
History 024A (Special Topics in History-Africa)
History 027A (Traditional Africa)
History 027B (Modern Africa)

2. Asia:

Art 003A-B (History of Asian Art)
Chinese 008A-B (Introduction to Chinese Conversation - Mandarin)
Chinese 009A-C (Chinese Conversation - Mandarin)
Chinese 010 (Chinese Civilization)
Chinese 012 (Chinese Literature in Translation)
English 048 (Asian Literature)
History 002A-B (History of World Civilization To/From 1500)
History 018 (History of South Asia, Southeast Asia and the Pacific)
History 019 (History of China, Japan, and Korea)
History 024B (Special Topics in History - Asia)
History 024G (Special Topics in History-World)
Japanese 005 (Reading and Composition)
Japanese 008A-B (Introduction to Japanese Conversation)
Japanese 009A-C (Japanese Conversation)
Japanese 010 (Japanese Civilization)
Japanese 011 (Inside Japan)
Japanese 012 (Japanese Literature in Translation)
Music 027 (Asian Music)
Music 038C (Chinese Music Ensemble)
Religious Studies 002 (Comparative Religions: Far East)

3. Europe:

Art 004B (History of European Medieval Art)
Art 004C (History of European Renaissance and Baroque Art)
Anthropology 030E (Anthropological Field Studies - England)
Anthropology 030F (Anthropological Field Studies - Italy)
English 044A-C (Masterpieces of Literature)
English 046A-B (English Literature)

French 009A-B (French Conversation)
 French 010 (French Civilization)
 German 005 (Introduction to German Literature)
 German 008 A-C (Introduction to German Conversation)
 German 010 (German Civilization)
 History 001A-B (History of European Civilization To/From 1715)
 History 002A-B (History of World Civilizations To/From 1500)
 History 005A-B (History of Great Britain To/From 1714)
 History 024C (Special Topics in History – Europe)
 History 024G (Special Topics in History – World)
 Italian 008A-B (Introduction to Italian Conversation)
 Italian 010 (Italian Civilization)
 Italian 050 (Italian Film as Dramatic Literature)
 Music 021 (Music Appreciation)
 Philosophy 020A (History of Ancient Philosophy)
 Philosophy 020B (History of Modern Philosophy)
 Religious Studies 003 (Comparative Religions: Near East)
 Russian 011 (Russian Civilization)
 Spanish 005 (Introduction to Spanish Literature)
 Spanish 006A (Introduction to Spanish-American Literature)
 Spanish 006B (Introduction to Spanish-American Literature)
 Spanish 009A-C (Spanish Conversation)
 Spanish 025 (Spanish Composition)
 Spanish 042 A-B (Civilization of Spain and Portugal)

4. Latin America:

Art 007 (Pre-Columbian Art)
 Art 008 (History of Mexican and Chicano Art)
 Dance 004H (World Ethnic Dance: Spain/Portugal)
 History 008 (History of California)
 History 009A (Latin America: Pre-Columbian to 1825)
 History 009B (Latin America: 1825 to the Present)
 History 024D (Special Topics in History – Latin America)
 History 024G (Special Topics in History – World)
 History 030 (History of Mexico)
 Spanish 044 A-B (Civilization of Latin America)

5. Middle East:

Art 004A (History of Ancient Art in the West)
 Art 009 (History of Islamic Art)
 History 016 (History of the Middle East)
 History 024E (Special Topics in History – Middle East)
 Religious Studies 003 (Comparative Religions: Near East)

ETHNIC AND GENDER STUDIES

Pasadena City College promotes cross cultural understanding and an appreciation of diversity in all its forms. The courses listed below have been identified as providing that understanding and appreciation. Students wishing to study American Indian, Asian American, Chicano and African American cultures are referred to the following general education courses:

(Courses preceded with an asterisk () are college courses approved by the California State Department of Education for school staff preparation in the history, culture and current problems of racial and ethnic minorities in accordance with Article 3.3, Education Code Section 13344.1.)*

1. African American Studies:

*Art 002 (History of African and African-American Art)
 *English 050 (Afro-American Literature)
 History 029A (African American History to 1865)
 History 029B (African American History from 1865)
 *Music 025 (Afro-American Music)
 *Psychology 029 (Psychology of the Afro-American)
 *Sociology 029 (Sociology of the African-American)

2. Asian American Studies:

English 052 (Asian American Literature)
 *History 041 (History of Asian Pacific Americans)
 *Psychology 041 (Psychology of the Asian American)
 *Sociology 041 (Sociology of the Asian American)

3. Chicano/Latina/o Studies:

*Anthropology 031 (Mexican and Chicano Culture)
 *Art 008 (History of Mexican and Chicano Art)
 *English 047 (Mexican and Chicano Literature)
 History 008 (History of California)
 *History 031 (History of Mexican Americans in the United States)
 *Philosophy 031 (Contemporary Chicano Philosophy)
 *Psychology 031 (Studies in Chicano Behavior)
 *Sociology 031 (Chicano Sociology)
 *Spanish 031 (Language of the Barrio)

4. Cross Cultural Studies:

Anthropology 002, 002H (Cultural Anthropology)
 Child Development 024E (Special Topics – Multicultural Issues)
 Dance 021A-B (Dance History: Cultural and Social Heritage)
 English 012/Linguistics 012 (Intercultural Communications)
 English 025I (Post-Colonial Literatures)
 Geography 002 (Cultural Geography)

Geography 003 (World Regional Geography)
 Linguistics 012 (Intercultural Communication)
 Music 023 (Music Cultures of the World)
 Sociology 014 (Introduction to Ethnic Studies)

5. Gender Studies:

English 025C (Images of Women in Literature)
 History 025B (Women in American Society)

6. Health Sciences Diversity Courses:

Anesthesia Technician 118 (Anesthesia Technician Clinical Seminar)
 Dental Assisting 110 (Introduction to Dental Essentials)
 Dental Assisting 111 (Applied Human Behavior)
 Dental Assisting 123A (Chairside Techniques)
 Dental Hygiene 104B (Clinical Dental Hygiene Theory and Practice)
 Dental Hygiene 104C (Clinical Dental Hygiene Theory and Practice)
 Dental Hygiene 109 (Dental Health Education and Communication)
 Dental Hygiene 119A (Community Dental Health)
 Dental Hygiene 121 (Clinical Practice in Alternative Settings)
 Gerontology 001 (Introduction to Gerontology)
 Gerontology 022 (Directed Studies in Gerontology)
 Medical Assisting 111A (Medical Office Procedures I)
 Nursing 050 (Foundational Nursing Care)
 Nursing 051 (Beginning Nursing)
 Nursing 052 (Intermediate Nursing Care)
 Nursing 053 (Advanced Medical-Surgical Nursing)
 Nursing 125 (Fundamental of Vocational Nursing – Theory)
 Nursing 126 (Intermediate Vocational Nursing – Theory)
 Radiologic Technology 113A/B (Clinical Learning Experience)

7. Native American Studies:

Anthropology 012 (American Indian Cultures)
 *English 051 (Native American Mythology and Literature)
 *History 012 (The North American Indian)

REQUIREMENTS FOR TRANSFERRING TO A FOUR-YEAR COLLEGE OR UNIVERSITY

Information on a wide variety of transfer programs is available in the PCC Counseling Department and in the Transfer Center. Students are also encouraged to consult

the Web to investigate the many transfer options currently available throughout California and out of state. The following information will be helpful for use in developing a transfer plan to a four-year college or university. Students are encouraged to work with a member of Pasadena City College’s counseling faculty and to utilize the services of the Transfer Center in order to make the transition from PCC to a four-year college or university easier.

TRANSFER BASICS

Students who wish to transfer to a university for a bachelor’s degree typically take general education and major preparation courses at PCC. The college offers lower division major preparation for many university majors (Example: for transfer as a Business major to a CSU, students may take ACCT 001A, 001B, BUS 012A, BUS 014B, CIS 010, and ECON 001A/001B.

In most cases, the UC and CSU require a minimum of **60 transferable units** (courses numbered 001—099) to transfer at the upper-division (3rd year) level.

GENERAL EDUCATION +	MAJOR CLASSES & ELECTIVES =	TOTAL
Approximately 39 units +	21 units minimum =	60 units minimum

Some majors require more than 60 units to transfer due to extensive major preparation requirements. See a counselor to discuss high-unit majors such as biology, engineering, etc.

There are two paths to complete general education for transfer to the California public universities. Intersegmental General Education Transfer Curriculum (IGETC) for UC and CSU campuses. Or if you are only applying to CSU campuses you may complete the CSU Breadth requirements.

General education requirements vary for private 4-year and out-of-state colleges and universities. Some private and out-of state universities will accept the IGETC or CSU certification from a California community college such as PCC.

Specific articulation agreements with private and out-of state universities can be found at: <http://www.pasadena.edu/student-services/counseling/articulation.cfm>

TRANSFER WITH AN ASSOCIATE DEGREE

It is easy to prepare for transfer to a UC, CSU, or private university and earn an associate degree (AA, AA-T, or AS-T) at the same time.

ASSOCIATE IN ARTS/SCIENCE DEGREES FOR TRANSFER

(AD-T) – California Community Colleges are now offering Associate Degrees for Transfer (AD-T) to the CSU system. 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. The AD-T 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. Students should consult with a counselor when planning to complete the degree or for more information on university admission and transfer requirements.

To view the most current list of Pasadena City College Associate Degrees for Transfer (AD-T), please go to <http://www.pasadena.edu/academicprograms/transfer-degree.cfm>.

The AA-T and AS-T degrees, are awarded in the following disciplines:

- Administration of Justice (AS-T)
- Anthropology (AA-T)
- Art History (AA-T)
- Business Administration (AS-T)
- Communication Studies (AA-T)
- Early Childhood Education (AS-T)
- English (AA-T)
- Geography (AA-T)
- Geology (AS-T)
- History (AA-T)
- Journalism (AA-T)
- Kinesiology (AA-T)
- Mathematics (AS-T)
- Music (AA-T)
- Physics (AS-T)
- Political Science (AA-T)
- Psychology (AA-T)
- Sociology (AA-T)
- Spanish (AA-T)
- Studio Arts (AA-T)
- Theatre Arts (AA-T)

PCC's Transfer Requirements Tool (at www.pasadena.edu/transfer/)

The Pasadena City College Transfer Center has developed an easily accessible interactive transfer tool which lists transfer requirements for either a selected four-year college or university, a specific major, or a general education plan. Students interested in a specific major, for example, may access a listing of PCC courses that are recommended in preparation for fulfilling lower-division requirements for a wide variety of majors at numerous four-year colleges and universities. Such information is useful in working with a counselor to develop an educational plan to transfer to a four-year institution.

In order to provide the most current transfer information, the Transfer Requirements Tool is updated on a regular basis, since lower-division requirements at a given college or university are subject to change. It is the student's responsibility to check the Transfer Tool on line periodically for updates, and to consult the catalog of the college or university to which they expect to transfer, for additional information.

Students may access the Transfer Requirements Tool on the PCC Transfer Center website at www.pasadena.edu/transfer/. See the next page for a sample transfer tool major preparation sheet.

SYSTEMWIDE GENERAL EDUCATION AGREEMENTS

The California State University and the University of California systems have developed system-wide general education agreements which enable community college transfer students to complete lower division courses that satisfy general education requirements at many CSUs and UCs.

The Intersegmental General Education Transfer Curriculum (IGETC) is a series of courses that prospective transfer students may complete at PCC to satisfy lower division breadth/general education requirements at both the University of California and the California State University. IGETC is most helpful to students who want to transfer but have not yet decided upon a particular CSU or UC campus. It is applicable to many but not all majors, and students should consult the specific UC or CSU campus for additional information on IGETC acceptability, particularly for high-unit majors such as engineering, architecture, and a number of the physical and life sciences.

The CSU General Education Breadth Requirements have been developed by the CSU system and the community colleges to enable a prospective transfer student to sat-

PCC Transfer Requirements Tool

Pasadena City College – Transfer Curricula For

History Major

Any Pasadena City College courses listed below are recommended for the following selected transfer institution(s). It is the student's responsibility to check the listed college's current catalog and articulation agreements for any changes that may occur.

School	G.E. Plans	Lower-Division Major Requirements
California State University Los Angeles	IGETC or CSU GE	Engl 001C General Option: Hist 001A & 001B or Hist 002A & 002B Hist 007A, 007B Teacher Preparation Option: Engl 001C, Hist 001A & 001B or Hist 002A & 002B, Hist 007A, Hist 007B, Geog 002, PolS 001, Phil 037 or Relg 001
California State University Northridge	IGETC or CSU GE	Hist 002A or 001A, Hist 002B or 001B Hist 007A, 007B Choose 1 course or sequence: Hist 027A & 027B, 009A, 016, 019
California State University San Bernardino	IGETC or CSU GE	Track A - Teaching Credential Option: Hist 002A & 002B, Hist 007A, Hist 007B, Geog 001 & 001L, Econ 001A, Econ 001B, Geog 002 Track B - General Option: Hist 002A & 002B, Hist 007A, 007B Track C - Public and Oral History Option: Hist 002A & 002B, Hist 007A, 007B
Loyola Marymount University	Follow the specific requirements of the institution	Hist 001A & 001B Hist 007A & 007B Choose 1 course: Hist 009A, 019, 027A, 027B, 030 Note: In addition to the above requirements, LMU recommends the study of geography and foreign languages.
University of California Berkeley	IGETC	Hist 001A or Hist 001B Hist 007A or 007B Choose 1 course: Hist 009A, 019, 027A, 027B, 030
University of California Davis	IGETC	Choose 5 courses: Hist 001B, 007A, 007B, 019, 025B, 027B
University of California Irvine	IGETC	Choose 2 courses from 2 different regions: Hist 016, 018, 019, 001A, 001B, 002A, 002B, 007A, 007B, 009A, 009B, 027A, 027B Up to three additional transferable courses in history. For additional requirements, please refer to Assist.org
University of California Los Angeles	IGETC	Choose 1 course: Hist 001A, 001B, 002A or 002B Choose 2 courses: Hist 005A, 005B, 007A, 007B, 008, 009A, 009B, 012, 016, 018, 019, 025A-I, 027A, 027B, 029A, 029B, 030, 031, 038, 041
University of California Riverside	IGETC	Hist 002A or 002B Hist 007A & 007B Administrative Studies Option: Bus 009, Acct 001A, CS 001 or CIS 001 or CIS 010, Stat 050 Law & Society Option: Phil 030, Hist 002A or 002B, Hist 007A & 007B, Psyc 005 (Recommended)
University of California Santa Barbara	IGETC	Select 2 of the following 3 sequences: Hist 001A & 001B, Hist 002A & 002B, Hist 007A & 007B Choose 1 course: Hist 009A, 009B, 018, 019, 027A, 027B, or 030 + one additional UC transferable history course.

This major may be impacted at some campuses. Please contact the individual campus for more information.
This is not a complete listing of transfer institutions. Counselors can help you explore other colleges for transfer.

Requirements revised 09/27/10

isfy the lower-division general education requirements for many CSU campuses. The CSU General Education Breadth Requirements List specifies community college courses that may be used to satisfy each of the CSU subject areas for general education at the lower division.

The IGETC and the CSU General Education system-wide requirements – as well as the PCC courses that satisfy them – are listed on the next few pages. Students are encouraged to meet with a counselor for additional information, as well as to develop a transfer plan that includes both general education and major preparation components.

INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM (IGETC)

The Intersegmental General Education Transfer Curriculum permits a student to transfer from a community college to a campus in either the California State University or the University of California system without the need, after transfer, to take additional lower division, general education courses to satisfy campus GE requirements.

Completion of the IGETC is not a requirement for transfer to a CSU or a UC, nor is it the only way to fulfill the lower division, general education requirements of the CSU or UC prior to transfer. As an alternative, students transferring to the CSU may choose to follow the General Education Certification Program. Students may also elect to fulfill the graduation requirements listed in the catalog of any specific CSU or UC campus.

Due to substantial lower division prerequisites in high-unit majors such as engineering, architecture, and the physical and natural sciences, IGETC may be an inappropriate option. Individual colleges or majors within a UC campus may not accept IGETC for meeting general education. A list of those UC colleges and majors is found on the following campus guidance for IGETC website: <http://admission.universityofcalifornia.edu/transfer/general-education-igetc/igetc/igetc-campus-guidance/index.html>. Please consult a PCC counselor for additional information.

If IGETC is chosen as the option to fulfill the general education requirements, all areas must be met with minimum grades of C or Pass prior to transfer.

IGETC COURSES

AREA 1 – ENGLISH COMMUNICATION

All students must complete two courses, 6 semester units (or 8–10 quarter units), one from Group A and one from Group B. Students transferring to a CSU must also complete one course, 3 semester units (or 4–5 quarter units) from Group C.

GROUP A: English Composition 3 units
English 001A, 001AH, 001AS

GROUP B: Critical Thinking/English Composition 3 units
English 001C
Philosophy 025
Physical Science 002

GROUP C: Oral Communication (CSU Requirement Only) 3 units
Speech 001, 010

AREA 2 — MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

..... 3 units
Complete one course, 3 semester units
(or 4–5 quarter units).
Business 014A, 014B[†]
Math 003[†], 005A[†], 005B, 005C, 007A[†],
007B[†], 009[†], 010, 012, 015, 022, 055[†],
055H[†]
Statistics 015, 018[†], 050[†]

AREA 3 — ARTS AND HUMANITIES 9 units
Complete three courses, 9 semester units (or 12–15 quarter units); at least one course from the Arts and one course from the Humanities.

3A ARTS

Architecture 024A, 024B
Art 001A, 001B, 002, 003A, 003B, 004A,
004B, 004C, 004D, 005, 007, 008, 009
Chinese 022, 050
Cinema 007A, 007B, 025
Dance 021A, 021B
French 050
Italian 050
Music 007A, 007B, 021, 022, 023, 024A,
024B, 025, 026, 027, 028
Photo 010, 025 (Cinema 025)
Spanish 050
Theater Arts 001, 005A, 005B, 007A (Cinema
007A), 007B (Cinema 007B)

3B HUMANITIES

Chinese 005, 010, 012
English 001B, 001BH, 010, 011, 024, 025A,
025C,
025D, 025E, 025F, 025G, 025H, 025I,
025J, 026, 030A, 030B, 030C, 044A,
044B, 044C, 045A, 045B, 046A, 046B,
047, 048, 049A, 050, 051, 052, 053,
054, 057, 058, 059, 060, 061, 078A, 078B,
082A, 082B, 082C
French 005A, 005B, 006, 010, 012, 016
German 005, 010, 012
*History 001A, 001B, 002A, 002B, 005A,
005B, 007A, 007B, 008, 009A, 009B,
012, 016, 018, 019, 025B,
025D, 025F, 025I, 027A, 027B, 029A,
029B, 030, 031, 041

Humanities 001, 002, 003, 004
 Italian 010, 012
 Japanese 005, 010, 012
 Linguistics 010, 011
 Philosophy 001, 001H, 003, 007, 008, 020A,
 020B, 031, 037
 Religious Studies 001, 002, 003
 Russian 011
 Spanish 005, 006A, 006B, 012, 025, 042A[†],
 042B[†], 044A[†], 044B[†]

AREA 4 — SOCIAL AND BEHAVIORAL SCIENCES..... 9 units

Complete three courses, 9 semester units (or 12–15 quarter units) from at least two disciplines.
 Anthropology 001*, 001H, 002, 002H, 003, 004, 005, 006, 012, 031
 Economics 001A, 001B
 English 012
 Environmental Studies 002[†]
 Geography 002, 003, 005
 *History 001A, 001B, 002A, 002B, 005A, 005B, 007A, 007B, 008, 009A, 009B, 012, 016, 018, 019, 025B, 025D, 025F, 025I, 027A, 027B, 029A, 029B, 030, 031, 041
 Linguistics 012, 014, 016, 017
 Political Science 001, 002, 006, 007, 021, 022
 Psychology 001, 001H, 002, 005, 021[†], 021H, 022[†], 023, 024[†], 025, 029, 031, 033, 041
 Sociology 001, 002, 014, 015, 016, 022, 024, 029, 031, 041
 Speech 013

AREA 5 — PHYSICAL AND BIOLOGICAL SCIENCES..... 7 units

Complete at least two courses, 7 to 9 semester units (or 9–12 quarter units); one Physical Science course and one Biological Science course. Laboratory course in 5C must be associated with a lecture component in at least one of the courses completed in either 5A or 5B.

5A Physical Sciences

Astronomy 001[†], 012[†]
 Chemistry 001A[†], 001B[†], 002A[†], 002B[†], 008A, 008B, 022
 Environmental Studies 001[†], 003
 Geography 001
 Geology 001[†], 002, 003[†], 004, 006, 008, 012[†], 016, 021, 022
 Physical Sciences 003[†]
 Physics 001A[†], 001B[†], 001C[†], 001D[†], 002A[†], 002B[†], 010[†], 031A[†], 031B[†]

5B Biological Sciences

Anatomy 025[†]
 Anthropology 001*, 001H
 Biology 001A, 001B, 001C[†], 002, 003[†], 004, 010A, 010B, 010C[†], 011[†], 011H, 014, 016[†], 035[†], 038[†], 039[†]
 Microbiology 002
 Physiology 001[†], 002A[†], 002B[†]
 Psychology 002

5C Science Courses With Laboratory Component (may be same course from 5A or 5B, or a laboratory related to a lecture course completed in either 5A or 5B)

Anatomy 025[†]
 Anthropology 001L*
 Astronomy 001[†]
 Biology 001A, 001B, 001C[†], 002[†], 003[†], 004[†], 010A, 010B, 011[†], 011H, 014, 016[†], 037, 038[†], 039[†]
 Chemistry 001A[†], 001B[†], 002A[†], 002B[†], 008A, 008B, 022
 Environmental Studies 001[†], 003
 Geography 001L
 Geology 001[†], 001F[†], 002, 002F, 003[†], 003F[†], 006, 008, 012F[†], 012L, 021L
 Microbiology 002
 Physical Sciences 003L[†]
 Physics 001A[†], 001B[†], 001C[†], 001D[†], 002A[†], 002B[†], 010L[†], 031A[†], 031B[†]
 Physiology 001[†], 002A[†], 002B[†]

ADDITIONAL REQUIREMENTS

I. FOREIGN LANGUAGE – UC REQUIREMENT ONLY

Students must provide proof of proficiency equivalent to two years of high school study in the same language. An official copy of high school transcript(s) must be submitted for IGETC certification.

The following courses fulfill this requirement:

American Sign Language 010B, 010C, 010D
 Arabic 002; Armenian 002; Chinese 002[†], 002A[†], 003, 004; French 002, 003, 004; German 002, 003, 004; Greek 002; Hebrew 002, 003; Italian 002, 003, 004; Japanese 002, 003, 004; Latin 002; Portuguese 002, 003, 004; Russian 002, 003, 004; Spanish 002[†], 002A[†], 003, 004

II. UNITED STATES HISTORY, CONSTITUTION AND AMERICAN IDEALS – CSU REQUIREMENT ONLY

Not part of IGETC. May be completed prior to transfer; however, courses used to meet this requirement may also be used in areas 3 and/or 4 of this document with the approval of the CSU campus where a student is accepted.

6 units required: one course from (A) and one course from (B)

*(A) Political Science 001

*(B) History 007A, 007B, 025B, 029A, 029B, 031, 041

*Courses listed in more than one area may be certified **only** in a single area.

† Courses designated with a (†) have credit limitations for UC. Consult a counselor or www.assist.org. Select “PCC/UC Transferable courses.”

CALIFORNIA STATE UNIVERSITY GENERAL EDUCATION CERTIFICATION PROGRAM

California State University requirements for advanced undergraduate standing and general education are listed below. Requirements for the individual CSU campuses are similar, but students should consult specific catalogs as each may have additional requirements. For instance, a given campus may have added general education requirements so long as the requirement applies equally to native as well as transfer students.

Under this program, candidates for the Baccalaureate Degree at a California State University must meet the general education requirement of 48 units. A student may currently meet 39 units of this requirement at Pasadena City College. The remaining 9 units must be completed at the upper division level.

Students expecting to request general education certification should complete 39 units distributed among categories A through E as noted with no less than 30 units for areas A through D. Areas A and B4 must be fully completed with minimum grades of C prior to transfer. A single course may not meet more than one area requirement.

Students whose majors require more than 30 units should consult Counseling Services regarding the advisability of completing all major requirements instead of all general education requirements.

AREA A – ENGLISH LANGUAGE COMMUNICATION AND CRITICAL THINKING 9 units

Students must complete 9 semester units (or 12–15 quarter units) with at least one course each from A1, A2, and A3.

A1 – ORAL COMMUNICATION 3 units
Speech 001, 010

A2 – WRITTEN COMMUNICATION 3 units
English 001A, 001AH, 001AS

A3 – CRITICAL THINKING 3 units
English 001C
Philosophy 025, 030, 033
Physical Science 002
Speech 006, 012

AREA B – SCIENTIFIC INQUIRY AND QUANTITATIVE REASONING 9 units

Students must complete 9 semester units (or 12–15 quarter units) with at least one course each from B1, B2, and B4. At least one of the science courses completed in B1 or B2 must contain a related laboratory component in B3.

B1 – PHYSICAL SCIENCE

Astronomy 001, 012
Chemistry 001A, 001B, 002A, 002B, 008A, 008B, 022
Environmental Studies 001, 003
Geography 001
Geology 001, 002, 003, 004, 006, 008, 012, 016, 021, 022, 030A–M
Physical Sciences 003
Physics 001A, 001B, 001C, 001D, 002A, 002B, 010, 031A, 031B

B2 – LIFE SCIENCE

Anatomy 025
Anthropology 001, 001H
Biology 001A, 001B, 001C, 002, 003, 004, 010A, 010B, 010C, 011, 011H, 014, 016, 030, 035, 038, 039
Microbiology 002
Physiology 001, 002A, 002B
Psychology 002

B3 – LABORATORY ACTIVITY (related to a lecture course taken to satisfy either B1 or B2)

Anatomy 025
Anthropology 001L
Astronomy 001
Biology 001A, 001B, 001C, 002, 003, 004, 010A, 010B, 011, 011H, 014, 016, 030, 038, 039
Chemistry 001A, 001B, 002A, 002B, 008A, 008B, 022
Environmental Studies 001, 003
Geography 001L
Geology 001, 001F, 002, 002F, 003, 003F, 006, 008, 012F, 012L, 021L, 030A–M

Microbiology 002
Physical Sciences 003L
Physics 001A, 001B, 001C, 001D, 002A,
002B, 010L, 031A, 031B
Physiology 001, 002A, 002B

B4 – MATHEMATICS / QUANTITATIVE REASONING

Business 014A, 014B
Computer Science 002, 004, 006, 008, 010,
012, 043, 045
Mathematics 003, 005A, 005B, 005C, 007A,
007B, 008, 009, 010, 012, 015, 022,
038, 055, 055H
Statistics 015, 018, 050

**AREA C – ARTS, LITERATURE, PHILOSOPHY,
AND FOREIGN LANGUAGE..... 9 units**

Students must complete 9 semester units (or 12–15
quarter units) with at least one course each in Arts and
Humanities areas.

**C1 – ARTS (Arts, Cinema, Dance, Music,
Theater)**

Architecture 024A, 024B
Art 001A, 001B, 002, 003A, 003B, 004A,
004B, 004C, 004D, 005, 007, 008, 009
Chinese 022, 050
Cinema 007A, 007B, 025
Dance 021A, 021B
French 050
Italian 050
Music 007A, 007B, 021, 022, 023, 024A,
024B, 025, 026, 027, 028, 038A
Photo 010, 025 (Cinema 025)
Spanish 050
Theater Arts 001, 005, 005A, 005B, 007A
(Cinema 007A), 007B (Cinema 007B),
Television and Radio 019

**C2 – HUMANITIES (Literature, Philosophy,
Languages Other Than English)**

American Sign Language 010A, 010B
Arabic 001, 002
Armenian 001, 002
Chinese 001, 002, 002A, 003, 004, 005,
010, 012
English 001B, 001BH, 005A, 005B, 009, 010,
011, 024, 025A, 025C, 025D, 025E, 025F,
025G, 025H, 025I, 025J, 026, 030A, 030B,
030C, 044A, 044B, 044C, 045A, 045B,
046A, 046B, 047, 048, 049A, 050, 051,
052, 053, 054, 057, 058, 059, 060, 061,
078A, 078B, 082A, 082B, 082C
French 001, 002, 003, 004, 005A, 005B,
006, 010, 012, 016

German 001, 002, 003, 004, 005, 010, 012
Greek 001, 002
Hebrew 001, 002, 003
History 001A, 001B, 002A, 002B, 005A,
005B, 007A*, 007B*, 008, 009A, 009B,
012, 016, 018, 019, 025B*, 025D, 025F,
025I, 027A, 027B, 029A*, 029B*, 030,
031*, 041*
Humanities 001, 002, 003, 004
Italian 001, 002, 003, 004, 010, 012
Japanese 001, 002, 003, 004, 005, 010,
011, 012
Latin 001, 002
Linguistics 010, 011
Philosophy 001, 001H, 003, 007, 008, 020A,
020B, 031, 037
Portuguese 001, 002, 003, 004
Religious Studies 001, 002, 003
Russian 001, 002, 003, 004, 011
Spanish 001, 002, 002A, 003, 004, 005,
006A, 006B, 012, 025, 042A, 042B,
044A, 044B

**AREA D – SOCIAL, POLITICAL, AND ECONOMIC
INSTITUTIONS AND BEHAVIOR,
HISTORICAL BACKGROUND..... 9 units**

Students must complete 9 semester units (or 12–15
quarter units) required with courses in at least two
disciplines.

D0 – SOCIOLOGY AND CRIMINOLOGY

Sociology 001, 002, 014, 015, 016, 022,
024, 029, 031, 041

D1 – ANTHROPOLOGY AND ARCHAEOLOGY

Anthropology 001, 001H, 001L, 002, 002H,
003, 004, 005, 006, 012, 031

D2 – ECONOMICS

Economics 001A, 001B
Geography 005

D3 – ETHNIC STUDIES

Anthropology 012, 031
History 012, 029A, 029B, 031*, 041*
Psychology 029, 031, 041
Sociology 014, 029, 031, 041

D5 – GEOGRAPHY

Geography 002, 003, 005

D6 – HISTORY

History 001A, 001B, 002A, 002B, 005A,
005B, 007A*, 007B*, 008, 009A, 009B,
012, 016, 018, 019, 025B*, 025D, 025F,
025I, 027A, 027B, 029A*, 029B*, 030,
031*, 041*

D7 – INTERDISCIPLINARY SOCIAL OR BEHAVIORAL SCIENCE

Child Development 015
Communication 001
English 012
Environmental Studies 002
Gerontology 001
Linguistics 012, 014, 016, 017
Speech 013

D8 – POLITICAL SCIENCE, GOVERNMENT, AND LEGAL INSTITUTIONS

Political Science 001*, 002, 006, 007, 021, 022

D9 – PSYCHOLOGY

Psychology 001, 001H, 002, 005, 021, 021H, 022, 023, 024, 025, 029, 031, 033, 041

Psychology 001, 001H, 021, 021H, 022, 023, 024
Sociology 002, 022, 024

NOTE: Courses may not be used in more than one area.

CATALOG RIGHTS

When graduation requirements are revised, a student with continuous enrollment may graduate under the new requirements or the requirements in effect at the time of the student's initial enrollment. Continuous enrollment is defined as attending PCC at least one semester during each academic year without missing two consecutive semesters. A student whose first term of enrollment at Pasadena City College is the Summer of 2009 may elect to graduate under the provisions of the 2008–2009 *Catalog* if he/she maintains continuous enrollment. Students whose first term is the Fall of 2009, or any term thereafter, must follow the provisions of the appropriate subsequent *Catalog*.

American Institutions Requirement

All CSU campuses require a U.S. History and an American government course for CSU graduation. This requirement may be met with one asterisked () course in U.S. history within area **C2** or **D6**, AND with Political Science 1 (area **D8**).

Six units required: one course from (A) and one course from (B)

*(A) Political Science 001

*(B) History 007A, 007B, 025B, 029A, 029B, 031, 041

PHILOSOPHY OF GENERAL EDUCATION

General education requirements guide the student toward an intelligent understanding of the whole self and of the physical and social world. These requirements encourage the student to explore different areas of human inquiry not only to gain a basic understanding of these areas, but also to comprehend and use the principles, methods, values and thought processes of these disciplines. These explorations include an examination of the physical universe, its life forms and natural phenomena, human behavior and artistic and creative accomplishments. Basic to these studies and to the student's effectiveness in society is the capacity to think clearly, logically and analytically; to communicate clearly both orally and in writing; to perform quantitative functions; to find information; and to examine and evaluate that information using critical thinking skills.

After completing the general education requirements, the graduate should have the skills, knowledge, and insights to evaluate and appreciate the physical environment, culture, and society. To promote these skills and knowledge, Pasadena City College has developed Institutional Learning Outcomes and Competencies. The major areas of knowledge and skills that these outcomes seek to address are found on page 17 of this *Catalog*.

AREA E – LIFELONG LEARNING AND SELF-DEVELOPMENT 3 units

Students must complete 3 semester units (or 4–5 quarter units). Maximum of 1 unit of Dance Activity or PE/Kinesiology Activity (KINA).

Anthropology 002, 002H
Biology 019
College 001
Counseling 012
Dance 001, 002, 003, 004A–H, 005A–B, 006A–B, 007A–B, 008A–C, 009A–D, 010, 011A–D, 012, 013, 015A–D, 019A–C, 022A–C, 037A–C (maximum of 1 unit)
Health Education 002A, 002E, 044
Nutrition 011
Kinesiology/Physical Education Activity– KINA 003A–E, 027, 028A–B, 029A–C, 030, 032A–C, 033, 034A–B, 036, 037, 038, 039A–D, 046A–C, 048A–C, 049A–B, 053, 054A–C, 065A–C, 069, 081A–C (maximum of 1 unit)

Academic Programs Leading To A Degree Or Certificate

AA = Associate in Arts **AS** = Associate in Science **ADT** = Associate Degree for Transfer to CSU
CA = Certificate of Achievement **OSC** = Occupational Skills Certificate

DIVISIONS

BUS = Business **ENG** = English **E&T** = Engineering & Technology **HSC** = Health Sciences
KHA = Kinesiology, Health & Athletics **LANG** = Languages **LIB** = Library **MSC** = Math & Computer Science
NAT = Natural Sciences **PCA** = Performing and Communication Arts **SOC** = Social Sciences
VAMS = Visual Arts & Media Studies

Degree Title	DIV	AA	AS	ADT	CA	OSC	Page
ACCOUNTING							
Certified Bookkeeper	BUS		X		X		108
ADMINISTRATION OF JUSTICE							
Administration of Justice	BUS		X	X	X		109, 110
ANESTHESIA							
Anesthesia Technician	HSC		X		X		111
ANTHROPOLOGY							
Anthropology	SOC			X			112
ARCHAEOLOGY							
Archaeological Field Work	SOC					X	114
ARCHITECTURE							
Architecture	VAMS	X					115
ART							
Art History	VAMS			X			116
Studio Art	VAMS		X		X		117
Studio Arts	VAMS			X			118
AUTOMOTIVE TECHNOLOGY							
All Automotive Systems	E&T		X		X		120
Electrical/Electronics Systems	E&T					X	121
Engine Performance Technician	E&T		X		X		122
Heating & Air Conditioning Technician	E&T					X	122
Powertrain Technician	E&T		X		X		123
Undercar Technician	E&T		X		X		124
Underhood Technician	E&T		X		X		125
BIOLOGICAL TECHNOLOGY							
Biological Technology	NAT		X		X		126
Computational Biology	NAT				X		127
Laboratory Assistant	NAT				X		128
Laboratory Skills	NAT					X	129
Stem Cell Culture	NAT				X		130

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Degree Title	DIV	AA	AS	ADT	CA	OSC	Page
BUILDING CONSTRUCTION							
Building Construction	E&T		X		X		130
Cabinetmaking & Millwork	E&T					X	132
Construction Inspection	E&T		X		X		132
Construction Law	E&T					X	133
BUSINESS ADMINISTRATION							
Business	BUS	X					134
Business Administration	BUS			X			135
Customer Service	BUS					X	136
E-Commerce	BUS					X	136
Entrepreneurship	BUS		X		X		137
Financial Investments	BUS		X		X		138
International Business/Trade	BUS		X		X		139
Management	BUS		X		X		139
Marketing Management	BUS		X		X		140
Retail Management	BUS		X		X		141
BUSINESS INFORMATION TECHNOLOGY							
Administrative Assistant	BUS		X		X		142
Business Information Worker	BUS		X		X		143
Business Information Worker II	BUS		X		X		144
Business Software Specialist	BUS		X		X		144
Office Assistant	BUS		X		X		145
CHILD DEVELOPMENT							
Child Development	SOC		X		X		146
Child Development Instructional Assistant	SOC					X	149
Early Childhood Education	SOC			X			150
Music & Movement Education for Young Children	SOC					X	151
School Age Instructional Assistant	SOC					X	151
Special Education Assistant	SOC					X	152
COMMUNICATION STUDIES							
Communication Arts	PCA	X					153
Communication Studies	PCA			X			156
Speech Communication	PCA	X					158

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Degree Title	DIV	AA	AS	ADT	CA	OSC	Page
COMPUTER INFORMATION SYSTEMS							
CCNA Routing & Switching Preparation	BUS					X	159
CISCO Advanced Network Engineer	BUS					X	159
CISCO Certified Network Professional (CCPA) Preparation	BUS					X	160
E-Commerce	BUS					X	161
MCSA Windows Server Preparation	BUS					X	161
Operations	BUS		X		X		162
Programming	BUS		X		X		163
System and Network Administrator	BUS		X		X		164
Web Development Applications	BUS		X		X		165
COSMETOLOGY							
Cosmetology	E&T		X		X		165
Instructional Techniques in Cosmetology	E&T				X		167
CULINARY ARTS							
Culinary Arts	E&T		X		X		167
Baking & Pastry	E&T					X	168
Catering	E&T					X	169
Kitchen Assistant	E&T					X	169
DENTAL							
Dental Assisting	HSC		X		X		170
Dental Hygiene	HSC		X		X		172
Dental Laboratory Technology	HSC		X		X		174
Restorative Dental Technology	HSC		X		X		176
DESIGN STUDIES							
Industrial Design	VAMS					X	178
Interior Design	VAMS					X	179
Jewelry/Metalworking	VAMS					X	180
Product Design	VAMS		X		X		181
Product Design - Graphics	VAMS		X		X		182
Product Design - Technology	VAMS		X		X		183
DESIGN TECHNOLOGY							
CAD Designer - Architecture/Engineering/Construction	E&T					X	184
CAD Modeling & Animation - Architecture/Engineering/Construction	E&T					X	185
CAD Technician - Architecture/Engineering/Construction	E&T					X	185
CAD Technician - Mechanical Design and Manufacturing	E&T					X	186
Design Technology Pathway	E&T					X	186
Design Technology Mechanical and Manufacturing	E&T		X		X		187
Engineering and Technology	E&T	X					189

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KHA = Kinesiology, Health & Athletics **LANG** = Languages **LIB** = Library **MSC** = Math & Computer Science
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Degree Title	DIV	AA	AS	ADT	CA	OSC	Page
DIGITAL MEDIA							
Digital Media - Foundation	VAMS		X			X	191
Graphic Design	VAMS				X		192
ELECTRICAL & ELECTRONIC TECHNOLOGY							
Applied Circuits and Systems	E&T					X	193
Electrical Technology	E&T		X		X		194
Electronics Technology Basic Digital Technician	E&T					X	195
Photovoltaic Design & Installation	E&T		X		X		196
EMERGENCY MEDICAL							
Emergency Medical Technician I-A	HSC		X		X		196
ENGLISH							
English	ENG			X			197
English Literature	ENG	X					199
FASHION							
Fashion Assistant	VAMS				X		200
Fashion - Design	VAMS		X		X		201
Fashion Marketing	VAMS					X	202
Historical Costume Making	VAMS					X	203
FIRE TECHNOLOGY							
Fire Academy Preparation	BUS					X	204
Fire Technology	BUS		X		X		204
GENDER, ETHNICITY, AND MULTICULTURAL STUDIES							
Gender, Ethnicity, and Multicultural Studies	SOC	X					205
GEOGRAPHY							
Geography	NAT			X			207
Geotech (GIS)	NAT					X	209
GEOLOGY							
Geology	NAT			X			209
GERONTOLOGY							
Elder Care	HSC					X	210
Gerontology	HSC		X		X		211

AA = Associate in Arts **AS** = Associate in Science **ADT** = Associate Degree for Transfer to CSU
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DIVISIONS

BUS = Business **ENG** = English **E&T** = Engineering & Technology **HSC** = Health Sciences
KHA = Kinesiology, Health & Athletics **LANG** = Languages **LIB** = Library **MSC** = Math & Computer Science
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VAMS = Visual Arts & Media Studies

Degree Title	DIV	AA	AS	ADT	CA	OSC	Page
GRAPHIC COMMUNICATIONS TECHNOLOGY							
Apparel Graphics & Printing	VAMS					X	212
Computer Imaging & Composition	VAMS		X		X		212
Electronic Prepress	VAMS					X	213
Screen Printing	VAMS		X		X		214
Screen Printing for Small Business	VAMS					X	215
Textile Printing	VAMS					X	216
HISTORY							
History	SOC			X			216
HOSPITALITY MANAGEMENT							
Hospitality Management	BUS		X		X		218
HUMANITIES							
Humanities	SOC			X			219
JOURNALISM							
Journalism	VAMS			X			225
Photojournalism	VAMS		X		X		226
Printed Media	VAMS		X		X		227
KINESIOLOGY							
Kinesiology	KHA			X			228
Kinesiology & Wellness	KHA	X					230
LANGUAGES							
Chinese	LANG	X					233
Foreign Language - Basic	LANG					X	234
Foreign Language - Intermediate	LANG					X	235
Foreign Language - Advanced	LANG					X	237
French	LANG	X					238
German	LANG	X					239
Italian	LANG	X					240
Japanese	LANG	X					240
Russian	LANG	X					241
Spanish	LANG	X		X			242
LIBRARY							
Digitization Skills for Libraries & Cultural Heritage Institutions	LIB					X	244
Library Technology	LIB				X		244

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Degree Title	DIV	AA	AS	ADT	CA	OSC	Page
LINGUISTICS							
Linguistics	LANG	X					245
MACHINE SHOP TECHNOLOGY							
Machine Shop Technology	E&T		X		X		248
Industrial Fabricator	E&T					X	249
Manufacturing Technology II	E&T					X	249
MATHEMATICS							
Mathematics	MSC			X			250
MEDICAL ASSISTING							
Administrative & Clinical	HSC		X		X		251
Medical Office Administration	HSC		X		X		252
Medical Insurance Biller	HSC		X		X		253
Medical Office Receptionist	HSC					X	253
Medical Office Transcription	HSC					X	254
MUSIC							
Commercial Music	PCA					X	254
Music	PCA	X		X			255, 257
NATURAL SCIENCES							
Natural Sciences	NAT					X	258
NURSING							
Certified Nursing Assistant	HSC					X	261
Registered Nursing	HSC		X		X		262
Vocational Nursing	HSC		X		X		265
Licensed Vocational Nurse to Registered Nurse	HSC		X		X		267
Licensed Vocational Nurse to Registered Nurse - Non-Degree 30 unit option	HSC						269
PARALEGAL STUDIES							
Paralegal Studies	BUS		X		X		270
PHOTOGRAPHY							
Cinema - Cinematography	VAMS					X	272
Cinema - Cinema Production/Filmmaking	VAMS					X	273
Digital Image Editing	VAMS					X	274
Foundation in Photography	VAMS					X	274
Photography	VAMS		X		X		275
Portrait Photography	VAMS					X	276
PHYSICS							
Physics	NAT			X			276

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Degree Title	DIV	AA	AS	ADT	CA	OSC	Page
POLITICAL SCIENCE							
Political Science	SOC			X			277
PSYCHOLOGY							
Psychology	SOC			X			278
RADIOLOGY							
Radiology Technology	HSC		X		X		280
SOCIAL & BEHAVIORAL SCIENCES							
Social & Behavioral Sciences	SOC	X					281
SOCIOLOGY							
Sociology	SOC			X			284
SPEECH-LANGUAGE PATHOLOGY							
Speech-Language Pathology Assistant	PCA		X				285
TELEVISION & RADIO							
Broadcast Journalism	PCA		X		X	X	286
Media Programming & Management	PCA					X	288
Radio Production	PCA		X		X		288
Television Operations	PCA		X		X		290
Television Post Production	PCA					X	290
Television Production	PCA					X	291
Video Operations	PCA					X	291
Video Post-Production	PCA				X		292
Video Production	PCA		X		X		292
Writing For Film, Television & Radio	PCA					X	294
THEATER ARTS							
Theater Arts	PCA			X			294
Theater Technology	PCA		X		X		295
WELDING							
Basic Welding	E&T					X	296
Construction Welding	E&T		X		X		297
Gas Tungsten & Gas Metal Welding	E&T		X		X		298

ACADEMIC PROGRAMS

ACCOUNTING

(Business Division)

Accounting – Certified Bookkeeper – Certificate of Achievement, Associate in Science Degree

Top Code: 0502.00

The curriculum prepares students to become (with experience) certified bookkeepers. This training is relevant to positions such as bookkeeping/accounting/auditing clerk, accounts payable clerk, accounts receivable clerk/collections, general ledger clerk or payroll clerk. Knowledge of accounting and spreadsheet software is necessary.

The curriculum is aimed at students passing the national Certified Bookkeeper exams administered by the American Institute of Public Bookkeepers (AIPB). For more information on this program go to www.aipb.org.

Optionally, students can also take a course to become a California Registered Tax Preparer (CRTP) to prepare to work as a para-professional in an accounting or CPA office. For more information go to www.ctec.org.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Be able to pass the national AIPB Certified Bookkeeping exams.
2. Be able to perform basic General Ledger, Accounts Receivable, Accounts Payable, basic payroll duties.

Requirements for the Certificate of Achievement (21 units):

ACCT 010 – Bookkeeping–Accounting (4)
ACCT 104A – Computerized Accounting–Quickbooks (3)
ACCT 104B – Payroll Accounting (3)
BIT 106 – Business Software–Introduction to Microsoft Office System (3)
BIT 133 – Business Software–Microsoft Excel (2)
BUS 112 – Business English (3)
BUS 114 – Business Mathematics (3)

Recommended Electives

ACCT 001A – Financial Accounting (5)
ACCT 001B – Managerial Accounting (4)
ACCT 104C – Income Tax Preparation (3)
BUS 012A – Business Law (3)
BUS 170 – Work Experience Internship (3)

Requirements for the Associate in Science Degree – see page 89.

ADMINISTRATION OF JUSTICE

(Business Division)

Administration of Justice – Certificate of Achievement, Associate in Science Degree

Top Code: 2105.00

The curriculum prepares students for entry-level positions as police officers, police reserve officers, police assistants and community service officers in police and sheriff's departments and for positions in private security, as well as preparation for careers in probation, parole and federal law enforcement agencies.

Emphasis is on critical thinking, oral communication skills and writing skills essential to today's law enforcement employees. Students are kept informed of changes in law enforcement such as community policing, laws of arrest, search and seizure and updates to the State penal code. Role-playing and Moot Court participation are included to enhance oral communication skills and preparation of written reports. Training is also provided in the area of crime analysis and use of computer technology in law enforcement.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Identify the education stages to successfully enter a law enforcement Academy consisting of academics, physical training, firearms, Code of Ethics requirements for the law enforcement officer as a professional.
2. Demonstrate a fundamental knowledge of the law enforcement profession consisting of the role of the police, the courts and corrections.
3. Explain an understanding of the role of the community in a partnership with law enforcement including interpersonal skills of effective written and oral communications plus critical thinking required of a law enforcement officer (i.e., community policing).
4. Outline and discuss the moral/legal aspects of the use of firearms, impact weapons, chemical agents, Laws of Evidence, the preparation of Search and Arrest Warrants and the collection of physical evidence at a crime scene.

Requirements for the Certificate of Achievement (37 units):

Recommended sequence:

Semester I

AJ 010 – Introduction to the Administration of Justice (3)

AJ 012 – Concepts of Criminal Law (3)

ENGL 100 – Reading and Writing Skills (4)

or ENGL 001A – Reading and Composition (4)

Semester II

AJ 014 – Legal Aspects of Evidence (3)

AJ 016 – Principles and Procedures of the Justice System (3)

AJ 185 – Homeland Security (3)

KINA 037 – Police-Fire Agility Training (1)

Semester III

AJ 018 – Community Relations (3)

AJ 019 – Principles of Investigation (3)

SPCH 001 – Fundamentals of Speech (3)

or SPCH 010 – Interpersonal Communication (3)

Semester IV

- AJ 022 – Concepts of Enforcement Services (3)
- AJ 128 – Use of Force (1)
- AJ 130 – Firearms (1)
- AJ 190 – Introduction to Forensics (3)

Recommended Electives

- AJ 122 – Field Practice in Administration of Justice (2)
- FIRE 110 – Introduction to Fire Technology (3)

Requirements for the Associate in Science Degree – see page 89.

Administration of Justice – Associate in Science Degree for Transfer to CSU

Top Code: 2105.00

The Associate in Science in Administration of Justice for Transfer (AS-T) prepares students for entry-level positions as police officers, police reserve officers, police assistants, and community service officers in police and sheriff’s departments and for positions in private security as well as preparation for careers in probation, parole, and federal law enforcement agencies.

Emphasis is on critical thinking, oral communication skills, and writing skills essential to today’s law enforcement employees. Students are kept informed of changes in law enforcement such as community policing, laws of arrest, search and seizure, and updates to the state penal code. Role playing and Moot court presentation are included to enhance oral communication skills and preparation of written reports. Training is also provided in the area of crime analysis and use of computer technology in law enforcement. All courses in the major must be completed with a grade of “C” or better.

Associate in Science in Administration of Justice for Transfer Degree

REQUIRED (6 units)

- AJ 010 – Introduction to the Administration of Justice (3)
- AJ 012 – Concepts of Criminal Law (3)

LIST A: Select 2 Courses from Below (6 units)

- AJ 014 – Legal Aspects of Evidence (3)
- AJ 018 – Community Relations (3)
- AJ 019 – Principles of Investigation (3)

LIST B: Select 2 Courses from Below (Minimum 6 units)

- POLS 001 – Introduction to American Government and Politics (3)
- PSYC 001 – Introductory Psychology (3)
- SOC 002 – Contemporary Social Problems (3)
- STAT 018 – Statistics for Behavioral and Social Sciences (4)
- or STAT 050 – Elementary Statistics (4)

Required Subtotal	18–19
CSU General Education or IGETC	
Pattern.....	39–41
CSU transferrable units to meet 60 unit maximum	
for degree.....	1–3

Degree Total..... 60

Program Outcomes:

1. Identify the education stages to successfully enter a law enforcement academy consisting of academics, physical training, firearms and Code of Ethics requirements for the law enforcement officer as a professional.
2. Demonstrate fundamental knowledge of the law enforcement profession consisting of the role of the police, courts and corrections.
3. Explain an understanding of the role of the community in a partnership with law enforcement including, but not limited to interpersonal skills of effective written and oral communications plus critical thinking required of a law enforcement officer.
4. Outline and discuss the moral/legal aspects of the use of firearms, impact weapons, chemical agents, Laws of Evidence, the preparation of search warrants and the collection of physical evidence at a crime scene.

ANESTHESIA

(Health Sciences Division)

Anesthesia Technician – Certificate of Achievement, Associate in Science Degree

Top Code: 1230.00

The Anesthesia Technician program prepares the student to be an integral member of the anesthesia patient care team. Emphasis is on fundamental and advanced clinical procedures to assist licensed anesthesia providers in the acquisition, preparation, and application of various types of equipment required for the delivery of anesthesia care.

Anesthesia technicians are integral members of the anesthesia patient care team. Their role is to assist licensed anesthesia providers in the acquisition, preparation and application of various equipment required for the delivery of anesthesia care. This may be performed in a variety of clinical settings such as: the operating room, interventional and diagnostic radiology, post anesthesia care unit, intensive care unit, cardiac cath lab, emergency room, endoscopy, dental suites, and ambulatory surgery centers.

Job responsibilities may include equipment maintenance and servicing such as cleaning, sterilizing, assembling, calibrating, testing, troubleshooting, and recording of inspections and maintenance. In addition, the anesthesia technician will assist licensed anesthesia providers with patient assessments, evaluations, transport, positioning, insertion of intravenous and other invasive lines, and airway management.

Certification/Accreditation/Eligibility:

A Certificate of Achievement and an Associate in Science degree is awarded upon completion of all required courses with a C or better. The two-year program includes one summer session.

Upon successful completion of the program, the student is eligible to take the American Society of Anesthesia Technicians/Technologists (ASATT) National Certification Examination to become certified as an Anesthesia Technician (Cer. A.T.)

Highlights of the PCC program include professional, experienced academic and clinical instructors, and a multitude of clinical sites with state-of-the-art technology and hands-on instruction. The Anesthesia Technician program is a partnership program with Kaiser Permanente.

Requirements for Admission:

1. Graduation from an accredited high school or equivalent.
2. Overall minimum GPA of 2.0 in all required prerequisite courses. An overall minimum GPA of 2.5 in the following prerequisite courses: Speech 010, Physiology 002A/002B or Anatomy 025 and Physiology 001, English 001A, and Chemistry 002A.

3. Current CPR/ Basic Cardiac Life Support (BCLS) certification.
4. Completion of application for admission into the program.

Program Outcomes:

1. Apply theory and knowledge of social sciences in effective communication with anesthesia care providers in the delivery of patient care.
2. Apply theory and knowledge of chemistry and biology to assist the anesthesia provider in the selection and operation of appropriate anesthesia equipment for patient care.
3. Apply theory and concepts in pharmacology specific to anesthesia surgical procedure in preparation of patient care.
4. Apply theory and knowledge of basic anatomy/physiology, and pathophysiology in assisting the anesthesia provider in the development of patient care plans.

Recommended Preparation:

High school courses in biology, anatomy/physiology, and chemistry with a laboratory.

**Requirements for the Certificate of Achievement
(30 units):**

Summer Intersession I

AT 110 – Professional Aspects of Anesthesia Technology (2)

AT 111 – Basic Principles of Anesthesia Technology (3)

Fall Semester II

AT 112 – Advanced Principles of Anesthesia Technology (3)

AT 113 – Anesthesia Pharmacology (3)

AT 114 – Basic Anesthesia Equipment–Theory and Lab (3)

AT 116 – Anesthesia Technology Clinical Experience I (5)

Spring Semester III

AT 115 – Advanced Anesthesia Equipment–Theory and Lab (3)

AT 117 – Anesthesia Technology Clinical Experience II (5)

AT 118 – Anesthesia Technology Case Study and Program Review (3)

Requirements for the Associate in Science Degree – see page 89.

ANTHROPOLOGY **(Social Sciences Division)**

Anthropology – Associate in Arts Degree for Transfer

Top Code: 2202.00

Anthropology is the comprehensive study of humans, our ancestors, and our non-human primate relatives. The field explores what it means to be human, from prehistoric times to the present. Anthropologists investigate contemporary human social behaviors (cultural anthropology), the origins and nature of languages (linguistic anthropology), human evolution, variation and adaptation (physical anthropology), and the ancient life ways and cultural development of past human populations (archaeology). The anthropology program at Pasadena City College provides courses that enable students to complete lower division prerequisites and general education requirements for transfer to institutions of higher learning and/or receive an associate degree. The goal of the anthropology program is to prepare students to use the discipline's holistic perspective,

research methods, and general knowledge in order to find reasonable solutions to human dilemmas. The Associate in Arts in Anthropology for Transfer Degree is designed to prepare the student for seamlessly transferring to the CSU to earn a baccalaureate degree in anthropology.

Associate Degree for Transfer Requirements

- 60 semester or 90 quarter CSU-transferable units.
- the California State University-General Education-Breadth pattern (CSU GE-Breadth); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern.
- a minimum of 18 semester or 27 quarter units in the major or area of emphasis as determined by the community college district.
- obtainment of a minimum grade point average (GPA) of 2.0.
- earn a grade of C or better in all courses required for the major or area of emphasis.

Associate in Arts Degree in Anthropology for Transfer

REQUIRED CORE (9 units)

ANTH 001 – Physical Anthropology (3)

or

ANTH 001H – Physical Anthropology (3)

ANTH 002 – Cultural Anthropology (3)

or

ANTH 002H – Honors Cultural Anthropology (3)

ANTH 003 – Introduction to Archaeology (3)

LIST A: (3 units)

ANTH 001L – Laboratory in Physical Anthropology (1)

STAT 018 – Statistics for Behavioral and Social Sciences (4)

STAT 050 – Elementary Statistics (4)

LIST B: (3–5 units)

Area 1: Science Methods

PSYC 005 – Research Methods in Psychology (4)

Area 2: Sciences

ANAT 025 – General Human Anatomy (4)

GEOG 001 – Physical Geology (4)

GEOG 003 – Earth and Space Science (4)

GEOG 011 – Introduction to Geographic Information Systems and Techniques, with Lab (3)

LIST C: SELECT ONE (3 units) Any List A or B course not already used

ANTH 004 – Anthropology of Religion, Magic, Witchcraft (3)

ANTH 005 – Introduction to Linguistic Anthropology (3)

ANTH 012 – American Indian Cultures (3)

ANTH 031 – Mexican and Chicano Culture (3)

REQUIRED SUBTOTAL.....19–20

CSU General Education or IGETC Pattern..... 37–39

DEGREE TOTAL 60

Student Learning Outcomes:

1. Demonstrate an understanding of the nature of scientific inquiry and its application to anthropological research.
2. Identify patterns and analyze the adaptive relationships between organisms and their environments.
3. Demonstrate an awareness of the diversity of past human societies and a comprehension of how archaeological evidence is used to reconstruct past processes of culture change.
4. Understand and articulate the breath of cultural beliefs and practices found across cultures and throughout time, with special emphasis on indigenous traditions.
5. Articulate an understanding of ethical principles and responsibilities in anthropological research using a relativistic framework.

ARCHAEOLOGY

(Social Sciences Division)

Archaeological Field Work – Occupational Skills Certificate

Top Code: 2202.00

The curriculum prepares an individual for the workplace environment with skills that apply to archaeological field excavation techniques, artifact analysis and preparation of the required governmental documentation associated with cultural resource management. The student may choose to work for either a private or a governmental agency as a cultural resource specialist.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Satisfy requirements for entry level position in archaeological excavation project or CRM work.
2. Understand the essential scientific components required in archaeological field work.
3. Allow students the opportunity to decide if a career in archaeology is of interest to them in the future.

Requirements for the Occupational Skills Certificate (17 units):

Recommended sequence:

Semester I

ANTH 001 – Physical Anthropology (3)

ANTH 001L – Laboratory in Physical Anthropology (1)

ANTH 002 – Cultural Anthropology (3)

Semester II

ANTH 003 – Introduction to Archaeology (3)

ANTH 012 – American Indian Cultures (3)

ANTH 030A – Anthropological Field Studies – Mesa Verde, Colorado (2)

or ANTH 030B – Anthropological Field Studies – Rio Grande Pueblos–New Mexico (2)

or ANTH 030C – Anthropological Field Studies – California (2)

or ANTH 030D – Anthropological Field Studies – Rocky Mountains (2)

or ANTH 030E – Anthropological Field Studies – England (2)

or ANTH 030F – Anthropological Field Studies – Italy (2)

or ANTH 030G – Anthropological Field Studies – Southern California (2)

or ANTH 030H – Applications of Archeological Field Work (2)

Semester III ANTH 030H – Applications of Archeological Field Work (2)

Recommended Electives

BIOL 002 – Animal Biology (4)

BIOL 030 – Field Botany (4)

ARCHITECTURE

(Visual Arts and Media Studies Division)

Architecture – Associate in Arts Degree

Top Code: 2201.00

The Architectural major allows students to pursue an architectural education at a university level. It is designed for high-achieving students who seek a degree in a 5-year professional or 4-year non-professional degree university level undergraduate program in Architecture, Interiors Architecture, Environmental Design and Landscape Architecture in CSU, UC, and private schools. Curriculum in this major encompasses the first two years of architectural curriculum following standards outlined by the National Architectural Accreditation Board (NAAB) in architectural design, visual communications, materials and processes of construction, professional practice and history/theory. Courses focus on exploration and understanding of architecture's cultural, environmental, and formal relevance to both individuals and society as a whole. Architecture students are trained to think creatively, abstractly, and to develop design concepts for critical inquiry and design. Students apply current design principles and processes of architectural design that produce design solutions. Architecture students effectively convey their creative architectural design projects, research and essays realized through physical, digital and verbal presentation forms. These completed works are then studied and developed into portfolios of individual student accomplishment for transfer.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. *When selecting courses students should consult with Counseling Services to determine the particular transfer requirements (specifically Math and Physics) required by public and private transfer institutions.*

This major is primarily intended to prepare students to transfer and earn a 4- or 5-year bachelor's degree in Architecture.

Courses must be completed with a grade of C or better. All courses must be numbered 001–099. Students must complete all 37 units in the discipline listed below:

Program Outcomes:

1. Apply creative and abstract thought to develop design concepts based on historical awareness and critical inquiry.
2. Execute architectural design and research solutions employing current design principles and processes of architectural design and research.
3. Convey creative architectural design projects, research and essays through physical, digital and verbal presentation forms.

Requirements for the major **(37 units minimum)**

ARCH 010A – Architectural Design Fundamentals (3)
ARCH 010B – Design Fundamentals (3)
ARCH 011 – Introduction to Architecture (2)
ARCH 012A – Visual Communications I (3)
ARCH 012B – Visual Communications II (Digital Media) (3)
ARCH 013 – Architectural Portfolio Preparation (3)
ARCH 014 – Materials and Processes of Construction (2)
ARCH 020A – Architectural Design (6)
ARCH 020B – Architectural Design (6)
ARCH 024A – History of Architecture (3)
ARCH 024B – History of Architecture (3)

Requirements for the Associate in Arts Degree – see page 85.

ART

(Visual Arts and Media Studies Division)

Art History – Associate in Arts Degree for Transfer to CSU

Top Code: 1001.00

The Associate in Arts Degree in Art History for Transfer at Pasadena City College promotes an understanding of art across cultures and geographic boundaries. Students are taught to apply fundamental art and art historical terminology, and an appreciation of process, to analyze works, in order to articulate the historical, social, and aesthetic functions of art.

The Associate in Arts Degree in Art History for Transfer degree will be awarded upon completion of coursework totaling 60 California State University (CSU) transferable units including the major requirements and the Intersegmental General Education Transfer Curriculum (IGETC-CSU) or California State University General Education (CSUGE) requirements with a minimum grade point average of 2.0. All courses in the major must be completed with a grade of “C” or better. (Students completing this degree are not required to fulfill additional local graduation requirements.)

Associate in Arts in Art History for Transfer Degree

REQUIRED CORE: 9 units

ART 001A – History of Western Art–Prehistoric through Medieval (3)

ART 001B – History of Western Art (3)

ART 011A – Foundation Drawing (3)

LIST A: Select One Course – 3 units

ART 002 – History of African and African-American Art (3)

ART 003A – History of Asian Art (3)

ART 003B – History of Asian Art (3)

ART 007 – Pre-Columbian Art (3)

ART 008 – History of Mexican and Chicano Art (3)

ART 009 – History of Islamic Art (3)

LIST B: Select One Course – 3 units

ART 012A – Beginning Life Drawing (3)

ART 016 – Perspective (3)

ART 020A – Beginning Painting (3)

ART 023A – Printmaking – Intaglio and Relief (3)

ART 023B – Printmaking–Lithography (3)

ART 023C – Printmaking–Monotype (3)

ART 025 – Beginning Sculpture (3)

ART 026 – Sculpture (3)

ART 031A – Color and Composition–Two Dimensional Design (3)

ART 032A – Design–Three Dimensional (3)

ART 034A – Crafts – Materials and Processes (3)

ART 038A – Ceramics (3)

ART 038B – Ceramics (3)

ART 039A – Handbuilt Ceramics (3)

ART 040 – Introduction to Digital Arts (3)

ART 050A – Introduction to Graphic Design & Advertising (3)

ART 051A – Typography – Lettering (3)

PHOT 021 – Introduction to Black and White Photography (3)

LIST C: Select One Course – 3 units

- ART 004A – History of Ancient Art in the West (3)
- ART 004B – History of European Medieval Art (3)
- ART 004C – History of European Renaissance and Baroque Art (3)
- ART 004D – History of Modern Art (3)
- ART 005 – Art Fundamentals (3)
- HIST 001A – History of European Civilization to 1715 (3)
- HIST 001B – History of European Civilization from 1715 (3)
- HIST 002A – History of World Civilizations to 1500 (3)
- HIST 002B – History of World Civilizations from 1500 (3)

Required Subtotal 18
 CSU General Education or IGETC Pattern..... 39–41
 Transferable Electives (as needed to reach
 60 transferable units)

DEGREE TOTAL 60

Student Learning Outcomes:

1. Express an understanding of the contribution of art to humanity.
2. Communicate an understanding of the artistic contributions of diverse peoples.
3. Utilize critical thinking to discuss works of art in an historical context.
4. Demonstrate how works of art communicate visual meaning.

Studio Art – Certificate of Achievement, Associate in Science Degree

Top Code: 1001.00

This curriculum is appropriate for students seeking transfer to programs that focus on the practice of fine art, or who wish to pursue professional practice as a visual artist. (Suitable transfer programs at four- year colleges, universities, or art institutes include the traditional studio arts—drawing, painting, sculpture, printmaking and ceramics; programs in photography and digital media that have a fine arts emphasis; and studio art programs that are not media-specific, with names such as “new genres”).

Students completing the degree program will develop a portfolio of original artwork and prepare their work for exhibition. Students pursuing a Bachelor’s degree should research the specific requirements of desired transfer institutions and meet with a counselor, as completion of this certificate program is not a guarantee of acceptance. Students are advised to meet with a full-time visual arts faculty member for suggestions of potential transfer institutions and additional curriculum specific to their needs. (Students will be advised to complete the CSU-GE-Breadth or IGETC pattern.)

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate proficiency in the use of tools and materials in at least one studio arts discipline.
2. Analyze the formal properties and social content of works of art, verbally and in writing.
3. Create a portfolio of original art work.

Requirements for the Certificate of Achievement (18 units):

REQUIRED CORE (ART 004D is CSU Transferable) – 6 units

- ART 011A – Foundation Drawing (3)
 or ART 004D – History of Modern Art (3)
 or ART 106 – Art Since 1945 (3)

Required Capstone Course: Select one course from the following list: – 3 units

ART 075 – Exhibition and Presentation of Visual Art (3)
or ART 145 – Portfolio Development and Critique (3)

Required Electives

Studio Electives: Select three courses from the following. Include one B-Level or second level course:

ART 011B – Concepts in Drawing (3)
ART 011C – Portfolio Development of Drawing (3)
ART 012A – Beginning Life Drawing (3)
ART 012B – Life Drawing (3)
ART 020A – Beginning Painting (3)
ART 020B – Painting (3)
ART 020C – Painting (3)
ART 023A – Printmaking – Intaglio and Relief (3)
ART 023B – Printmaking–Lithography (3)
ART 023C – Printmaking–Monotype (3)
ART 024 – Printmaking – Silk Screen (3)
ART 025 – Beginning Sculpture (3)
ART 026 – Sculpture (3)
ART 027 – Sculpture Technology–Metal Casting and Mold Making (3)
ART 028 – Figure Sculpture (3)
ART 038A – Ceramics (3)
ART 038B – Ceramics (3)
ART 038C – Ceramics (3)
ART 039A – Handbuilt Ceramics (3)
ART 039B – Handbuilt Ceramics (3)
ART 039C – Handbuilt Ceramics (3)
ART 040 – Introduction to Digital Arts (3)
ART 056 – Introduction to Digital Painting & Drawing (3)
ART 057 – Motion Graphics (3)
PHOT 021 – Introduction to Black and White Photography (3)
PHOT 022A – Large Format Photography (3)
PHOT 031 – Beginning Digital Photography (3)

Requirements for the Associate in Science Degree – see page 89.

Studio Arts – Associate in Arts Degree for Transfer to CSU

Top Code: 1002.00

The Associate in Arts Degree in Studio Arts for Transfer provides a solid preparation for transfer majors in the various areas of studio art, including ceramics, drawing, jewelry and craft, painting, printmaking, and sculpture. Additionally, the studio courses align well with preparation for transfer majors in related fields such as design, photography, cinema studies and other areas of study at UC, CSU, and private colleges and universities.

The Associate in Arts Degree in Studio Arts for Transfer degree will be awarded upon completion of coursework totaling 60 California State University (CSU) transferable units including the major requirements and the Intersegmental General Education Transfer Curriculum (IGETC) or California State University General Education (CSUGE) requirements with a minimum grade point average of 2.0. All courses in the major must be completed with a grade of “C” or better. (Students completing this degree are not required to fulfill additional local graduation requirements).

Associate in Arts Degree in Studio Arts for Transfer Degree

REQUIRED CORE: 12 units

- ART 001B – History of Western Art (3)
- ART 011A – Foundation Drawing (3)
- ART 031A – Color and Composition–Two-Dimensional Design (3)
- ART 032A – Design–Three Dimensional (3)

LIST A: Select One Course (3 units)

- ART 001A – History of Western Art–Prehistoric through Medieval (3)
- ART 002 – History of African and African-American Art (3)
- ART 003A – History of Asian Art (3)
- ART 003B – History of Asian Art (3)
- ART 004A – History of Ancient Art in the West (3)
- ART 004B – History of European Medieval Art (3)
- ART 004C – History of European Renaissance and Baroque Art (3)
- ART 004D – History of Modern Art in Europe and America (3)

LIST B: Select Three Courses (9 units)

- ART 011B – Concepts in Drawing (3)
- ART 012A – Life Drawing–Beginning (3)
- ART 020A – Painting (3)
- ART 020B – Painting (3)
- ART 023A – Printmaking–Intaglio and Relief (3)
- ART 025 – Sculpture (3)
- ART 026 – Sculpture (3)
- ART 031B – Color Theory (3)
- ART 034A – Crafts–Materials and Processes (3)
- ART 036A – Jewelry/Metal Fabrication (3)
- ART 038A – Ceramics (3)
- ART 039A – Handbuilt Ceramics (3)
- ART 040 – Introduction to Digital Arts (3)
- ART 050A – Introduction to Advertising/Graphic Design (3)
- ART 050B – Intermediate Advertising/Graphic Design (3)
- ART 051A – Lettering Fundamentals (3)
- PHOT 021 – Elementary Photography (3)

REQUIRED SUBTOTAL..... 24
CSU General Education or IGETC Pattern..... 39–41
Transferable Electives (as needed to reach 60 transferable units)

DEGREE TOTAL 60

Student Learning Outcomes:

1. Display competence in the use of tools, materials and concepts by completing a portfolio of original art and design projects.
2. Evaluate works of art and design through critical discussion and written assignments.
3. Demonstrate, through the analysis of aesthetic and cultural values, an understanding of the contribution of art and design to human experience.

AUTOMOTIVE TECHNOLOGY

(Engineering & Technology Division)

Automotive Technology – All Automotive Systems – Certificate of Achievement, Associate in Science Degree

Top Code: 0948.00

The curriculum prepares the student for entry-level employment in the automotive areas such as an apprentice mechanic, assistant technician, mechanic's helper, predelivery technician, installer, service technician, service attendant, or trainee smog technician. Students enrolling in the curriculum of Automotive Technology will have the opportunity to receive instruction and "hands-on" experience in diagnosis and repair of vehicles while using the National Education Technicians Foundation (NATEF) task list as a guide. Instruction includes automotive engines, transmissions and drive lines (RWD & FWD) for both automatics and manual, suspension systems, braking systems (including ABS), air conditioning systems, and engine performance including most state and federally mandated requirements (DOT, BAR, FMVSS). Upon successful completion of the curriculum, a student receives credit for one year of work experience when applying for certification by the National Institute of Automotive Service Excellence (ASE).

This program has lab fees, uniform and DMV requirements. Please inquire with Division on those course preparations. This curriculum is National Technicians Education Foundation (NATEF) approved and renewed in 2016.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Describe automotive systems' fundamentals of operation in order to apply the theory to practical diagnostic scenarios encountered during automotive service and repair.
2. Demonstrate and integrate the safe set-up and operation of diagnostic, hand, special service and machine tools utilized by standard automotive repair industry.
3. Develop diverse skill sets pertaining to the National Automotive Technician Education Foundation (NATEF) standards and performance tasks.
4. Develop a technician with the knowledge of basic customer service and writing skills to follow the legal aspects outlined by the State of California Bureau of Automotive Repair standards.
5. Prepare students to successfully complete Automotive Service Excellence examinations.

Requirements for the Certificate of Achievement (55 units):

Recommended sequence:

AUTO 050 – Automotive Electrical Systems (3)
AUTO 151 – Automotive Electronics (4)
AUTO 200 – Automotive Fundamentals for Technicians (4)
AUTO 220 – Engine Operation and Testing (5)
AUTO 221 – Engine Machining and Rebuilding (6)
AUTO 222 – Manual Transmission, Transaxle and Drivetrain (5)
AUTO 223 – Automatic Transmissions and Transaxles (5)
AUTO 224 – Automotive Brake Systems (5)
AUTO 225 – Suspension and Steering (5)
AUTO 226 – Engine Performance (5)
AUTO 227 – Advanced Engine Performance (5)
ELTN 130 – Introduction to Electronics (3)

Recommended Electives

AUTO 215 – Automotive Air Conditioning (4)
AUTO 228 – Electric and Hybrid Electric Vehicle (4)

BUS 011A – Business Communications (3)
BUS 160 – Customer Service (3)
MIT 101 – Introduction to Robotics (4)

Requirements for the Associate in Science Degree – see page 89.

Automotive Technology – Electrical/Electronics Systems – Occupational Skills Certificate

Top Code: 0948.00

The curriculum prepares the students for successful completion of the Electrical/Electronics Systems Certificate. The courses also provide a strong foundational electronics knowledge for completion in the All Automotive Systems Certificate. The electrical technology is expanding at an exponential rate, this certificate will create the base foundation for success at every job level. This certificate is also available to automotive professionals who wish to update and/or upgrade their knowledge in automotive electrical/electronic systems. Students will receive instruction and hands-on experience in proper diagnostic and service techniques used in automotive electrical/electronic systems. The use of precision measuring equipment and specialty tools are emphasized. Students are encouraged to take the Automotive Service Excellence (ASE) exam for electrical/electronic systems (A6). This program has lab fees, uniform and DMV requirements. Please inquire with Division on those course preparations. This curriculum is National Technicians Education Foundation (NATEF) approved and renewed in 2016.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Describe electrical/electronic systems fundamentals of operation in order to apply the theory to practical diagnostic scenarios encountered during electrical/electronic automotive service and repair.
2. Demonstrate and integrate the safe set up and operation of diagnostic, hand, special service, and machine tools utilized by electrical/electronic automotive repair industry.
3. Develop diverse skill sets pertaining to the electrical/electronic systems (A6) tasks as pertains to the National Automotive Technician Education Foundation (NATEF).
4. Develop an electrical/electronic systems technician skill set with the knowledge of basic customer service and writing skills to follow the legal aspects outlined by the California Bureau of Automotive Repair standards.
5. Prepare students to successfully complete and pass the Automotive Service Excellence exam on electrical/electronics systems (A6).

Requirements for the Occupational Skills Certificate: (14 units)

Recommended sequence:

AUTO 050 – Automotive Electrical Systems (3)
AUTO 151 – Automotive Electronics (4)
AUTO 200 – Automotive Fundamentals for Technicians (4)
ELTN 130 – Introduction to Electronics (3)

Recommended Electives

ELTY 012 – Basic Electricity–Electronics (Industrial Arts) (2)
or ELTN 109B – Applied Mathematics for Electronics (3)

Automotive Technology – Engine Performance Technician – *Certificate of Achievement, Associate in Science Degree*

Top Code: 0948.00

The curriculum prepares the student for entry-level employment in automotive engine performance. Students will receive instruction and hands-on experience in diagnosing and repairing automotive engine driveability problems, carburetion, electronic fuel injection, ignition systems, emission testing and applicable laws. The use of precision equipment including lab scopes, engine and emission analyzers and other specialty tools is emphasized.

This program has lab fees, uniform and DMV requirements. Please inquire with Division on those course preparations. This curriculum is National Technicians Education Foundation (NATEF) approved and renewed in 2016.

Students are encouraged to take the Automotive Service Excellence (ASE) Exams for Engine Performance (A8) and Advanced Engine Performance (L1).

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Prepare students for successful completion of the Automotive Service Excellence examination, A8 – Engine Performance.
2. Demonstrate and integrate the proper set up and operation of engine diagnostic tools used in the automotive industry.
3. Describe fuel system, ignition system and emission system fundamentals of operation and apply these theories to practical diagnostic scenarios encountered during engine performance repairs.
4. Apply skill sets pertaining to the National Automotive Technician Education Foundation (NATEF) standards and performance tasks.

Requirements for the Certificate of Achievement (29 units):

Recommended sequence:

AUTO 050 – Automotive Electrical Systems (3)
AUTO 151 – Automotive Electronics (4)
AUTO 200 – Automotive Fundamentals for Technicians (4)
AUTO 220 – Engine Operation and Testing (5)
AUTO 226 – Engine Performance (5)
AUTO 227 – Advanced Engine Performance (5)
ELTN 130 – Introduction to Electronics (3)

Requirements for the Associate in Science Degree – see page 89.

Automotive Technology – Heating & Air Conditioning Technician – *Occupational Skills Certificate*

Top Code: 0948.00

The curriculum prepares the student for entry-level employment in automotive air conditioning repair or as preparation for master technician status. Students will receive instruction and hands-on experience in servicing, repair and diagnosis of automotive air conditioning systems. The Refrigerant Handlers Certification Examination given by International Mobile Air Conditioning Society (IMAC) is included in this training. The use of precision equipment and specialty tools is emphasized. Students are encouraged to take the Automotive Service Excellence (ASE) Exam for Heating and Air Conditioning (A7).

This program has lab fees, uniform and DMV requirements. Please inquire with Division on those course preparations. This curriculum is National Technicians Education Foundation (NATEF) approved and renewed in 2016.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Prepare students for successful completion of the Automotive Service Excellence examination, A7 – Heating and Air Conditioning.
2. Describe automotive heating and air conditioning system fundamentals of operation and apply these theories to practical diagnostic scenarios encountered during automotive heating and air conditioning service repairs
3. Demonstrate and integrate the proper set up and operation of automotive air conditioning systems refrigerant identification, recovery and recharging equipment.
4. Prepare students to obtain the United States Clean Air Act Section 609 Certification through examination from the International Mobile Air Conditioning Society (IMAC).
5. Apply skill sets pertaining to the NATEF/ASE and BAR standards.

Requirements for the Occupational Skills Certificate: (14 units)

Recommended sequence:

AUTO 050 – Automotive Electrical Systems (3)
AUTO 200 – Automotive Fundamentals for Technicians (4)
AUTO 215 – Automotive Air Conditioning (4)
ELTN 130 – Introduction to Electronics (3)

Automotive Technology – Powertrain Technician – Certificate of Achievement, Associate in Science Degree

Top Code: 0948.00

The curriculum prepares the student for entry-level employment in transmission repair. Students will receive instruction and hands-on experience in removing, rebuilding, and adjusting manual and automatic transmissions and transaxles, clutches, drivelines, universal joints, constant-velocity (CV) joints and differentials. The use of precision equipment and specialty tools is emphasized. Students are encouraged to take the Automotive Service Excellence (ASE) examinations for Automatic Transmission/Transaxle (A2) and Manual Drive Train and Axles (A3).

This program has lab fees, uniform and DMV requirements. Please inquire with Division on those course preparations. This curriculum is National Technicians Education Foundation (NATEF) approved and renewed in 2016.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Prepare students for successful completion of the Automotive Service Excellence examinations, A2 – Automatic Transmissions and Transaxles, and A3 – Manual Transmissions and Drive Trains.
2. Demonstrate and integrate the proper set up and operation of transmission diagnostic and service tools used in the automotive industry.
3. Describe automatic transmission and manual transmission fundamentals of operation in order to apply these theories to practical diagnostic scenarios encountered during service and repairs of automatic and manual transmissions/transaxles and drive trains.

4. Apply skill sets pertaining to the National Automotive Technician Education Foundation (NATEF) standards and performance tasks for automatic and manual transmissions, transaxles, and drive trains.

Requirements for the Certificate of Achievement (20 units):

Recommended sequence:

AUTO 050 – Automotive Electrical Systems (3)
AUTO 200 – Automotive Fundamentals for Technicians (4)
AUTO 222 – Manual Transmission, Transaxle and Drivetrain (5)
AUTO 223 – Automatic Transmissions and Transaxles (5)
ELTN 130 – Introduction to Electronics (3)

Recommended Electives

WELD 145 – Introduction to Tig Welding (1)

Requirements for the Associate in Science Degree – see page 89.

Automotive Technology – Undercar Technician – Certificate of Achievement, Associate in Science Degree

Top Code: 0948.00

The curriculum prepares the student for entry-level employment in brake and suspension repair. Students will receive hands-on instruction experience in removing, rebuilding, adjusting and re-installing brake systems and components of both foreign and domestic vehicles. A wide variety of vehicle models are discussed and used during the lab portion of the class. Both early and late model vehicles are covered during the course of the semester for both the brakes class and the steering and suspension class. Antilock brake systems (ABS) are discussed and service procedures are demonstrated. The use of precision equipment such as computerized alignment machines, brake disc and drum lathes and diagnostic scan tools keep students current with the latest industry standards. All applicable machining procedures and technical calculations are covered. Students are highly recommended to purchase tools while in the program, tools are required once entering the workforce. A uniform and valid drivers license is required for program participation.

Students are encouraged to take the Automotive Service Excellence (ASE) exams for Suspension and Steering (A4), and Brakes (A5). Students are required to take the NATEF Student Certification Examinations

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Describe the theory, operation, and fundamentals of automotive brakes, suspension, and steering systems to apply a practical diagnosis, service, maintenance, and repair.
2. Demonstrate and integrate the safe set up and operation of tools and equipment required by the automotive industry as it relates to automotive brakes, suspension, and steering systems.
3. Perform a majority of the NATEF laboratory tasks (as outlined) in an acceptable amount of time in a safe and consistent manner.
4. Prepare students to successfully take and complete the Automotive Service Excellence exam in the areas of automotive brakes (A5), suspension, and steering systems (A4).
5. Prepare students to take the NATEF Student Certification Exam at the end of term.

Requirements for the Certificate of Achievement (20 units):

Recommended sequence:

AUTO 050 – Automotive Electrical Systems (3)
AUTO 200 – Automotive Fundamentals for Technicians (4)
AUTO 224 – Automotive Brake Systems (5)
AUTO 225 – Suspension and Steering (5)
ELTN 130 – Introduction to Electronics (3)

Requirements for the Associate in Science Degree – see page 89.

Automotive Technology – Underhood Technician – Certificate of Achievement, Associate in Science Degree

Top Code: 0948.00

The curriculum prepares the student for entry-level employment in an automotive engine repair facility or engine machine shop. Students will receive instruction and hands-on experience in removing, measuring, rebuilding, and adjusting automotive engines. The use of precision equipment and specialty tools is practiced. Students are encouraged to take the Automotive Service Excellence (ASE) Exam for Engine Repair (A1).

This program has lab fees, uniform and DMV requirements. Please inquire with Division on those course preparations. This curriculum is National Technicians Education Foundation (NATEF) approved and renewed in 2016.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Prepare students for successful completion of the Automotive Service Excellence examination; A1 – Engine Repair.
2. Demonstrate and integrate the proper set up and operation of engine mechanical system diagnostic tools used in the automotive industry.
3. Describe engine mechanical operating systems and control assemblies, their theories of operation and practical diagnostic scenarios used to track failed components or systems encountered during engine repair.
4. Apply skill sets pertaining to the National Automotive Technician Education Foundation (NATEF) standards and performance tasks for automotive engine repair.

Requirements for the Certificate of Achievement (18 units):

Recommended sequence:

AUTO 200 – Automotive Fundamentals for Technicians (4)
AUTO 220 – Engine Operation and Testing (5)
AUTO 221 – Engine Machining and Rebuilding (6)
ELTN 130 – Introduction to Electronics (3)

Recommended Electives

MACH 101 – Beginning Metalworking Skills (3)
MACH 220 – Machine Shop Technology (9)
WELD 044A – Introduction to Gas Welding (1)
WELD 200C – Semi-Automatic and Gas Tungsten Welding (10)

Requirements for the Associate in Science Degree – see page 89.

BIOLOGICAL TECHNOLOGY

(Natural Sciences Division)

Biological Technology – Certificate of Achievement, Associate in Science Degree

Top Code: 0430.00

The curriculum prepares students to work in entry level positions in the field of biotechnology in high-tech industry and research institutions. This is an interdisciplinary program including courses and practical training in math, chemistry, biology, computer skills, and English. Emphasis is placed on program participants developing competency for working in a laboratory environment, including; performing basic and advanced laboratory techniques; collecting, documenting, and analyzing data; and participating in short-term independent projects. Fundamental skills and workplace competencies necessary for successful employment in the biotechnology industry and in research laboratories are also emphasized.

Students are kept informed on current advances in biotechnology by guest speakers and internet assignments to access relevant technical resources and recently published scientific articles.

This program offers classroom instruction in a working laboratory setting and assistance in finding appropriate internships. Students must be willing to spend time working on long term projects and participating in outreach programs. Students must be able to provide their own transportation to an internship site.

Employment opportunities include positions in: biomedical industry, academic research institutes, pharmaceutical companies, agriculture, and food science genetic engineering laboratories.

Students who have previously completed coursework required for the Certificate of Achievement and need only the Biology 102A–D courses may take a “fast track” and complete the certificate in 1 year.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Understand, interpret and write laboratory documents, SOPs, protocols and notebook documentation.
2. Be able to use, maintain, calibrate and/or validate standard laboratory equipment.
3. Be prepared for entry level technician positions in the biological technology industry and in research laboratories.

Prerequisites:

MATH 131

CHEM 001A, 022

Recommended preparation:

Computer literacy

Requirements for the Certificate of Achievement

(50 units):

Recommended sequence:

Semester I

ENGL 001A – Reading and Composition (4)

BIOL 102A – Biological Technology–Basic Techniques (3)

CHEM 001B – General Chemistry and Chemical Analysis (5)

BIOL 010A – Cellular Biology, Genetics and Evolution (5)

Semester II

BIOL 102B – Biological Technology–Advanced Techniques (3)

BIOL 102C – Biological Technology–Cell Culture Techniques (3)

BIOL 010B – The Diversity of Life on Earth: Structure, Function and Ecology (5)

Semester III

CHEM 008A – Organic Chemistry (5)

MICR 002 – Microbiology (4)

or BIOL 104B – Microbiological Applications used in Biotechnology (4)

STAT 018 – Statistics for Behavioral and Social Sciences (4)

or STAT 050 – Elementary Statistics (4)

Semester IV

BIOL 010C – Genetics (3)

PHSC 002 – Scientific Method as Critical Thinking (3)

Summer

BIOL 102D – Biological Technology–Laboratory Internship (3)

Recommended Electives

BIOL 104A – Applications of Fluorescence Microscopy (2)

BIOL 104C – Research Methodology (3)

BIOL 104D – Collaborative Research Experience (3)

Requirements for the Associate in Science Degree – see page 89.

Biological Technology – Computational Biology – *Certificate of Achievement*

Top Code: 0430.00

Today's biotechnology companies depend on the ability of their employees to understand and use computational skills to handle large amounts of research data. This curriculum provides interdisciplinary skills required to seek employment at an entry level in performing data acquisition, management, and analysis in laboratory environments. The certificate program can also benefit working professionals seeking to advance or change their careers.

Students will learn programming, statistics, basic concepts of molecular biology, and use of bioinformatics applications and resources. The program emphasizes the skills necessary to become creative and flexible team members and leaders who can work with others in the dynamic interdisciplinary team environment found in today's biotechnology companies.

Students in the certificate program will be required to complete a programming project in the Biology 028 class.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate an understanding of the fundamental concepts of molecular biology, including DNA, genes, proteins, and genomes.
2. Use online resources such as NCBI (National Center for Biotechnology Information) and bioinformatics applications to research and analyze biological data.
3. Write computer programs to perform customized analyses of biological data, using statistical measures to determine the significance of results.

Requirements for the Certificate of Achievement (16–17 units):

Recommended sequence:

Semester I

CIS 010 – Introduction to Information Systems (3)

BIOL 039 – Modern Human Genetics (4)

or BIOL 102A – Biological Technology–Basic Techniques (3)

or BIOL 102B – Biological Technology–Advanced Techniques (3)

Semester II

STAT 018 – Statistics for Behavioral and Social Sciences (4)

or STAT 050 – Elementary Statistics (4)

CIS 036 – Introduction to Visual Basic (3)

Semester III

BIOL 028 – Introduction to Bioinformatics (3)

Biological Technology – Laboratory Assistant – *Certificate of Achievement*

Top Code: 0430.00

The curriculum prepares students to work in entry level positions in the field of biotechnology where a biology or chemistry degree is not required. This is an interdisciplinary program including courses and practical training in math, chemistry, biology, computer skills and English. This program prepares students using scans guidelines. Emphasis is on practical laboratory skills combined with training in quality assurance and quality control in a working laboratory setting. Students are kept informed on current advances in biotechnology by speakers from industry, internet assignments and tours of local biotech facilities.

This program offers classroom instruction plus supervised work experience in the biotechnology industry. Students must be willing to spend time working on long term projects and participating in outreach programs.

Students must be able to provide their own transportation in the final semester to an internship site. Employment opportunities include: biomedical industry, academic research labs, pharmaceuticals, agriculture, food science labs, genetic engineering labs.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Students who have previously completed coursework required for the laboratory assistant option and need only the Biology 102A–D courses may take a “fast track” and complete the option in 1 year.

Program Outcomes:

1. Understand, interpret and write laboratory documents, SOPs protocols and notebook documentation.
2. Be able to use, maintain, calibrate and/or validate standard laboratory equipment.
3. Be prepared for entry level technician positions in the biological technology industry and in research laboratories with an emphasis in the medical environment.

Prerequisite:

MATH 125

Requirements for the Certificate of Achievement (39 units):

Recommended sequence:

Semester I

BIOL 011 – General Biology (4)
or BIOL 039 – Modern Human Genetics (4)
BIOL 102A – Biological Technology–Basic Techniques (3)
CHEM 002A – Chemistry–General, Organic and Biochemistry (4)
ENGL 001A – Reading and Composition (4)

Semester II

BIOL 102B – Biological Technology–Advanced Techniques (3)
CHEM 002B – Chemistry–General, Organic and Biochemistry (4)
PHSC 002 – Scientific Method as Critical Thinking (3)

Semester III

MICR 002 – Microbiology (4)
STAT 018 – Statistics for Behavioral and Social Sciences (4)
or STAT 050 – Elementary Statistics (4)

Semester IV

BIOL 102C – Biological Technology–Cell Culture Techniques (3)

Summer

BIOL 102D – Biological Technology–Laboratory Internship (3)

Biological Technology – Laboratory Skills – Occupational Skills Certificate

Top Code: 0430.00

The curriculum prepares students to work in entry level positions in the field of biotechnology in high-tech industry and institutions. Emphasis is on practical laboratory skills combined with training in a working laboratory setting.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Understand, interpret and write laboratory documents, SOPs, protocols and notebook documentation.
2. Be able to use, maintain, calibrate and/or validate basic laboratory equipment.
3. Be prepared for entry level technician positions in the biological technology industry and in research laboratories.

Requirement for the Occupational Skills Certificate (16 units):

Recommended Sequence:

Semester I

BIOL 102A – Biological Technology–Basic Techniques (3)

Semester II

BIOL 102B – Biological Technology–Advanced Techniques (3)

Semester III BIOL 102C – Biological Technology–Cell Culture Techniques (3)

Semester IV

BIOL 039 – Modern Human Genetics (4)

Summer

BIOL 102D – Biological Technology–Laboratory Internship (3)

Biological Technology – Stem Cell Culture – *Certificate of Achievement*

Top Code: 0430.00

The curriculum prepares students to work in entry level positions in the field of cell culture including stem cell culture. Emphasis is on practical laboratory skills combined with training in a working laboratory setting.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Understand, interpret and write laboratory documents, SOPs, protocols and notebook documentation.
2. Be able to use, maintain, calibrate and/or validate standard laboratory equipment.
3. Be prepared for entry level technician positions in laboratories performing stem cell research in the biological technology industry and in research institutes.

Requirements for the Certificate of Achievement (33 units):

Semester I

BIOL 102A – Biological Technology–Basic Techniques (3)

CHEM 022 – Introductory Chemistry (4)

MATH 131 – Intermediate Algebra (4)

Semester II

BIOL 102B – Biological Technology–Advanced Techniques (3)

CHEM 001A – General Chemistry and Chemical Analysis (5)

Semester III

BIOL 002 – Animal Biology (4)

or MICR 002 – Microbiology (4)

BIOL 102C – Biological Technology–Cell Culture Techniques (3)

Semester IV

BIOL 038 – Cell and Molecular Biology (4)

BIOL 102D – Biological Technology–Laboratory Internship (3)

BUILDING CONSTRUCTION (Engineering & Technology Division)

Building Construction – *Certificate of Achievement, Associate in Science Degree*

Top Code: 0952.00

The curriculum prepares students for working in the construction industry. The program qualifies graduates to seek employment as apprentice carpenters and journey-level carpenters. Students may also complete at least two years' experience which can be applied towards the required four years' experience needed to qualify for a Class "B" State of California Contractors License.

Instruction is offered in all phases of construction from demolition of an existing structure to grading of land to, ultimately, a turn-key situation. Studies include safety, materials of construction, mathematics, print reading, builders level and transit, site work, foundation and floors, rough framing, roof framing, stair building, exterior finish, and interior finish.

Additional studies included are timber construction, steel stud construction, grading of land, plumbing, HVAC, and various other specialty items that vary from project to project. The culminating student experience is the building of a single family dwelling.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Identify the training/educational requirements and describe the role of the apprentice carpenter.
2. Demonstrate the safe practices in the shop and on the job site and the safe/proper use of hand and power tools used in construction.
3. Interpret trade technical calculations using addition, subtraction, multiplication, and division for estimating material take-off costs.
4. Explain the importance of measuring tools and their use in calculating building layout and estimation of materials used for construction.
5. Describe and explain residential print reading and interpret the use of the related local and international building codes used for construction.
6. Demonstrate the skills of an apprentice carpenter in the construction field to build a single-family residence from foundation to roofing including framing, plumbing, heating and air conditioning, stairs, windows, doors and the application of interior and exterior finish.

**Requirements for the Certificate of Achievement
(40 units):**

Recommended sequence:

Semester I

BLDG 230A – Building Construction (10)

Semester II

BLDG 230B – Building Construction (10)

Semester III

BLDG 230C – Building Construction (10)

Semester IV

BLDG 230D – Building Construction (10)

Recommended Electives

ARCH 014 – Materials and Processes of Construction (2)

BLDG 122 – Contractor’s Licensing (3)

BLDG 210A – Building Construction (5)

BLDG 210B – Building Construction (5)

BLDG 212 – Print Reading for Construction (3)

BLDG 213 – Building Construction Codes and Standards (3)

BLDG 214 – Materials & Processes of Const: Sub Grade to Floor Framing (3)

BLDG 215 – Materials & Methods of Const: Floor through Roof Framing (3)

BLDG 218 – Inspection of Architectural Details (3)

BLDG 220 – Estimating for Building Construction (3)

BLDG 221 – Elements of Grading Inspection (3)

BLDG 222 – Principles of Housing and Zoning Requirements (3)

BLDG 223 – Principles of Plumbing Inspection (3)

BLDG 224 – Principles of Heating and Refrigeration Inspections (3)

TECH 107A – Technical Calculations (3)

Requirements for the Associate in Science Degree – see page 89.

Cabinetmaking and Millwork – Occupational Skills Certificate

Top Code: 0952.00

The curriculum prepares students for working in the construction industry in cabinetmaking and millwork. The program qualifies graduates to seek employment as an apprentice cabinetmaker and finish carpenter and journey-level cabinetmaker and finish carpenter. Students may also complete at least two (2) additional years experience which all related work can be applied towards the required four (4) years needed to qualify for a C-6 State of California Contractors License.

Instruction is offered in cabinetmaking, cabinet installation and millwork. Studies include safety in hand, pneumatic and power tools in the shop and on the jobsite, materials and take-off list, mathematics, print reading, cutting list, and cabinet assembly.

Additional studies included are cabinet finishing and installation, interior door installation, molding making, and installation and estimating. The culminating student experience is the fabrication of cabinets and millwork and their installation in the residential home project.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Interpret a complete set of prints for cabinet layout and cabinet construction.
2. Practice safe construction techniques in both the shop and jobsite according to OSHA standards.
3. Demonstrate the proper sequence of cabinet construction and millwork.

Requirements for the Occupational Skills Certificate (14 units):

BLDG 152A – Cabinetmaking for the Student Built Home Construction (4)

BLDG 152B – Cabinet Installation & Millwork for Home Construction (4)

BLDG 212 – Print Reading for Construction (3)

BLDG 220 – Estimating for Building Construction (3)

Recommended Electives

BLDG 210A – Building Construction (5)

BLDG 230A – Building Construction (10)

TECH 107A – Technical Calculations (3)

Construction Inspection – Certificate of Achievement, Associate in Science Degree

Top Code: 0957.20

The curriculum prepares students to seek employment as construction inspectors. The focus is on the responsibility of construction inspectors to verify that contractors and subcontractors comply with the architect's plans.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Requirements for the Certificate of Achievement (31–32 units):

Recommended sequence:

Semester I

BLDG 212 – Print Reading for Construction (3)

TECH 107A – Technical Calculations (3)

Semester II

BLDG 214 – Materials & Processes of Const: Sub Grade to Floor Framing (3)
BLDG 215 – Materials & Methods of Const: Floor through Roof Framing (3)
BLDG 221 – Elements of Grading Inspection (3)

Semester III

BLDG 218 – Inspection of Architectural Details (3)
ELTY 217 – Electrical Inspection and Codes (2)
or ELTY 218 – Electrical Inspection and Codes–Update (1)
BLDG 222 – Principles of Housing and Zoning Requirements (3)

Semester IV

BLDG 213 – Building Construction Codes and Standards (3)
BLDG 223 – Principles of Plumbing Inspection (3)
BLDG 224 – Principles of Heating and Refrigeration Inspections (3)

Recommended Electives

BLDG 220 – Estimating for Building Construction (3)
BLDG 210A – Building Construction (5)
BLDG 210B – Building Construction (5)
FIRE 142 – Building Construction for Fire Protection (3)

Requirements for the Associate in Science Degree – see page 89.

Construction Law – Occupational Skills Certificate

Top Code: 0952.00

Details in the areas of construction law, printreading and estimating. Legal and contractual aspects of the construction industry including California contractors' license law, business ethics, lien laws, health and safety regulations, workers' compensation, employment insurance and taxes. Also residential and commercial printreading and estimating.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Interpret the legal and contractual aspects of the construction industry.
2. Compare the difference of construction laws versus contractor's license laws.

Requirements for the Occupational Skills Certificate (9 units):

BLDG 122 – Contractor's Licensing (3)
BLDG 212 – Print Reading for Construction (3)
BLDG 220 – Estimating For Building Construction (3)

Recommended Electives

TECH 107A – Technical Calculations (3)

BUSINESS ADMINISTRATION

(Business Division)

Business – Associate in Arts Degree

Top Code: 0505.00

This area of emphasis is primarily intended to prepare students to transfer to a university and earn a bachelor's degree in Business Administration. The study of Business gives the student an understanding of the social and economic environment in which we live and provides a common body of knowledge for all students who specialize in any business field. It is the purpose of this area of emphasis to develop in students the interpersonal, technical, and managerial competence necessary for successful performance in business, industry, government, and education. Students who choose this field of study will accomplish several objectives. The first of these is to prepare for lifelong professional careers in commerce, finance and industry, as well as for management careers in the public and non-profit sectors. A second objective is to provide students with the knowledge and skills needed to obtain professional, entry level positions in one or another functional area of the business enterprise, or in some particular field of business. The primary objective, however, is transfer in the field of Business Administration. Specialized options in a bachelors' degree program such as accounting, finance, entrepreneurship, information systems, and other specializations are widely available in CSU, UC, and private schools.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. *When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Program Outcomes:

1. Demonstrate a productive working knowledge of the basic functions of a business enterprise, including: accounting, entrepreneurship, economics, business law, finance, human resource management, ethics and marketing.
2. Demonstrate an understanding of the communication process in a business and professional setting, including: written, oral, non-verbal, electronic communication, and active listening.

Requirements for the area of emphasis (18 units minimum)

Courses must be completed with a grade of C or better. All courses must be numbered 001–099. Students must complete at least 18 units chosen from the courses listed below:

ACCT 001A – Financial Accounting (5)
ACCT 001B – Managerial Accounting (4)
ACCT 010 – Bookkeeping–Accounting (4)
BIT 025 – Survey of Computer Technology in Business (3)
 or CIS 001 – Introduction to Computers (3)
 or CIS 010 – Introduction to Information Systems (3)
BUS 002 – Personal Finance (3)
BUS 009 – Introduction to Business (3)
BUS 010 – Introduction to Management (3)
BUS 011A – Business Communications (3)
BUS 012A – Business Law (3)
BUS 012B – Business Law Transactions & Organizations (3)
BUS 014A – Mathematical Analysis for Business–Finite (4)
BUS 014B – Mathematical Analysis for Business–Calculus (4)
BUS 016 – Business Computations Utilizing Technology (3)
ECON 001A – Principles of Economics (3)
ECON 001B – Principles of Economics (3)
MATH 005A – Single Variable Calculus I (5)
STAT 015 – Statistics for Business and Economics (4)
 or STAT 050 – Elementary Statistics (4)

Requirements for the Associate in Arts Degree – see page 85.

Business Administration – Associate in Science Degree for Transfer to CSU

Top Code: 0505.00

This program provides an opportunity for students to earn an Associate in Science in Business Administration for Transfer while preparing to transfer as an upper division student to a four-year college or university. For those students considering a career in business, a baccalaureate degree is necessary. However, the attainment of an Associate in Science in Business Administration for Transfer will demonstrate commitment to the field and the student's ability to complete an educational goal. An Associate in Science in Business Administration for Transfer is awarded for satisfactory performance in major courses, as well as completion of general education and graduation requirements

In doing so, students will acquire the knowledge and skills necessary to transfer to an upper-division Business program at a California State University. Given the uniqueness of each CSU campus, completion of the Associate in Science in Business Administration for Transfer will also prepare students for the various options under business administration such as; Business Law, Management, Accounting, Finance, and Marketing to name a few.

The Associate in Science in Business Administration for Transfer degree will be awarded upon completion of coursework totaling 60 California State University (CSU) transferable units. The degree requirements include the 27–29 major requirements and the Intersegmental General Education Transfer Curriculum (IGETC-CSU) or California State University General Education (CSUGE) requirements with a minimum grade point average of 2.0. All courses in the major must be completed with a grade of "C" or better. (Students completing this degree are not required to fulfill additional PCC graduation requirements)

Associate in Science in Business Administration for Transfer Degree

Required Courses (17 Units)

- ACCT 001A – Financial Accounting (5)
- ACCT 001B – Managerial Accounting (4)
- BUS 012A – Business Law (3)
- ECON 001A – Principles of Economics (3)
- ECON 001B – Principles of Economics (3)

LIST A: Select One Course from Below (4 Units)

- BUS 014B – Mathematical Analysis for Business–Calculus (4)
- MATH 012 – Finite Mathematics (4)
- STAT 015 – Statistics for Business and Economics (4)
- STAT 050 – Elementary Statistics (4)

LIST B: Select 2 Courses From Below or Any Course From List A Not Already Used (5–8 Units)

- BIT 025 – Survey of Computer Technology in Business (3)
- BUS 009 – Introduction to Business (3)
- BUS 011A – Business Communications (3)
- CIS 001 – Introduction to Computers (3)
- CIS 010 – Introduction to Information Systems (3)

REQUIRED SUBTOTAL 27–29
CSU General Education or IGETC Pattern..... 39–41
CSU transferable units to meet 60 unit maximum
for degree..... 1–3

DEGREE TOTAL 60

Student Learning Outcomes:

1. Demonstrate a productive working knowledge of the basic functions of a business enterprise, including: accounting, entrepreneurship, economics, business law, finance, human resource management, ethics and marketing.
2. Demonstrate an understanding of the communication process in a business and professional setting, including: written, oral, non-verbal, electronic, and active listening.

Customer Service – Occupational Skills Certificate

Top Code: 0509.00

The curriculum prepares students to work with diverse groups of customers, responding to them with courtesy and tact. Emphasis on customer skills, effective oral and written communication, interpersonal skills, workplace attitude and conduct, stress and time management, conflict resolution, business etiquette, and problem solving.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Write effective Business letters and memos. Give clear concise oral presentations.
2. Identify the customer service factors involved in obtaining customer goodwill, enhancing the company image and communicating with customers.
3. Demonstrate knowledge of the elements necessary in establishing a successful customer service program.

Requirements for the Occupational Skills Certificate (12 units):

BIT 025 – Survey of Computer Technology in Business (3)

BUS 009 – Introduction to Business (3)

BUS 011A – Business Communications (3)

or BUS 112 – Business English (3)

BUS 160 – Customer Service (3)

E-Commerce – Occupational Skills Certificate

Top Code: 0514.00

(Interdisciplinary Occupational Skills Certificate: Business Administration, Computer Information Technology)

This curriculum prepares the student to enter the industry as an entry level E-Commerce developer, or as an entrepreneur seeking to move an existing business to the internet. Fundamental concepts of the technology and business practices used to build a successful business on the Internet are stressed during the course of this program.

An Occupational Skills Certificate is awarded upon successful completion of all required courses with a grade of C or better.

Program Outcomes:

1. Given a simple and clearly defined common business need, students will be capable of recommending one or more potential e-commerce hardware and/or software solution to meet the needs of the client.
2. Apply skills needed to:
 - Develop a fully-functioning e-commerce website
 - Create a marketing and advertising program for a client business utilizing industry-standard e-commerce tools.
3. Obtain an entry-level position in industry developing e-commerce capable websites.

Requirements for the Occupational Skills Certificate (12 units):

CIS 010 – Introduction to Information Systems (3)
CIS 050 – Survey of E-Commerce/E-Business Technology (3)
CIS 055 – Introduction to E-Business Practices (3)
CIS 060 – E-Commerce Fundamentals (3)

Recommended Electives

BUS 009 – Introduction to Business (3)
BUS 012B – Business Law Transactions & Organizations (3)
BUS 012A – Business Law (3)
BUS 116 – Small Business Management (3)
BUS 151 – International Marketing (3)
BUS 153 – International Business Law (3)
CIS 190 – Web Server Development (3)

Business Administration – Entrepreneurship – Certificate of Achievement, Associate in Science Degree Top Code: 0506.40

The curriculum prepares students for owning or operating small businesses. Instruction includes all aspects of business creation, start-up strategies, product/service development, legal and financial components of a new business.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Compare and contrast domestic and international businesses.
2. Write effective business correspondence, and give clear, concise oral presentations.
3. Achieve confidence working with whole numbers, fractions, and percents and applying them to common business problems such as markup, markdown, simple and compound interest, payroll, discounts, etc.
4. Compare the advantages and disadvantages of buying an existing business instead of starting one from scratch.

Requirements for the certificate (28–30 units):

Recommended sequence:

ACCT 001A – Financial Accounting (5)
 or ACCT 010 – Bookkeeping–Accounting (4)
BIT 025 – Survey of Computer Technology in Business (3)
BUS 002 – Personal Finance (3)
BUS 010 – Introduction to Management (3)
 or BUS 009 – Introduction to Business (3)
BUS 011A – Business Communications (3)
BUS 012A – Business Law (3)
BUS 016 – Business Computations Utilizing Technology (3)
 or BUS 014A – Mathematical Analysis for Business–Finite (4)
 or STAT 015 – Statistics for Business and Economics (4)
BUS 116 – Small Business Management (3)
MRKT 020 – Principles of Marketing (3)
 or MRKT 123 – Promotions and Marketing Communications (3)

Recommended Electives

BUS 161 – Applied Business Principles and Practices (2)

BUS 160 – Sales and Customer Service (3)

Requirements for the Associate in Science Degree – see page 89.

Business Administration – Financial Investments – Certificate of Achievement, Associate in Science Degree

Top Code: 0504.00

The curriculum prepares students for careers in investment banks, stock brokerage firms, insurance companies, and firms providing financial advice in buying and selling of stocks, bonds, or shares in mutual funds.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Identify the various ways by which business enterprises are financed. Explain the legal elements of financing a business.
2. Write effective Business correspondence.
3. Achieve mastery and confidence working with whole numbers, fractions, and percents and use these skills in everyday business transactions.
4. Describe financial controls that may be used to keep a business successful.
5. Use computers to collaborate with others to solve business problems.

Requirements for the certificate (25–27 units):

Recommended sequence:

ACCT 010 – Bookkeeping–Accounting (4)

or ACCT 001A – Financial Accounting (5)

BIT 025 – Survey of Computer Technology in Business (3)

BUS 002 – Personal Finance (3)

BUS 009 – Introduction to Business (3)

or BUS 010 – Introduction to Management (3)

BUS 011A – Business Communications (3)

BUS 014A – Mathematical Analysis for Business–Finite (4)

or BUS 016 – Business Computations Utilizing Technology (3)

or STAT 015 – Statistics for Business and Economics (4)

BUS 118 – Investments (3)

BUS 160 – Sales and Customer Service (3)

Recommended Electives

ACCT 104A – Computerized Accounting–Quickbooks (3)

Requirements for the Associate in Science Degree – see page 89.

Business Administration – International Business/Trade – Certificate of Achievement, Associate in Science Degree

Top Code: 0508.00

The curriculum prepares students for competing in the international global marketplace. Emphasis is on importing, exporting and establishing an overseas business presence. This curriculum is designed for the individual international entrepreneur, as well as the established company executive.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Compare and contrast international and domestic business.
2. Write effective business correspondence, and give clear, concise oral presentations.
3. Achieve confidence working with whole numbers, fractions, and percents and apply them to common business problems such as markup, markdown, simple and compound interest, payroll, discounts, etc.
4. Identify and apply the major components needed to perform a country analysis.
5. Perform simple foreign exchange calculations to determine the cost of foreign products and the book value of foreign companies.

Requirements for the certificate (22–24 units):

Recommended sequence:

- ACCT 001A – Financial Accounting (5)
 - or ACCT 010 – Bookkeeping–Accounting (4)
- BIT 025 – Survey of Computer Technology in Business (3)
- BUS 002 – Personal Finance (3)
- BUS 009 – Introduction to Business (3)
- BUS 011A – Business Communications (3)
- BUS 016 – Business Computations Utilizing Technology (3)
 - or BUS 014A – Mathematical Analysis for Business–Finite (4)
 - or STAT 015 – Statistics for Business and Economics (4)
- BUS 150 – Survey of International Business (3)
 - or BUS 151 – International Marketing (3)
 - or BUS 152 – Principles of Importing and Exporting (3)

Recommended Electives

- BUS 116 – Small Business Management (3)
- BUS 160 – Customer Service (3)

Requirements for the Associate in Science Degree – see page 89.

Business Administration – Management – Certificate of Achievement, Associate in Science Degree

Top Code: 0506.30

The curriculum prepares students to seek employment as managers or supervisors in medium or large corporations, emphasizing leadership skills. The business supervisor coordinates the operation, production, distribution and sales divisions within an organization by planning, organizing, directing, controlling resources and executing administrative policies through support personnel.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Compare and contrast international and domestic business.
2. Write effective business correspondence, and give clear, concise oral presentations.
3. Research and analyze management and leadership issues and provide solutions.
4. Demonstrate the ability to work cooperatively with others.

Requirements for the certificate (27–29 units):

Recommended sequence:

ACCT 001A – Financial Accounting (5)

or ACCT 010 – Bookkeeping–Accounting (4)

BIT 025 – Survey of Computer Technology in Business (3)

BUS 002 – Personal Finance (3)

BUS 009 – Introduction to Business (3)

BUS 011A – Business Communications (3)

BUS 010 – Introduction to Management (3)

or BUS 128 – Human Resources Management (3)

BUS 016 – Business Computations Utilizing Technology (3)

or STAT 015 – Statistics for Business and Economics (4)

or BUS 014A – Mathematical Analysis for Business–Finite (4)

BUS 160 – Sales and Customer Service (3)

or BUS 117 – Human Relations/Organizational Behavior (3)

BUS 161 – Applied Business Principles and Practices (2)

Recommended Electives

MRKT 020 – Principles of Marketing (3)

Requirements for the Associate in Science Degree – see page 89.

Business Administration – Marketing Management – Certificate of Achievement, Associate in Science Degree

Top Code: 0509.00

The Marketing Management program provides students with core skills for employment in sales, marketing management, marketing research, promotions and customer service. Students will complete course work that emphasizes customer segmentation, marketing plans, marketing research, consumer behavior, social media marketing, and marketing communication. This program is designed for entry level career paths in Marketing Management, Advertising and Promotions, Marketing Analysts, Market Researcher, Social Media Coordinator, and Sales.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Develop a marketing plan tailored for a specific target market.
2. Analyze an organization's strengths, weaknesses, opportunities and threats from a marketing perspective.
3. Explain the environmental factors which influence consumer and organizational decision making.
4. Identify the ethical challenges that companies face in marketing a brand.

Requirements for the certificate (21 units):

BUS 009 – Introduction to Business (3)
BUS 117 – Human Relations/Organizational Behavior (3)
BUS 160 – Sales and Customer Service (3)
MRKT 020 – Principles of Marketing (3)
MRKT 123 – Promotions and Marketing Communications (3)
MRKT 150 – Social Media Marketing for Business (3)
MRKT 132 – Retail Management (3)

Recommended Electives

BIT 025 – Survey of Computer Technology in Business (3)

Requirements for the Associate in Science Degree – see page 89.

Retail Management – Certificate of Achievement, Associate in Science Degree

Top Code: 0506.50

The curriculum prepares students for marketing careers in the retail industry in market research, promotion, advertising, distribution and pricing. Curriculum was developed in cooperation with the Western Association of Food Chains (WAFC), and is a nationally-recognized certificate.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Analyze the customer service factors involved in obtaining customer goodwill, enhancing the company image and communicating with customers.
2. Write effective business correspondence, and give clear, concise oral presentations.
3. Achieve confidence working with whole numbers, fractions, and percentages and applying them to common business problems such as markup, markdown, simple and compound interest, payroll, discounts, etc.
4. Identify the five mental stages of a sale.
5. Write a features-and-benefits analysis on a product.

Requirements for the certificate (25–26 units):

ACCT 001A – Financial Accounting (5)
or ACCT 010 – Bookkeeping–Accounting (4)
BIT 025 – Survey of Computer Technology in Business (3)
BUS 010 – Introduction to Management (3)
BUS 011A – Business Communications (3)
BUS 117 – Human Relations/Organizational Behavior (3)
BUS 128 – Human Resources Management (3)
MRKT 020 – Principles of Marketing (3)
MRKT 132 – Retail Management (3)

Requirements for the Associate in Science Degree – see page 89.

BUSINESS INFORMATION TECHNOLOGY **(Business Division)**

Business Information Technology – Administrative Assistant – Certificate of Achievement, Associate in Science Degree

Top Code: 0514.00

The curriculum prepares students for business positions such as administrative assistant, secretary, executive assistant, and office assistant. Employees in these types of positions perform a variety of administrative tasks including document processing, using computer applications such as presentation graphics and spreadsheets, scheduling appointments, researching and organizing information, and arranging meetings and travel.

Upon successful completion of this certificate, students will be prepared to take the Microsoft Office Specialist (MOS) certification exams in Word, Outlook, and Excel.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Develop work habits to function as a team member with people of diverse experiences and backgrounds in a workplace environment.
2. Apply standard business English to oral and written communications in support of a business office, including the production and design of complex electronic and paper-based correspondence and documents.
3. Determine appropriate information technology tools to access, manage, integrate, and create information.
4. Formulate solutions to business problems by using the Internet, current and emerging computer applications, records management, and standard business procedures.
5. Demonstrate self-management and self-awareness in terms of workplace responsibility and productivity.
6. Demonstrate the ability to competently use a wide variety of office systems, including computers, web-based workspaces, and video conferencing.

Requirements for the Certificate of Achievement (26 units):

Recommended sequence:

Semester I

- BIT 011 – Business Document Processing (2)
- BIT 025 – Survey of Computer Technology in Business (3)
- BIT 107 – Business Software–Windows (1)
- BUS 009 – Introduction to Business (3)

Semester II

- BIT 106 – Business Software–Introduction to Microsoft Office System (3)
- BIT 108 – Microsoft Outlook and Productivity Tools (1)
- BIT 115 – Business Records Skills (1)
- BIT 122 – Internet Research for Business (1)
- BUS 112 – Business English (3)

Semester III

- BIT 117 – Collaborative Web-Based Workspaces (1)
- BIT 124 – Administrative Business Procedures (3)
- BIT 128 – Business Software–Microsoft Word (2)
- BIT 133 – Business Software–Microsoft Excel (2)

Recommended Electives

BIT 105 – Business Software–Microsoft Access (2)
BIT 109 – Business Software–Microsoft PowerPoint (2)

Requirements for the Associate in Science Degree – see page 89.

Business Information Technology – Business Information Worker – *Certificate of Achievement, Associate in Science Degree*

Top Code: 0514.00

The curriculum prepares students to work in a variety of office environments by acquiring a broad range of entry-level office skills and applications. With a solid foundation in Microsoft Windows and Office as well as strong digital and web literacy skills, the Business Information Worker brings efficiency and productivity to the workplace.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. In an enterprise environment, create, manage, and store data on collaborative web sites.
2. In an enterprise environment, use business computer software to perform common tasks.
3. Communicate with customers, employees, and other individuals to disseminate or explain information.
4. Demonstrate critical thinking, problem solving, and professional interpersonal skills in the workplace.

Requirements for the Certificate of Achievement (26 units):

Recommended sequence:

Semester I

BIT 011 – Business Document Processing (2)
BIT 025 – Survey of Computer Technology in Business (3)
BIT 106 – Business Software–Introduction to Microsoft Office System (3)
BIT 107 – Business Software–Windows (1)
ENGL 001A – Reading and Composition (4)

Semester II

BIT 108 – Microsoft Outlook and Productivity Tools (1)
BIT 115 – Business Records Skills (1)
BIT 122 – Internet Research for Business (1)
BIT 128 – Business Software–Microsoft Word (2)
BIT 133 – Business Software–Microsoft Excel (2)
BUS 011A – Business Communications (3)
BUS 160 – Customer Service (3)

Requirements for the Associate in Science Degree – see page 89.

**Business Information Technology – Business Information Worker II – Certificate of Achievement,
Associate in Science Degree**

Top Code: 0514.00

The Business Information Worker II Certificate of Achievement provides students with skills in records management, collaboration software, presentation software, and QuickBooks. This secondary stage in the BIW pathway increases students' value and opportunities in multiple occupations, including but not limited to: office, business and executive administrative support, office supervision/coordination, small business support, retail sales, customer service and marketing support. Students completing this certificate will be equipped to take multiple Microsoft Office Specialist credential exams and become a QuickBooks certified user.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Develop a solution to a business problem using the most appropriate business application software.
2. Apply software tools to function effectively as a team member using collaborative web-based work spaces.
3. Construct business presentations that are accurate, well-organized, and are appropriate to the audience and purpose.
4. Develop accurate accounting reports using appropriate spreadsheet and accounting software.
5. Organize customer service tasks using customer relationship management software.

Requirements for the Certificate of Achievement (19 units):

ACCT 104A – Computerized Accounting – QuickBooks (3)
ACCT 010 – Bookkeeping–Accounting (4)
BIT 105 – Business Software–Microsoft Access (2)
BIT 109 – Business Software–Microsoft PowerPoint (2)
BIT 117 – Collaborative Web-Based Workspaces (1)
BIT 133 – Business Software–Microsoft Excel (2)
BIT 135 – Business Software – Customer Relationship Management (2)
MRKT 020 – Principles of Marketing (3)

Requirements for the Associate in Science Degree – see page 89.

**Business Information Technology – Business Software Specialist – Certificate of Achievement,
Associate in Science Degree**

Top Code: 0514.00

The curriculum prepares students to apply commonly used computer applications to business tasks; for example, word processing, spreadsheets, presentation graphics, databases, email, Internet research, and content management. Emphasis is on the use of computer systems to collaborate with others to solve business problems.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Analyze business problems, and then design and use appropriate technology to effectively, accurately, and coherently communicate solutions.
2. Develop creative methods for applying technology to solve business problems.
3. Employ technological tools to expedite workflow within an organization.
4. Identify and demonstrate professional work behaviors and personal qualities needed to be employable.

Requirements for the Certificate of Achievement (22 units):

Recommended sequence:

Semester I

- BIT 011 – Business Document Processing (2)
- BIT 025 – Survey of Computer Technology in Business (3)
- BIT 106 – Business Software–Introduction to Microsoft Office System (3)
- BIT 107 – Business Software–Windows (1)
- BIT 128 – Business Software–Microsoft Word (2)

Semester II

- BIT 105 – Business Software–Microsoft Access (2)
- BIT 108 – Microsoft Outlook and Productivity Tools (1)
- BIT 109 – Business Software–Microsoft PowerPoint (2)
- BIT 117 – Collaborative Web-Based Workspaces (1)
- BIT 122 – Internet Research For Business (1)
- BIT 125 – Business Software Integration (2)
- BIT 133 – Business Software–Microsoft Excel (2)

Requirements for the Associate in Science Degree – see page 89.

Business Information Technology – Office Assistant – Certificate of Achievement, Associate in Science Degree

Top Code: 0514.00

The curriculum prepares students for office positions such as receptionists, virtual receptionists, and information clerks. Employees in these types of positions respond to inquiries from the public, locate and provide information to other employees, coordinate electronic communications into and out of the office, maintain electronic calendars, monitor use of conference rooms, and look up customer information.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Perform a variety of tasks in a business office setting including document processing, greeting visitors, handling telephone calls, using computer systems, and managing business records.
2. Apply appropriate business software to complete tasks.
3. Compute, record, and proofread records and reports; review files, records and other documents to obtain information.
4. Function effectively as a team member using collaborative web-based workspaces.

Requirements for the Certificate of Achievement (18 units):

Recommended sequence:

Semester I

- BIT 011 – Business Document Processing (2)
- BIT 025 – Survey of Computer Technology in Business (3)
- BIT 106 – Business Software–Introduction to Microsoft Office System (3)
- BIT 107 – Business Software–Windows (1)

Semester II

BIT 108 – Microsoft Outlook and Productivity Tools (1)

BIT 115 – Business Records Skills (1)

BIT 117 – Collaborative Web-Based Workspaces (1)

BIT 122 – Internet Research for Business (1)

BIT 128 – Business Software–Microsoft Word (2)

BUS 112 – Business English (3)

Requirements for the Associate in Science Degree – see page 89.

CHILD DEVELOPMENT (Social Sciences Division)

Child Development – *Certificate of Achievement, Associate in Science Degree*

Top Code: 1305.00

The curriculum focuses on children, from infancy through school age. Courses provide foundations and prepare students for careers in child care, sociology, social work, education, special education and psychology. Opportunities are available for work with children in a variety of settings including homes, schools, hospitals, and public and non-profit agencies concerned with the development and welfare of children. CPR, First-aid training, TB and fingerprint clearances are required for certificates in child development.

Requirements for the **Associate Teacher** Child Development Permit*:

Completion of 16 core units as follows: PSYC 021 or PSYC 121, CHDV 010, CHDV 015 and CHDV 020 or CHDV 016, and CHDV 013A. Completion of these courses with a C or better must be verified by official transcripts.

Requirements for the **Teacher** Child Development Permit*:

Completion of the Certificate of Achievement requirements plus 16 additional general education units as follows: at least one course each in Humanities, Social Sciences, Math and/or Science, and English. Completion of these courses with a C or better must be verified by official transcripts. The Administration Specialization (CHDV 112A and CHDV 112B) does not meet the State of California Child Development Permit requirements for the “Teacher” permit.

Requirements for the **Master Teacher** Child Development Permit*:

Completion of the Certificate of Achievement requirements plus 16 additional general education units as follows: at least one course each in Humanities, Social Sciences, Math and/or Science, and English; a minimum (6 unit) specialization option, and CHDV 119, Child Development Mentor Teacher Practices. Completion of these courses with a C or better must be verified by official transcripts. The Administration Specialization (CHDV 112A and CHDV 112B) does not meet the State of California Child Development Permit requirements for the “Master Teacher” permit.

Requirements for the **Site Supervisor** Child Development Permit*

Completion of the Certificate of Achievement requirements including A.A., CHDV 112A, Administrative Issues, CHDV 112B, Advanced Administrative Issues and CHDV 119, Child Development Mentor Teacher Practices. Completion of these courses with a C or better must be verified by official transcripts.

*Permits are issued by the California Commission on Teacher Credentialing.

Program Outcomes:

1. Students will demonstrate through original written and/or oral presentations their ability to identify the theories and practices of the social, emotional, creative, cognitive and physical development of young children.
2. Students will demonstrate an awareness of and evaluate important factors in planning in childcare facilities and the ethical issues involved in working with young children.
3. Students will demonstrate responsibility as self-directed learners and facilitators of the practical application of theoretical concepts through structured interaction in child care settings.
4. Students will demonstrate an understanding for the planning and guiding of learning activities.
5. Students will demonstrate competency upon completion of structured mentoring experiences in approved learning partnerships with private industry.
6. Students will compare and contrast the skills necessary in working with and supporting families, diversity and program practices.

Requirements for the Certificate of Achievement (37–45 units):

Recommended sequence:

Semester I

CHDV 010 – Principles and Practices of Teaching Young Children (3)
ENGL 100 – Reading and Writing Skills (4)
 or ESL 033B – ESL Reading and Writing–Level 5 (4)
 or ENGL 001A – Reading and Composition (4)
PSYC 021 – Developmental Psychology: The Child (3)
 or PSYC 121 – Psychology of Child Development (3)

Semester II

CHDV 013A – Practicum in Child Development–A (2)
CHDV 020 – Introduction to Curriculum Planning (3)

Semester III

CHDV 013B – Practicum in Child Development–B (2)
CHDV 015 – Child, Family and Community (3)

Semester IV

CHDV 013C – Child Development Field Practice (4)
CHDV 016 – Health, Safety and Nutrition (3)

***Depending on initial placement, students may be required to take additional English and ESL courses.**

AND

6 units from the electives listed below:

ART 006 – Art Media for Early Childhood Education (3)
CHDV 011 – Infant and Toddler Development (3)
CHDV 017 – Teaching Children in a Diverse Society (3)
CHDV 024A – Special Topics in Child Development–Health and Safety (2)
CHDV 024B – Special Topics in Child Development–Curriculum (2)
CHDV 024C – Special Topics in Child Development–The Young Child (2)
CHDV 024D – Special Topics in Child Development–Working with Parents (2)
CHDV 024E – Special Topics in Child Development–Multicultural Issues (2)
CHDV 024F – Special Topics in Child Development–Discipline (2)
CHDV 024G – Special Topics in Child Development–Environment (2)
CHDV 024H – Special Topics in Child Development–Administration (2)
CHDV 030 – Introduction to Children with Special Needs (3)
CHDV 035 – Introduction to Curriculum and Strategies for Children with Special Needs (3)

CHDV 105 – Children with Challenging Behaviors (3)
CHDV 118 – Language and Literacy in Early Childhood (3)
CHDV 196 – Child Development Laboratory (1)
DANC 025 – Movement for Child Development (2)
EDUC 131 – Introduction to the School-Age Child (3)
EDUC 132 – Curriculum for School-Age Children (3)
ENGL 059 – Children’s Literature (3)
KINT 027C – Early Childhood Physical Education (2)
MUSC 030 – Music for Early Childhood Education (3)
MUSC 130 – Music Education for Young Children (3)
MUSC 131 – Multicultural Music Materials for Young Children (3)
MUSC 135 – Curriculum Applications of Music in Early Childhood Education (3)

OR select a specialization.

Specialization Options:

Infant/Toddler (6 units)

CHDV 011 – Infant and Toddler Development (3)
CHDV 030 – Introduction to Children with Special Needs (3)

Multicultural Awareness (6 units)

CHDV 017 – Teaching Children in a Diverse Society (3)
MUSC 131 – Multicultural Music Materials for Young Children (3)

Language/Literacy (6 units)

CHDV 118 – Language and Literacy in Early Childhood (3)
ENGL 059 – Children’s Literature (3)

School Age Children (6 units)

EDUC 131 – Introduction to the School-Age Child (3)
EDUC 132 – Curriculum for School-Age Children (3)

Children with Special Needs (8 units)

CHDV 035 – Introduction to Curriculum and Strategies for Children with Special
CHDV 105 – Children with Challenging Behaviors (3)
CHDV 122 – Practicum in Early Intervention/Special Education (2)

Preschool Music Education (14 units)

MUSC 030 – Music for Early Childhood Education (3)
or MUSC 130 – Music for Early Childhood Education (3)
MUSC 131 – Multicultural Music Materials for Young Children (3)
MUSC 134 – Music Development & Assessment for Young Children (3)
MUSC 135 – Curriculum Applications of Music in Early Childhood Education (3)
DANC 025 – Movement for Child Development (2)
or KINT 027C – Early Childhood Physical Education (2)

***Administration (6 units)**

CHDV 112A – Administration (3)
CHDV 112B – Advanced Administrative Issues (3)

* This option does not qualify for the State of California Child Development Permit for "Teacher" and "Master Teacher," but does qualify for the Pasadena City College Certificate of Achievement.

Requirements for the Associate in Science Degree – see page 89.

Child Development Instructional Assistant – Occupational Skills Certificate

Top Code: 1305.00

The Child Development Instructional Assistant curriculum provides students with the necessary skills to seek employment as assistants in instructional programs for young children. Opportunities are available for work with children in a variety of settings including: homes, schools, and public or private agencies concerned with the development and welfare of young children. The program focuses on child psychology, curriculum planning, developmentally appropriate practices, safety, anti-bias environment, and provides practical experience. CPR, First-Aid training, TB and fingerprint clearances are required. Completion of this curriculum with a C or better grade allows the student to apply for the California Child Development permit at the Associate Teacher level.

Requirements for the Occupational Skills Certificate (16 units):

Semester I

CHDV 010 – Principles and Practices of Teaching Young Children (3)

PSYC 021 – Developmental Psychology: The Child (3)

Semester II

CHDV 013A – Practicum in Child Development–A (2)

CHDV 013AF – Field Practice in Child Development–A (2)

CHDV 015 – Child, Family and Community (3)

CHDV 020 – Introduction to Curriculum Planning (3)

Recommended electives:

ART 006 – Art Media for Early Childhood Education (3)

CHDV 016* – Health, Safety and Nutrition (3)

CHDV 017 – Teaching Children in a Diverse Society (3)

CHDV 024A – Special Topics in Child Development–Health and Safety (2)

CHDV 024B – Special Topics in Child Development–Curriculum (2)

CHDV 024C – Special Topics in Child Development–The Young Child (2)

CHDV 024D – Special Topics in Child Development–Working with Parents (2)

CHDV 024E – Special Topics in Child Development–Multicultural Issues (2)

CHDV 024F – Special Topics in Child Development–Discipline (2)

CHDV 024G – Special Topics in Child Development–Environment (2)

CHDV 024H – Special Topics in Child Development–Administration (2)

CHDV 118 – Language and Literacy in Early Childhood (3)

EDUC 030 – Teaching as a Profession (3)

ENGL 059 – Children's Literature (3)

KINT 027C – Early Childhood Physical Education (2)

MUSC 030 – Music for Early Childhood Education (3)

MUSC 130 – Music Education for Young Children (3)

*This class meets the CPR and First-Aid requirements.

Early Childhood Education – Associate in Science Degree for Transfer to CSU

Top Code: 1305.00

Child Development is the study of the physical, socio-emotional and cognitive growth and development of the child from conception through age eight. Students completing the Child Development program pursue a wide variety of careers including infant/toddler care, preschool teaching (including Head Start), elementary and secondary education, early childhood special education, program administration, school counseling, child psychology, child advocacy, social work, and community services. Completion of the Associate in Science in Early Childhood Education for Transfer (AS-T) ensures transfer students will complete the lower division general education requirements as well as the lower division major requirements for a bachelor's degree in Child Development prior to transferring to a CSU. The Child Development Program at Pasadena City College also offers Child Development Certificates for Child Development Permits from the California Commission on Teacher Credentialing. Please visit the following link <http://www.pasadena.edu/divisions/social-sciences/chdv/> for more information.

The Associate in Arts in Child Development for Transfer degree will be awarded upon completion of coursework totaling 60 California State University (CSU) transferable units including the major requirements and the Intersegmental General Education Transfer Curriculum (IGETC) or California State University General Education (CSUGE) requirements with a minimum grade point average of 2.0. All courses in the major must be completed with a grade of "C" or better. (Students completing this degree are not required to fulfill additional local graduation requirements)

Associate in Science in Early Childhood Education for Transfer Degree

REQUIRED COURSES (25 units)

- PSYC 021 – Developmental Psychology: the Child (3)
- CHDV 010 – Principles and Practices of Teaching Young Children (3)
- CHDV 013A – Practicum in Child Development (2)
- CHDV 013AF – Field Practice in Child Development – A (2)
- CHDV 014 – Observation and Assessment of Young Children (3)
- CHDV 015 – Child, Family and Community (3)
- CHDV 016 – Health, Safety and Nutrition (3)
- CHDV 017 – Teaching Children in a Diverse Society (3)
- CHDV 020 – Introduction to Curriculum Planning (3)

REQUIRED SUBTOTAL..... 25

DEGREE TOTAL 60

Student Learning Outcomes:

1. Interpret theoretical teaching practices as defined within the field of child development and education, the history, diversity, philosophies and ethical standards.
2. Identify the underlying theoretical perspective in forming a teaching and professional philosophy.
3. Integrate understanding of children's development to maintain healthy, safe, respectful, supportive, and challenging learning environments.
4. Evaluate the effectiveness of classroom teaching strategies to improve teaching practices for all children, including the application of a variety of effective approaches, strategies, and techniques supporting positive relationships.

Music & Movement Education for Young Children – Occupational Skills Certificate

Top Code: 1005.00

The program offers extensive hands-on training in music and movement education targeted specifically for early childhood (birth to 8 years old). Participants learn a comprehensive body of musical activities and games in four areas – singing, movement, playing instruments and listening. Students practice effective teaching techniques, explore the musical development of young children, and become acquainted with invaluable, state-of-the-art teaching materials. This certificate prepares students to teach music and movement in preschools, childcare centers, primary classrooms and private studios.

An Occupational Skills Certificate is awarded upon completion of all with a grade of C or better.

Requirements for the Occupational Skills Certificate (9 units):

MUSC 030 – Music for Early Childhood Education (3)

MUSC 131 – Multicultural Music Materials for Young Children (3)

MUSC 135 – Curriculum Applications of Music in Early Childhood Education (3)

Recommended Electives

DANC 025 – Movement for Child Development (2)

KINT 027C – Early Childhood Physical Education (2)

School Age Instructional Assistant – Occupational Skills Certificate

Top Code: 0802.00

The Instructional Assistant curriculum provides students with the necessary skills to seek employment working with school age children. Opportunities are available for work in a variety of settings including: parks and recreational facilities, before and after school programs, tutoring centers, public and private schools, and community agencies providing services for school age children and their families. The program focuses on child psychology, discipline techniques, curriculum planning, developmentally appropriate practices, safety, anti-bias environment, along with practical experience. CPR, First-aid training, TB and fingerprint clearances are required.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Requirements for the Occupational Skills Certificate (16 units):

Semester I

EDUC 131 – Introduction to the School-Age Child (3)

EDUC 132 – Curriculum for School-Age Children (3)

Semester II

CHDV 015 – Child, Family and Community (3)

CHDV 020 – Introduction to Curriculum Planning (3)

Semester III

CHDV 013A – Practicum in Child Development–A (2)

CHDV 013AF – Field Practice in Child Development–A (2)

Recommended electives

ART 006 – Art Media for Early Childhood Education (3)

CHDV 016 – Health, Safety and Nutrition (3)

CHDV 017 – Teaching Children in a Diverse Society (3)

CHDV 024A – Special Topics in Child Development–Health and Safety (2)

CHDV 024B – Special Topics in Child Development–Curriculum (2)
CHDV 024C – Special Topics in Child Development–The Young Child (2)
CHDV 024D – Special Topics in Child Development–Working with Parents (2)
CHDV 024E – Special Topics in Child Development–Multicultural Issues (2)
CHDV 024F – Special Topics in Child Development–Discipline (2)
CHDV 024G – Special Topics in Child Development–Environment (2)
CHDV 024H – Special Topics in Child Development–Administration (2)
CHDV 118 – Language and Literacy in Early Childhood (3)
EDUC 030 – Teaching as a Profession (3)
ENGL 059 – Children’s Literature (3)
KINT 027C – Early Childhood Physical Education (2)
MUSC 030 – Music for Early Childhood Education (3)
MUSC 130 – Music Education for Young Children (3)

Special Education Assistant – Occupational Skills Certificate

Top Code: 0809.00

This curriculum is designed to train and place individuals within one year into a special education paraprofessional position in the public or private sector. Individuals will be provided guidance as to what type of setting would most closely match their needs and aptitudes. Settings vary significantly in the age of student served (infants, toddlers, preschoolers, elementary age, secondary age, and adults) and types of disabilities served (acquired brain injury, learning disabilities, developmental disabilities, deaf, blind, visually-impaired, severely emotionally disturbed, mobility-impaired, communication disorders, etc.). The sites also differ in their requirements for employment. Employment sites may require a high school diploma, passing of a basic skills and special education concepts test, passing of an oral interview, bilingualism, fluency in sign language, ability to lift 50 pounds, CPR and First-aid training, passing of a TB and fingerprinting test, a driver’s license, a specific amount of experience working with individuals with disabilities, and clerical skills. Students would select electives, as needed, to prepare themselves for job requirements.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Requirements for the Occupational Skills Certificate (15 units):

Semester I

CHDV 010 – Principles and Practices of Teaching Young Children (3)
CHDV 030 – Introduction to Children with Special Needs (3)

Semester II

CHDV 035 – Introduction to Curriculum and Strategies for Children with Special Needs (3)
CHDV 105 – Children with Challenging Behaviors (3)
CHDV 122 – Practicum in Early Intervention/Special Education (2)
CHDV 122F – Field Practice in Early Intervention/Special Education (1)

Recommended Electives

CHDV 016 – Health, Safety and Nutrition (3)
CHDV 017 – Teaching Children in a Diverse Society (3)
CHDV 113 – Early Intervention: Home Visiting (3)
CHDV 114 – Early Intervention (3)
CHDV 118 – Language and Literacy in Early Childhood (3)
EDUC 100 – Tutoring Techniques (1)
EDUC 132 – Curriculum for School-Age Children (3)
ENGL 110 – Skills for College Success (2)
PSYC 022 – Developmental Psychology: The Adult (3)
PSYC 024 – Lifespan Developmental Psychology (3)

COMMUNICATION STUDIES **(Performing and Communication Arts Division)**

Communication Arts – Associate in Arts Degree Top Code: 4903.00

This area of emphasis is intended to align with preparation for transfer to universities in such majors as Art, Communication, English, Journalism, Television and Radio, Theatre Arts, and other similar fields of study. Communicating well and understanding the communication process are essential to professional success in many fields. People communicate to influence, to persuade, and to express. Learning to communicate effectively is one important reason for the study of Communication Arts. Studying the communication process helps one understand how the human mind works. Analyzing the messages in advertisements, television programs, and political speeches helps one to understand our society. Studying communication in everyday relationships, groups, and organizations shows us how these systems are created and maintained. Areas of study include face-to-face interaction, group process, organizational communication, rhetoric, advocacy, intercultural communication, political communication, and performance studies. Communication Arts students can expect to develop skills essential for leadership and career development, and for understanding and interpreting events.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. *When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Program Outcomes:

1. Read and critically analyze argumentative contexts using written and performative techniques.
2. Use relevant examples in support of a thesis.
3. Communicate using college-level grammar/syntax.
4. Demonstrate an awareness of cultural diversity and audience perceptions.

Requirements for the area of emphasis (18 units minimum)

Courses must be completed with a grade of C or better. All courses must be numbered 1–99. Students must complete 18 units with at least 3 units in three of the disciplines listed below.

Art /Design

- ART 001A – History of Western Art–Prehistoric through Medieval (3)
- ART 001B – History of Western Art (3)
- ART 011A – Foundation Drawing (3)
- ART 015 – Sketching For Design (3)
- ART 016 – Perspective (3)
- ART 018 – Rendering (3)
- ART 024 – Printmaking–Silk Screen (3)
- ART 031A – Color and Composition–Two Dimensional Design (3)
- ART 031B – Color Theory (3)
- ART 032A – Design–Three Dimensional (3)
- ART 034A – Crafts–Materials and Processes (3)
- ART 040 – Introduction to Digital Arts (3)
- ART 050A – Introduction to Graphic Design & Advertising (3)
- ART 050B – Intermediate Graphic Design & Advertising (3)
- ART 050C – Advanced Graphic Design & Advertising (3)
- ART 051A – Typography–Lettering (3)
- ART 051B – Typography–Application (3)
- ART 052A – Introduction to Illustration (3)
- ART 056 – Introduction to Digital Painting & Drawing (3)
- ART 052B – Advanced Illustration (3)

Communication

COMM 001 – Survey of Mass Communication (3)

English

ENGL 003 – Technical Writing–Advanced Exposition (3)
ENGL 005A – Creative Writing (3)
ENGL 005B – Creative Writing (3)
ENGL 006 – Short Story Writing (3)
ENGL 007 – Inscape Magazine Publication (3)
ENGL 008 – Writing Poetry (3)
ENGL 009 – Creative Nonfiction (3)
ENGL 010 – Introduction to Linguistics (3)
ENGL 011 – History of English Language (3)
ENGL 012 – Intercultural Communication (3)
ENGL 015 – The Research Paper (1)
ENGL 024 – A Literature in Translation (3)
ENGL 025A – Interpreting Modern Literature (3)
ENGL 025C – Women in Literature (3)
ENGL 025D – Science Fiction and Fantasy (3)
ENGL 025E – Literature of Horror (Gothic Novel) (3)
ENGL 025F – Comedy and Literature (3)
ENGL 025G – Mystery and Crime Fiction (3)
ENGL 025H – American Journeys (3)
ENGL 025I – Post-Colonial Literatures (3)
ENGL 025J – Utopian and Dystopian Literature (3)
ENGL 026 – Introduction to Literary Theory and Criticism (3)
ENGL 030A – American Literature (3)
ENGL 030B – American Literature (3)
ENGL 030C – American Literature (3)
ENGL 034 – Major Novelist (1)
ENGL 035 – Major Dramatist (1)
ENGL 036 – Major Poet (1)
ENGL 037 – Major Critic (1)
ENGL 044A – World Literature: Antiquity to 1500 (3)
ENGL 044B – World Literature: 1500–1800 A.D. (3)
ENGL 044C – World Literature: 1800–Mid 20th Century (3)
ENGL 045A – Literature of the Bible (3)
ENGL 045B – Literature of the Bible (3)
ENGL 046A – English Literature (3)
ENGL 046B – English Literature (3)
ENGL 047 – Mexican and Chicano Literature (3)
ENGL 048 – Asian Literature (3)
ENGL 049A – Film as Dramatic Literature (3)
ENGL 049B – Film as Dramatic Literature (3)
ENGL 050 – African-American Literature (3)
ENGL 051 – Native American Mythology and Literature (3)
ENGL 052 – Asian American Literature (3)
ENGL 053 – Interpreting Poetry (3)
ENGL 054 – California Literature (3)
ENGL 057 – Modern Drama (3)
ENGL 059 – Children’s Literature (3)
ENGL 060 – Masterpieces of Drama (3)
ENGL 061 – Introduction to the Novel (3)
ENGL 078A – Introduction to Shakespeare (3)

ENGL 078B – Introduction to Shakespeare (3)
ENGL 082A – Introduction to Mythology (3)
ENGL 082B – Introduction to Mythology (3)
ENGL 082C – Introduction to Mythology (3)

Journalism

JOUR 002 – Beginning Journalism (3)
JOUR 004A – Reporting and Newswriting (3)
JOUR 004B – Reporting and Newswriting (3)
JOUR 005 – Magazine and Small Publications (3)
JOUR 007A – Newswriting and Make-Up (4)
JOUR 007B – Newswriting and Make-Up (4)
JOUR 009 – Public Relations and Organizational Communication (3)
JOUR 021 – Beginning Press Photography (3)
JOUR 022 – Advanced Press Photography (3)
JOUR 023 – Photojournalism (3)

Photography

PHOT 021 – Introduction to Black and White Photography (3)
PHOT 022A – Large Format Photography (3)
PHOT 022B – Color Large Format Fine Arts Photography (3)
PHOT 023A – Color Photography (3)
PHOT 023B – Advanced Color Photography (3)
PHOT 024B – Experimental Photography (3)
PHOT 025 (CINE 025) – Film Art (3)
PHOT 026A (CINE 026A) – Beginning Electronic Filmmaking (3)
PHOT 026B (CINE 026B) – Intermediate Filmmaking–Electronic (3)
PHOT 026C (CINE 026C) – Advanced Filmmaking (3)
PHOT 027 (CINE 027) – Cinematography (3)
PHOT 030 – Introduction to Digital Image Editing (3)
PHOT 031 – Beginning Digital Photography (3)
PHOT 024A – Alternative Processes in Photography (3)

Speech

SPCH 002 – Persuasion (3)
SPCH 003 – Voice and Diction (3)
SPCH 004 – Oral Interpretation (3)
SPCH 005 – Forensics–Speech and Debate Team (3)
SPCH 005A – Forensics Research and Preparation (Speech and Debate Team) (3)
SPCH 006 – Argumentation and Debate (3)
SPCH 008 – Readers’ Theater (3)
SPCH 009 – Small Group Communication (3)
SPCH 012 – Argumentation and Critical Thinking (3)
SPCH 013 – Introduction to Speech Communication (3)

Television and Radio

TVR 001 – Introduction to Electronic Media (3)
TVR 002A – Beginning Audio Production (3)
TVR 002B – Radio Broadcast Master Control Operations (3)
TVR 007 – Beginning TV Studio Production (3)
TVR 012 – Beginning Announcing and Performing in Electronic Media (3)
TVR 014A – Beginning Radio Production (3)
TVR 014B – Advanced Radio Production (3)
TVR 015 – Introduction to Media Writing (3)

TVR 016A – Television Production (4)
TVR 016B – Television Production (4)
TVR 017A – Television and Film Script Writing (3)
TVR 017B – Television and Film Script Writing (3)
TVR 018 – Radio and Television Newswriting (3)
TVR 019 – Introduction to Media Aesthetics and Cinematic Arts (3)
TVR 021 – Electronic Media Management (3)
TVR 024 – Electronic News Gathering and Editing (3)

Theatre Arts

THRT 002A – Acting I (3)
THRT 002B – Acting II (3)
THRT 002C – Advanced Acting Fundamentals (3)
THRT 004A – Mime Fundamentals (2)
THRT 004B – Mime for the Actor (2)
THRT 005A – Theatre History I (3)
THRT 005B – Theatre History II (3)
THRT 006 – Play Writing (3)
THRT 008 – Voice and Movement for the Performer (3)
THRT 010A – Makeup for Stage and Screen (3)
THRT 010B – Advanced Makeup for Stage and Screen (1)
THRT 012A – Technical Theater (4)
THRT 012B – Advanced Technical Theater (4)
THRT 013 – Introduction to Scenic Design (3)
THRT 015 – Costume Crafts (3)
THRT 026 – Improvisation Techniques (2)
THRT 029 – Rehearsal and Performance (3)
THRT 030 – Stage Techniques (1)
THRT 041 – Fundamentals of Stage Lighting (3)
THRT 075 – Musical Theater Workshop (2)

Requirements for the Associate in Arts Degree – see page 85.

Communication Studies – *Associate in Arts Degree for Transfer to CSU*

Top Code: 1506.00

This area of emphasis is intended to align with preparation for transfer into the CSU system in such majors as Art, Communication, English, Journalism, Television and Radio, Theatre Arts, and other similar fields of study. Communicating well and understanding the communication process are essential to professional success in many fields. People communicate to influence, to persuade, and to express. Learning to communicate effectively is one important reason for the study of Communication Arts. Studying the communication process helps one understand how the human mind works. Analyzing the messages in advertisements, television programs, and political speeches helps one to understand our society. Studying communication in everyday relationships, groups, and organizations shows us how these systems are created and maintained. Areas of study include face to face interaction, group process, organizational communication, rhetoric, advocacy, intercultural communication, political communication, and performance studies. Communication Arts students can expect to develop skills essential for leadership and career development, and for understanding and interpreting events.

The Associate in Arts in Communication Studies for Transfer degree will be awarded upon completion of coursework totaling 60 California State University (CSU) transferable units including the above major requirements and the Intersegmental General Education Transfer Curriculum (IGETC-CSU) or California State University General Education (CSUGE) requirements

with a minimum grade point average of 2.0. All courses in the major must be completed with a grade of "C" or better. (Students completing this degree are not required to fulfill additional local graduation requirements.)

Associate in Arts in Communication Studies for Transfer Degree

Required core: 3 units

SPCH 001 – Fundamentals of Speech (3)

LIST A: Select any 2 courses (6 units)

SPCH 009 – Communication and Group Leadership (3)

SPCH 010 – Interpersonal Communication (3)

SPCH 012 – Argumentation and Critical Thinking (3)

or SPCH 006 – Argumentation and Debate (3)

LIST B: Select any 2 courses from below or from any List A course not used above (6 units)

SPCH 003 – Voice and Diction (3)

or SPCH 008 – Readers' Theatre (3)

SPCH 004 – Oral Interpretation (3)

SPCH 005A – Competitive Speech (1)

or SPCH 005B – Forensics (1)

COMM 001 – Survey of Mass Communication (3)

ENGL 012 – Intercultural Communication (3)

or LING 012 – Intercultural Communication (3)

LIST C: Select any 1 course from below or from any List A or B course not used above (3 units)

ANTH 002 – Cultural Anthropology (3)

SOC 001 – Introductory Sociology (3)

PSYC 001 – Introduction to Psychology (3)

ENGL 001B – Reading and Composition (4)

ENGL 001C – Intermediate Composition–Critical Thinking and Argument (4)

JOUR 004A – Reporting and Newswriting (3)

REQUIRED SUBTOTAL..... 18

CSU General Education or IGETC Pattern..... 39–41

Transferable Electives (as needed to reach 60 transferable units)

DEGREE TOTAL 60

Student Learning Outcomes:

1. Articulate the role of communication in multiple contexts.
2. Demonstrate competencies for ethical communication.
3. Critically analyze various communication practices.
4. Demonstrate effective verbal, nonverbal and written communication in diverse forms and contexts.

Speech Communication – Associate in Arts Degree

Top Code: 1506.00

A degree in Speech Communication from Pasadena City College prepares students for upper division (advanced level) coursework and several entry level positions within the field. This area of emphasis is primarily intended to prepare students to transfer and earn a bachelor's degree in Speech Communication or Communication Studies. Students develop verbal, nonverbal and interpersonal communication skills, apply critical thinking skills, and learn about human communication in multiple contexts. The Speech Communication major helps students to improve their relationship skills in both personal and professional life as well as prepares them for advancements in their careers.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. *When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Program Outcomes:

1. Articulate the role of communication in multiple contexts.
2. Demonstrate competencies for ethical communication.
3. Critically analyze various communication practices.
4. Demonstrate effective verbal, nonverbal and written communication in diverse forms and contexts.

Requirements for the major in Speech Communication (18 units minimum)

All courses must be completed with a grade of C or better. All courses must be numbered 001–099.

Required courses:

Students must complete all of the following:

- SPCH 001 – Fundamentals of Speech (3)
- SPCH 006 – Argumentation and Debate (3)
- SPCH 010 – Interpersonal Communication (3)

Additional courses:

Students must complete at least nine additional units from the following courses:

- SPCH 002 – Persuasion (3)
- SPCH 003 – Voice and Diction (3)
- SPCH 004 – Oral Interpretation (3)
- SPCH 005 – Forensics – Speech and Debate Team (3)
- SPCH 005A – Forensics Research and Preparation (Speech and Debate Team) (3)
- SPCH 008 – Readers' Theater (3)
- SPCH 009 – Small Group Communication (3)
- SPCH 012 – Argumentation and Critical Thinking (3)
- SPCH 013 – Introduction to Speech Communication (3)

Requirements for the Associate in Arts Degree – see page 85.

COMPUTER INFORMATION SYSTEMS **(Business Division)**

CCNA Routing & Switching Preparation – Occupational Skills Certificate

Top Code: 0708.10

The CISCO Networking Academy's CISCO Certified Network Associate (CCNA) Routing & Switching curriculum provides students with necessary skills to seek entry-level employment in the field of Information Technology. Instruction includes training in installing, configuring, maintaining, and troubleshooting CISCO routers and switches in a small to enterprise environment. These certificate courses are followed by CISCO Certified Network Professional (CCNP) Routing & Switching, and CCNA Security

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate an understanding of basic network design, implementation and troubleshooting using CISCO routers and switches.
2. Apply skills needed to:
 - a. Install and configure CISCO routers and switches in multiprotocol internetworks using LAN and WAN interfaces.
 - b. Provide Level 1 troubleshooting service.
 - c. Improve network performance and security.
 - d. Perform entry-level tasks in the planning, design, installation, operation, and troubleshooting of TCP/IP networks.
3. Obtain the industry-level CCNA Routing & Switching certification and secure employment as an entry-level network technician or network engineer.

Requirements for the Occupational Skills Certificate (12 units):

CIS 041 – CCNA R&S: Introduction to Networks (3)
CIS 042 – CCNA R&S: Routing and Switching Essentials (3)
CIS 163 – CCNA R&S: Scaling Networks (3)
CIS 164 – CCNA R&S: Connecting Networks (3)

CISCO Advanced Network Engineer – Occupational Skills Certificate

Top Code: 0708.10

The CISCO Advanced Network Engineer Program provides advanced training for CISCO router and switch configuration, maintenance, and troubleshooting. It also covers configuration of network security using CISCO ASA. Students will obtain necessary training to become a network engineer for an organization of any size and form. This program will prepare students to take the CCNP (CISCO Certified Network Professional) and CCNA-Security certification exams.

An Occupational Skills Award is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Install, configure and troubleshoot CISCO routers, switches and ASA firewalls.
2. Configure dynamic routing with provided network scenario.
3. Configure VLANs and spanning-tree protocol.
4. Provide necessary security for the network using CISCO routers, switches, and ASA firewalls.

Requirements for the Occupational Skills Certificate (17 units):

Semester I

CIS 165 – CCNP R&S Route: Implementing IP Routing (4)

Semester II

CIS 167 – CCNP R&S Implementing CISCO IP Switched Networks (4)

Semester III

CIS 168 – CCNP TSHOOT: Troubleshooting and Maintaining IP Networks (4)

CIS 169A – CCNA Security (4)

Semester IV

CIS 020 – Independent Study (1)

Recommended electives

CIS 140A – MCSE: Microsoft Windows System Administration 1 (4)

CIS 140B – MCSE: Microsoft Windows System Administration 2 (4)

CIS 151 – VMWare VSphere: Install, Configure, Manage (3)

CISCO Certified Network Professional (CCNP) Preparation – Occupational Skills Certificate

Top Code: 0708.10

This CISCO Academy curriculum provides a student with the necessary skills to seek entry to mid-level employment in the information technology field, especially, in the configuring, installing, and maintaining CISCO routers and switches in either a LAN, WAN, or switched LAN environment. This certificate course is designed to follow the CCNP program, and is the second level of three level CISCO certification designations. Students completing this certification program will have the ability to install, configure, and maintain more complicated LAN, WAN, and switched LAN networks. To become a CCNP a student must pass four industry level certificate exams offered by CISCO.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate an understanding of basic network management utilizing CISCO products.
2. Apply skills needed to:
 - Construct a CISCO-based network from the “ground up.”
 - Manage a CISCO-based network.
 - Establish appropriate routing and virtual networks for any given situation utilizing CISCO products.
3. Obtain the appropriate CISCO certification and an entry-level position within industry.

Requirements for admission into the CISCO Certified Network Professional Preparation program:

CIS 164 – CCNA: Connecting Networks (3)

or Obtain CCNA certificate by passing CISCO Certified Network Associate industry certificate exam.

Requirements for the Occupational Skills Certificate (12 units):

CIS 165 – CCNP R&S Route: Implementing IP Routing (4)

CIS 167 – CCNP R&S Implementing CISCO IP Switched Networks (4)

CIS 168 – CCNP TSHOOT: Troubleshooting and Maintaining IP Networks (4)

Recommended electives

CIS 169A – CCNA Security (4)

CIS 169B – Network Security 2 (4)

CIS 170 – CISCO IP Telephony (4)

E-Commerce – Occupational Skills Certificate

Top Code: 0514.00

This curriculum prepares the student to enter the industry as an entry level E-Commerce developer, or as an entrepreneur seeking to move an existing business to the internet. Fundamental concepts of the technology and business practices used to build a successful business on the Internet are stressed during the course of this program.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Given a simple and clearly defined common business need, students will be capable of recommending one or more potential e-commerce hardware and/or software solution to meet the needs of the client.
2. Apply skills needed to:
 - Develop a fully-functioning e-commerce website.
 - Create a marketing and advertising program for a client business utilizing industry-standard e-commerce tools.
3. Obtain an entry-level position in industry developing e-commerce capable websites.

Requirements for the Occupational Skills Certificate (12 units):

CIS 010 – Introduction to Information Systems (3) CIS 050 – Survey of E-Commerce/E-Business Technology (3)

CIS 055 – Introduction to E-Business Practices (3)

CIS 060 – E-Commerce Fundamentals (3)

Recommended electives:

BUS 009 – Introduction to Business (3)

BUS 012A – Business Law (3)

BUS 012B – Business Law Transactions & Organizations (3)

BUS 116 – Small Business Management (3)

BUS 151 – International Marketing (3)

BUS 153 – International Business Law (3)

CIS 190 – Web Server Development (3)

MCSA Windows Server Preparation – Occupational Skills Certificate

Top Code: 070800

This curriculum provides students with necessary skills to seek entry-level employment in the field of Information Technology to administer Microsoft Windows Server operating system and Microsoft client operating system. Instruction includes training in installing, configuring, maintaining, monitoring, and troubleshooting Microsoft Windows Server operating system networking services and Windows client operating system features in a networked environment.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate an understanding of the Microsoft Windows Server operating system networking services and Windows Client Operating System features.
2. Apply skills needed to:
 - a. Install, configure, maintain, monitor, and troubleshoot systems with Microsoft Windows Server Operating System in a small to enterprise environment.
 - b. Deploy, configure, maintain, and troubleshoot desktop systems with Microsoft Windows Client Operating system in a small to enterprise environment.
 - c. Plan and implement networking services and security using Microsoft Windows Operating Systems.

3. Obtain the industry-level CompTIA A+ and Microsoft Certified Solutions Associate (MCSA): Windows Server certification, and secure employment as an entry-level system engineer or system administrator.

Requirements for the Occupational Skills Certificate (12 units):

CIS 011 – Information and Communication Technology Essentials (4)
CIS 045 – MCSA: Microsoft Windows System Administration 1 (4)
CIS 146 – MCSA: Microsoft Windows System Administration 2 (4)

Computer Information Systems – Operations – Certificate of Achievement, Associate in Science Degree
Top Code: 0702.00

This curriculum prepares students with entry-level skills to seek employment in client/server operations for business or technical support staff. Instruction includes training in the fields of client/server applications, database, SQL, and operating systems. Students must be willing to spend time outside of class working on assignments.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate an understanding of basic computer operations and industry-standard operation systems utilized on personal computers.
2. Apply skills needed to:
 - Keep track of all processing on a CPU and respond to the needs of the system.
 - Use computer-based technology to locate, access, evaluate, store and retrieve information.
 - Create and maintain a basic spreadsheet.
 - Execute Operating System commands, use utility programs as needed, and maintain information storage and retrieval systems.
3. Secure employment in an entry-level operations position to support a client-server network.

Requirements for the Certificate of Achievement (18 units):

Recommended sequence:

Semester I

CIS 010 – Introduction to Information Systems (3)
CIS 062 – Introduction to Systems Analysis (3)

Semester II

CIS 011 – Information and Communication Technology Essentials (4)
CIS 132 – Fourth Generation Languages (3)

Semester III

CIS 031 – Database Systems (3)
CIS 115 – Microcomputer Field Practice (2)
CIS 135 – Client/Server Development (1)

Recommended electives

BIT 105A – Business Software–Microsoft Access Level 1 (1)
CIS 030 – Networks and Telecommunications (3)
CIS 081 – Advanced Microcomputer Applications (3)

ENGL 100 – Reading and Writing Skills (4)
SPCH 125 – Professional Communication (3)

Requirements for the Associate in Science Degree – see page 89.

Computer Information Systems – Programming – Certificate of Achievement, Associate in Science Degree

Top Code: 0707.10

The curriculum prepares students with entry-level skills to seek employment in programming. Emphasis will be on providing students with practical experience in utilizing at least two programming languages. Instruction will cover such topics as operating systems, applications and common programming languages. Students must be willing to spend considerable time outside of class working on assignments.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate an understanding of computer programming constructs and be able to write programming code in several programming languages to solve a business problem.
2. Design and layout the sequence of steps to solve a problem using appropriate tools and charts.
3. Write program code using the syntax of the programming language skills obtained during the course of this program.
4. Test program code, using different sets of data.
5. Maintain documentation to communicate the purpose of the program steps.
6. Present E-Portfolio to showcase skills necessary to qualify for an entry-level programming job.

Recommended sequence:

Semester I

CIS 010 – Introduction to Information Systems (3)
CIS 012 – Introduction to Programming (3)
CIS 062 – Introduction to Systems Analysis (3)

Semester II

CIS 014 – C++ Programming (3)
CIS 036 – Introduction to Visual Basic (3)

Semester III

CIS 016 – Java Programming (3)
CIS 020 – Independent Study (1)
CIS 038 – Advanced Visual Basic (3)

Recommended Electives

CIS 011 – Information and Communication Technology Essentials (4)
CIS 030 – Networks and Telecommunications (3)
ENGL 100 – Reading and Writing Skills (4)

Requirements for the Associate in Science Degree – see page 89.

Computer Information Systems – System and Network Administrator – Certificate of Achievement, Associate in Science Degree

Top Code: 0708.20

This system and network administrator program provides students with necessary skills to seek entry-level employment in the field of Information Technology to administer network infrastructure and Windows systems. Instruction includes training in installing, configuring, maintaining, and troubleshooting network devices (routers, switches, and access points) and end devices (computers, servers, printers, and mobile devices) with an emphasis on CISCO network infrastructure administration.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate an understanding of basic enterprise system and network administration.
2. Apply skills needed to:
 - a. Administer CISCO routers and switches in a small to enterprise environment.
 - b. Administer user computer systems (physical and virtual machines) in a small to enterprise environment.
 - c. Administer Microsoft Windows Server operating systems in a small to enterprise environment, and cloud computing environment.
3. Be able to acquire IT industry certifications including CompTIA A+, CISCO Certified Network Associate (CCNA) Routing and Switching and Microsoft Certified Solutions Associate (MCSA) Windows Server, and secure employment in an entry-level system administration or network administration position

Requirements for the Certificate of Achievement (20 units):

CIS 011 – Information and Communication Technology Essentials (4)
CIS 041 – CCNA R&S: Introduction to Networks (3)
CIS 042 – CCNA R&S: Routing and Switching Essentials (3)
CIS 045 – MCSA: Microsoft Windows System Administration 1 (4)
CIS 163 – CCNA R&S: Scaling Networks (3)
CIS 164 – CCNA R&S: Connecting Networks (3)

Recommended Electives

CIS 040 – UNIX/LINUX Administration (3)
CIS 061 – Introduction to Information Systems Security (3)
CIS 063 – Introduction to Cybersecurity: Ethical Hacking (3)
CIS 065 – Computer Forensics Fundamentals (3)
CIS 141 – MCSE: Microsoft Exchange Server Administration (4)
CIS 146 – MCSA: Microsoft Windows System Administration 2 (4)
CIS 151 – VMWARE VSPHERE: Install, Configure, Manage (3)
CIS 165 – CCNP R&S Route: Implementing IP Routing (4)
CIS 167 – CCNP R&S Implementing CISCO IP Switched Networks (4)
CIS 168 – CCNP TSHOOT: Troubleshooting and Maintaining IP Networks (4)
CIS 169A – CCNA Security (4)
ENGL 100 – Reading and Writing Skills (4)

Requirements for the Associate in Science Degree – see page 89.

Computer Information Systems – Web Development Applications – *Certificate of Achievement, Associate in Science Degree*

Top Code: 0707.10

This curriculum prepares students with entry-level skills to seek employment in the field of Web development/publishing, and the use of multimedia in creating Web pages/Web sites. Courses cover training in applications with an emphasis on programming with HTML/XHTML, CSS, JavaScript, XML, Flash, PHP, Ajax, ASP.Net, and Ruby on Rails.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate an understanding of how to use the Internet and how to create web-page content using HTML, Java and JavaScript.
2. Demonstrate effective use of a wide variety of technologies used in Web scripting and in the construction of a Web site:
TML/XHTML, CSS, JavaScript, XML, Flash, PHP, Ajax, ASP.Net, and Ruby on Rails.
3. Present E-Portfolio to demonstrate skills to qualify for an entry-level position as a Web-Page/Web site Developer.

Requirements for the Certificate of Achievement (19 units):

Recommended sequence:

Semester I

CIS 010 – Introduction to Information Systems (3)

CIS 012 – Introduction to Programming (3)

Semester II

CIS 192 – Introduction to Web Authoring (3)

CIS 193 – Web Applications Using Javascript (3)

Semester III

CIS 020 – Independent Study (1)

CIS 197 – Web Applications Using PHP & MYSQL (3)

CIS 199 – Web Scripting and Web Server Security (3)

Recommended Electives

CIS 031 – Database Systems (3)

CIS 062 – Introduction to Systems Analysis (3)

ENGL 100 – Reading and Writing Skills (4)

Requirements for the Associate in Science Degree – see page 89.

COSMETOLOGY

(Engineering & Technology Division)

Cosmetology – *Certificate of Achievement, Associate in Science Degree*

Top Code: 3007.00

The Cosmetology Certificate of Achievement is a comprehensive curriculum that prepares students for the Cosmetology Certificate of Achievement is a comprehensive curriculum that prepares students for the California State Board of Cosmetology Exam and a wide range of careers in the beauty industry. The curriculum offers theoretical and practical disciplines as well as

interactive demonstrations and hands-on applications that train students to become creative professionals and gain entry level employment as cosmetologists, nail technicians, aestheticians, salon managers or small business owners.

The program requires a minimum of 1,600 hours and will take approximately one year to complete with full-time commitment. All students will start in the Intro to Cosmetology class, which is an introductory course that teaches basic cosmetology principles and techniques. The program costs approximately \$4,000, with \$2,000 of the total cost required during the first week of the program. The \$2,000 includes tuition, kit, books, uniforms, and other school related materials. Students must have the cosmetology kit, books, and uniforms within the first week of the Intro to Cosmetology class. According to State Board regulation, students must have proof of 10th grade high school completion to enroll in the program.

After completion of Intro to Cosmetology with a passing grade of C or above, students can take Haircutting, Hair Color, Hair Styling, Chemical Texture, Skin Care, Nail Care, State Board, and Professional Development classes, which concentrate on specific topics of the cosmetology field. All classes must be passed with a C or above grade or must be retaken for a passing grade to complete the program. Each class will be offered twice per semester, every 8 weeks. Students will have the flexibility of part-time or full-time commitment to the program. Full-time commitment is strongly recommended, as students will be able to finish the program and become licensed in approximately 1 year. COSM 109-Salon Lab class is a 4-week class offered for students who have completed and passed the rest of the classes, but have not reached the required State Board hours. Students must register for the Salon class to accumulate the required hours by working on clients in a salon setting. Once students have successfully passed all classes and completed the 1,600 hour program, they will receive a Certificate of Achievement and be able to take the State of California Cosmetology Exam to become licensed cosmetologists.

A student who is dropped from the program for unsafe or inappropriate conduct, or excessive absences twice is not eligible to re-enroll except upon approval of the college Petitions Committee. Students who have acquired 300 or less hours in another cosmetology program may be admitted to the program subject to availability of space.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Enhance conversational abilities and build confidence to communicate with clients from different cultural backgrounds.
2. Evaluate client needs and select appropriate techniques and products to achieve desired results.
3. Use current technology effectively to keep up with trends in the beauty industry.
4. Work effectively as a team member in a diverse environment.
5. Demonstrate customer service skills, self-growth, and personal development to remain current with industry standards.

Requirements for the Certificate of Achievement (45 units):

- COSM 100 – Intro to Cosmetology (9)
- COSM 101 – Haircutting (4.5)
- COSM 102 – Hair Color (4.5)
- COSM 103 – Hairstyling (4.5)
- COSM 104 – Chemical Texture (4.5)
- COSM 105 – Skin Care (4.5)
- COSM 106 – Nail Care (4.5)
- COSM 107 – State Board (4.5)
- COSM 108 – Professional Development (4.5)

Recommended electives

- COSM 109 – Salon (3)

Requirements for the Associate in Science Degree – see page 89.

Cosmetology – Instructional Techniques in Cosmetology – *Certificate of Achievement*

Top Code: 3007.00

The curriculum will prepare licensed cosmetologists who want to become cosmetology instructors. Upon successful completion of this program, COSM 150 and COSM 151 (600 hours), a student will be eligible to take the California State Board Instructors Examination for licensure as an instructor.

Students must hold a valid State of California Cosmetology license to enroll in this program. Continuous enrollment until completion of the program is required.

Students will be responsible, during the first week of school, to pay for their tuition, books, CD-ROM, cosmetology supplies and a black lab coat.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Requirements for the Certificate of Achievement (20 units/600 hours):

Recommended sequence:

Semester I

COSM 150 – Instructional Techniques in Cosmetology (10)

Semester II

COSM 151 – Instructional Techniques in Cosmetology (10)

CULINARY ARTS

(Engineering & Technology Division)

Culinary Arts – *Certificate of Achievement, Associate in Science Degree*

Top Code: 1306.30

The curriculum prepares students for working in various food services industries. Graduates of the program qualify to seek employment in restaurants, cafeterias, hotels, health care facilities, and educational institutions as cooks, bakers, and assistant and training managers.

Instruction is offered in all phases of food preparation and presentation. Studies emphasize foods, terms and techniques, safety and sanitation, baking, catering, food preparation, menu planning, merchandising, and restaurant management. Students are kept informed of industry trends through guest speakers, trade publications, and field trips to local industries and culinary shows. All students participate daily in the kitchen lab in planning, preparing and serving cafeteria and special event meals.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate the academic skills and abilities to enter a career in the Food Services and Culinary Arts fields.
2. Demonstrate the recognition of the need for lifelong learning in the fields of Food Services and Culinary Arts.
3. Demonstrate knowledge of the sanitation requirements, ethical and social responsibilities of a career in Food Services and Culinary Arts fields.
4. Demonstrate the value of teamwork in the fields of Food Services and Culinary Arts.
5. Demonstrate an understanding of the career paths available in Cooking, Baking and Catering professions.
6. Produce quality food using the manipulative skills and technical training they received at Pasadena City College.

Requirements for the Certificate of Achievement (40 units):

Recommended sequence:

Semester I

CUL 145A – Introduction to Culinary Arts/Food Services (10)

Semester II

CUL 145B – Introduction to Food Services Production (10)

Semester III

CUL 145C – Quantity Cooking Techniques (10)

Semester IV

CUL 145D – Special Events Management (10)

Recommended Electives

CUL 154A – Introduction to Food Service Baking & Pastry (3)

CUL 154B – Advanced Baking and Pastry (3)

CUL 158 – Field Practice in Food Services (4)

CUL 160A – Introduction to Catering (3)

CUL 160B – Advanced Catering (3)

Requirements for the Associate in Science Degree – see page 89.

Baking & Pastry – Occupational Skills Certificate

Top Code: 1306.30

This program offers students study in baking and pastry techniques for seeking entry-level employment in the industry. The curriculum includes: introduction to small-scale baking and pastry, and techniques for large quantity baking and pastry procedures; kitchen safety and sanitation; tools and equipment identification, usage and care; product identification; measurements and temperature controls; time management; product costing for retail sales; proper mixing and baking techniques for breads, cakes, cookies, laminated doughs, and fancy pastries; assembling three-layer cakes to multiple-tiered cakes and intricate decorating.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate culinary arts skills in the baking and cake decorating field.
2. Identify usage of baking products by types for making high quality and large quantity baked goods.
3. Practice sanitation regulations established by the local Department of Environmental Health, pertaining to personal hygiene, kitchen and equipment management.
4. Explain the value of teamwork required in the food service industry.
5. Demonstrate the manipulative skills and technical requirements in the baking and cake decorating field.

Requirements for the Occupational Skills Certificate (6 units):

Recommended sequence:

Semester I

CUL 154A – Introduction to Food Service Baking & Pastry (3)

Semester II

CUL 154B – Advanced Baking and Pastry (3)

Catering – Occupational Skills Certificate

Top Code: 1306.30

This program offers students training in two aspects of the catering business: entry level employment skills and small business operation/ownership. The curriculum includes: introduction to catering for small-scale events and advanced catering business practices for large-scale events; kitchen safety and sanitation; tools and equipment identification, usage and care; product identification and costing for catered events; time management for seeking employment with catering facilities at hotels, casinos, resorts and country clubs. For seekers of self-employment, studies will include employment/workers compensation requirements (Employment Department); safe packing and transportation of products; event rentals; site dining/serving setup/take down; time management; commissary development and leasing; legal liabilities and responsibilities; contract negotiations and customer service relations.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate the capability to acquire and operate a catering business.
2. Explain the skills to establish professional contacts with reputable purveyors of qualified and quantity products in the operation of a catering business.
3. Develop the business skills of record-keeping in all aspects of a professional business; as well develop professional standards of conduct and attitudes necessary to operate a catering business.
4. Practice safe food handling/packing and transportation of customers ordered products necessary to operate a catering business.
5. Demonstrate the ability to organize on site dining/serving, setup/takedown of catered facilities in an orderly and timely manner.
6. Explain all legal documentation for a facility rental, sanitation certification, business licenses, and employee compensation, as required by local authorities.

Requirements for the Occupational Skills Certificate (6 units):

Recommended sequence:

Semester I

CUL 160A – Introduction to Catering (3)

Semester II

CUL 160B – Advanced Catering (3)

Kitchen Assistant – Occupational Skills Certificate

Top Code: 1306.30

This program prepares students for employment in the food service industry at an entry-level. Employment in restaurants, hospitals, hotels, casinos, resorts, and country clubs may include: prep cooks, line cooks, salad/sandwich preparers, baking and dessert cooks, catering servers, and banquet coordinators. Students will learn to use these skills to support concurrent industry requirements through laboratory training in food preparation/presentation, participation in on- and off-premise campus catered events for faculty/staff, and private entities; and baking products for daily requirements and special occasions.

An Occupational Skills Certificate is awarded upon completion of all courses with a grade of C or better.

Program Outcomes:

1. Demonstrate acquired professional skills and attitudes employers require of employees serving the general public.
2. Demonstrate both personal and professional knowledge of sanitation requirements.
3. Explain the importance of team work, in a manner that is necessary for all aspects of food preparation.
4. Explain the importance of maintaining good personal health, good attendance, and adherence to work schedules in the success of maintaining their employment in the food service industry.

Requirements for the Occupational Skills Certificate (16 units):

Recommended sequence:

Semester I

CUL 145A – Introduction to Culinary Arts/Food Services (10)

Semester II

CUL 154A – Introduction to Food Service Baking & Pastry (3)

CUL 160A – Introduction to Catering (3)

Recommended electives

ENGL 434 – Technical/Vocational Reading (3)

TECH 107A – Technical Calculations (3)

DENTAL

(Health Sciences Division)

Dental Assisting – Certificate of Achievement, Associate in Science Degree

Top Code: 1240.10

The Dental Assisting curriculum prepares the student to take on significant responsibility as a member of the dental health care team. Employment positions are available in dental offices, hospitals, clinics, dental schools and professional sales. Dental Assistants greatly increase the efficiency of the dentist in delivery of quality oral health care. A career in dental assisting offers many challenges and a variety of procedures. Specific tasks may be performed such as: assisting with and providing direct patient care, taking and developing dental radiographs (x-rays), sterilizing instruments, taking impressions, and performing office management tasks. Dental assisting offers a variety, flexibility, excellent working conditions and personal satisfaction. Students must provide their own transportation to off-campus clinical sites. A selected uniform and purchased dental kits are required for the program.

The program is accredited by the Commission on Dental Accreditation of the American Dental Association and approved by the Committee on Dental Auxiliaries in California. Upon successful completion of the program, a student is eligible to take the Dental Assisting National Board examination to obtain a certificate as a Certified Dental Assistant (CDA); and the California Registered Dental Assistant (RDA) examination to obtain a license as a Registered Dental Assistant.

Fingerprinting is mandatory with the RDA examination.

The program in dental assisting is accredited by the Commission on Dental Accreditation and has been granted the accreditation status of “*Approval without reporting requirements*”. The Commission is a specialized accrediting body recognized by the United States Department of Education. The Commission on Dental Accreditation can be contacted at (312) 440-4653 or at 211 East Chicago Avenue, Chicago, IL 60611. The Commission’s web address is: <http://www.ada.org/100.aspx>.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Requirements for Admission into the Dental Assisting Program are:

1. Graduation from an accredited high school or equivalent with a 2.0 grade point average.
2. Grade point average (GPA) of 2.0 for all college work.
3. Two sets of high school and college transcripts.
4. Completed application of admission to the program.
5. Current CPR/Basic Life Support (BLS) card, which must be maintained while in the program. CPR training can be obtained from the American Heart Association. The AHA can be contacted at (877) 242-4277. CPR training can also be completed at PCC by taking NURS 214.
6. After acceptance into the program, submit a completed health data form evidencing good health including required immunizations/chest x-ray or Mantoux test.

The Application Process:

Applications are accepted on a year-round basis. Students interested in the part-time Dental Assisting Program or additional program information should consult with the program director at (626) 585-7243.

Recommended Preparation:

Eligibility for English 100 or equivalent.

Additional Courses Required for the Associate in Science Degree:

Consult with a Counselor to determine which classes qualify to receive credit in the general education categories of Natural Sciences, Behavioral Sciences, Humanities, Language and Rationality, American Institutions, Health Education, and Physical Activity for the Associate in Science degree.

Program Outcomes:

1. Demonstrate technical skills and abilities, safety and infection control procedures as outlined by the California Dental Practice Act. (DA 100, 108, 110, 123A, 123B, 125, 127, 135, 140, 142).
2. Exhibit professional growth, behavior, knowledge and development; foster empathy and concern; and work toward a commitment of excellence at all times (all DA courses).
3. Exhibit communication and conflict skills and strategies that are effective with individuals and groups who are diverse in age, gender or culture (all DA courses).

Requirements for the Certificate of Achievement (32.5 units):

DA 100 – Dental Materials (3)
DA 108 – Infection Control in Dentistry (2)
DA 110 – Introduction to Dental Essentials (3)
DA 111 – Applied Human Behavior (2)
DA 123A – Chairside Techniques (4.5)
DA 123B – Advanced Chairside Techniques (4)
DA 124 – Office Administration (3)
DA 127 – Clinical Experience (4)
DA 135 – Registered Dental Assistant Techniques (3)
DA 140 – Oral Radiology (4)

Recommended Electives

BIT 025 – Survey of Computer Technology in Business (3)
DA 125 – Clinical Experience (1)
DA 142 – Advanced Oral Radiology Techniques (0.5)
DA 149 – Orthodontic Assistant (2.5)
DA 150 – Clinical Experience in a Specialty Practice (0.5)
DA 160 – Comprehensive Dental Assisting Skills and Techniques (0.5)

Requirements for the Associate in Science Degree – see page 89.

Dental Hygiene – *Certificate of Achievement, Associate in Science Degree*

Top Code: 1240.00

This two-year curriculum prepares a student to provide educational, clinical and therapeutic services supporting oral health. Studies include the biological basis of the health of the teeth and oral cavity, as well as procedures used to prevent decay and to maintain dental health. Employment opportunities include working as a licensed dental hygienist in dental offices, public clinics, schools, industry, research, and community health. Participation of all off campus assigned sites are required for program completion. Students must provide their own transportation to some off-campus clinical sites. Some off campus sites require homeland security screening and verification of legal status.

The program is approved by the Dental Hygiene Committee of California (DHCC) and is accredited by the Commission on Dental Accreditation of the American Dental Association. Upon successful completion of the Dental Hygiene National Board examination and the dental hygiene curriculum, the student receives a Certificate of Achievement, an Associate in Science Degree, and is eligible to take any applicable regional or state board examination(s) to obtain licensure as a Dental Hygienist. Applicants for Dental Hygiene licensure are required to submit official fingerprints. The law provides for denial of licensure for crimes or acts which are related to dental hygiene, qualifications and/or duties.

Requirements for selection and acceptance into the Dental Hygiene program are:

1. Graduation from High School or the equivalent
2. Minimum grade of C in:
 - ENGL 001A
 - PSYC 001
 - SPCH 001
 - SOC 001
 - Intermediate Algebra
 - Humanities
 - U.S. History (one course) and Political Science
or AMER 125
 - Physical Activity (2 units)
3. Minimum grade of C in these science courses (It is recommended that they be taken within the last five years):
 - MICR 002
 - NUTR 011
 - ANAT 025
 - PYSO 001
 - or PYSO 002AB
 - CHEM 001AB
 - or CHEM 002AB
4. Overall GPA of 3.0 for all prerequisite college work.
5. Completed application for selection and acceptance into the program.
6. Dental Hygiene students must have the ability to communicate effectively.
7. After acceptance into the program, submit a completed health data form evidencing physical and emotional health, including required immunizations/chest x-ray or Mantoux test.
8. Current CPR/Basic Life Support (BLS) card that must be maintained while in the program.

Recommended preparation:

High school courses in biology or physiology, algebra and chemistry with a laboratory. It is strongly recommended that general education requirements for the Associate in Science Degree be satisfied prior to enrolling in the program. Degree requirements must be met to be eligible to sit for license exams.

Acceptance to the program is competitive. Selection is based upon a combination of academic work completed, and grades earned. Other criteria such as work experience may also be are also considered. Please see Pasadena City College Dental Hygiene Information Brochure for current application instructions and selection criteria.

Program Outcomes:

1. Acquire the theoretical knowledge that will allow them to provide comprehensive dental health care to their clients/patients.
2. Apply the dental hygiene process of care to provide competent dental hygiene care as specified by the Dental Practice Act.

Requirements for the Certificate of Achievement (59.5 units):

ANAT 115 – Head and Neck Anatomy, Histology and Embryology (3)
DH 101A – Fundamentals of Dental Hygiene (5)
DH 101B – Fundamentals of Dental Hygiene Theory and Practice (5)
DH 104A – Clinical Dental Hygiene Theory and Practice: Pain Control (2)
DH 104B – Clinical Dental Hygiene Theory and Practice (7)
DH 104C – Clinical Dental Hygiene Theory and Practice (7)
DH 105 – Pathology (3)
DH 107 – Introduction to Oral Health Research (2)
DH 108 – Pharmacology (2)
DH 109 – Dental Health Education, Communication and Diversity (2)
DH 111 – Current Issues in Dental Hygiene (3)
DH 113A – Periodontics (2)
DH 113B – Periodontics (1)
DH 116 – Dental Materials (2.5)
DH 117 – Dental Morphology and Occlusion (2)
DH 119A – Community Dental Health (2)
DH 121 – Clinical Practice in Alternative Settings (1)
DH 121 – Clinical Practice in Alternative Settings (1)
DH 122 – Medical Evaluation of Dental Hygiene Patients (2)
DH 141 – Oral Radiology (3)
DH 200A – Directed Studies in Clinical Dental Hygiene (1)
DH 200B – Directed Studies in Clinical Dental Hygiene (1)
DH 201 – Dental Hygiene Skills Enhancement Lab (1)

Recommended electives

DH 119B – Community Dental Health Lab (0.5)
DH 120 – Independent Study (1)
DH 200C – Clinical Board Preparation (1)

Requirements for the Associate in Science Degree – see page 89.

Dental Laboratory Technology – Certificate of Achievement, Associate in Science Degree

Top Code: 1240.30

The PCC Dental Laboratory Technology curriculum prepares a student for employment in a private or commercial dental laboratory or dental office performing dental laboratory techniques and procedures. Emphasis is on fundamental and advanced laboratory procedures and concepts in all five specialized areas: complete dentures, crown and fixed partial dentures, ceramics, removable partial dentures, and orthodontics and pedodontics. Instruction includes courses in dental morphology, materials, anatomy, and dental laboratory management. Students will learn in a fully equipped, state-of-the-art laboratory and will be instructed by caring and experienced faculty.

The Dental Laboratory Technology program is accredited by the Commission on Dental Accreditation of the American Dental Association, a specialized accrediting body recognized by the United States Department of Education. The College is also a member of the National Association of Dental Laboratories (NADL). Upon successful completion of the curriculum, a student is eligible to take the written Recognized Graduate Examination given by the National Board for Certification. A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Pasadena City College will also award an Associate in Science Degree with a major in Dental Laboratory Technology upon successful completion of courses prescribed for the Certificate of Achievement in the Dental Laboratory Technology Program and completion of certain general education classes. Please consult with a College counselor or the College Catalog for more information.

Students must provide their own transportation to off-campus laboratory sites for their Winter session Clinical Experience course in their second year.

Fabricating a dental prosthesis is a tremendously detailed procedure that requires a knowledge of structural mechanics, metallurgy, materials science, chemistry, biology, physiology, physics, head and neck anatomy, colorimetry and esthetics. A good dental laboratory technician not only possesses working knowledge in these areas, but also has great manual and perceptual skills. The Pasadena City College Dental Laboratory Technology Program has been providing a well-rounded education in dental technology since 1967.

The program in dental laboratory technology is approved by the Dental Board of California and accredited by the Commission on Dental Accreditation and has been granted the accreditation status of *“Approval without reporting requirements”*. The Commission is a specialized accrediting body recognized by the United States Department of Education. The Commission on Dental Accreditation can be contacted at (312) 440-4653 or at 211 East Chicago Avenue, Chicago, IL 60611. The Commission’s web address is: <http://www.ada.org/100.aspx>.

Requirements for admission into the Dental Laboratory Technology Program are:

1. Verification of graduation from an accredited high school, or GED, or equivalent with a 2.0 or better grade point average.
2. Satisfactory scores on manual dexterity and hand/eye coordination tests which are given by appointment. To schedule an appointment contact the program director or test coordinator by calling (626) 585-7200.
3. Submission of a completed Application for Admission to the program.
4. Health clearance by a physician.

Program Outcomes:

1. Perform as competent entry-level dental laboratory technicians.
2. Demonstrate marketable knowledge and skills to secure employment as a dental technician.
3. Successfully complete the [National] Recognized Graduate (R/G) Examination.
4. Uphold the ethics of the dental laboratory technology profession.
5. Demonstrate pursuit of lifelong professional growth and development.
6. Assume leadership roles in the dental laboratory community.

Requirements for the Certificate of Achievement (61 units):

Recommended sequence:

Semester I

DLT 113A – Denture Techniques (4)
DLT 114A – Crown and Bridge (4)
DLT 115 – Dental Morphology (0.5)
DLT 116A – Dental Anatomy (1.5)
DLT 200A – Directed Studies in Basic Dental Laboratory Techniques (1)

Winter Intersession (First Year)

DLT 116B – Dental Anatomy (2)
DLT 200B – Directed Studies in Intermediate Dental Laboratory Techniques (1)

Semester II

DLT 109 – Dental Materials (2)
DLT 113B – Denture Techniques (4)
DLT 114B – Crown and Bridge (4)
DLT 116C – Advanced Dental Anatomy (2.5)
DLT 200C – Directed Studies in Advanced Dental Laboratory Techniques (1)

Semester III

DLT 116D – Highly Advanced Dental Anatomy (2.5)
DLT 117 – Orthodontics and Pedodontics (2)
DLT 118A – Ceramics (4)
DLT 119A – Partial Dentures (4)
DLT 201A – Directed Studies in Basic Dental Laboratory Techniques (1)

Winter Intersession (Second Year)

DLT 125 – Clinical Experience (3.5)
DLT 201B – Directed Studies in Intermediate Dental Laboratory Techniques (1)

Semester IV

DLT 118B – Advanced Ceramics (6)
DLT 119B – Partial Dentures (2)
DLT 124 – Dental Laboratory Management (2)
DLT 126 – Transition to Dental Laboratory Industry (2)
DLT 201C – Directed Studies in Advanced Dental Laboratory Techniques (1)

Required Electives

Summer Intersession First Year

SPCH 001 – Fundamentals of Speech (3)
or SPCH 010 – Interpersonal Communication (3)

Recommended Electives

ART 025 – Beginning Sculpture (3)
ART 031A – Color and Composition–Two Dimensional Design (3)
ART 034A – Crafts–Materials and Processes (3)
BUS 013 – Business Lectures (1)
BUS 116 – Small Business Management (3)
BUS 121 – Workplace Preparation and Skills (2)
DA 110 – Introduction to Dental Essentials (3)
DA 112 – Medical–Dental Terminology (2)

ENGL 450 – Introduction to English Essentials (3)
NURS 201 – Basic Strategies for Success in Nursing Education (1)
COUN 012 – Personal Growth and Development (3)
COUN 010 – Introduction to College (1)
COUN 011 – Learning Strategies and College Skills Development (1)
COUN 017 – Career Planning (2)

Requirements for the Associate in Science Degree – see page 89.

Restorative Dental Technology – *Certificate of Achievement, Associate in Science Degree*

Top Code: 1240.30

The Pasadena City College Restorative Dental Technology Program curriculum prepares a student for employment in a private or commercial dental laboratory or dental office performing restorative dental techniques and procedures. Emphasis is on fundamental and advanced laboratory procedures and concepts in all specialized areas: removable complete dentures, crown and fixed partial dentures, dental ceramics, removable partial dentures, implants, digital dentistry CAD CAM (three levels), and orthodontics and pedodontics. Instruction includes courses in intraoral and facial structures, dental materials, two-levels of dental anatomy, articulator instrumentation, functional anatomy, dental calculations, dental laboratory management, juris prudence, and legalities, as well as workplace readiness and dental communications. Students learn in two fully equipped, state-of-the-art laboratories dedicated to fixed and removable prosthetic fabrication and a digital workflow area. Students learn from caring, dedicated, and experienced faculty.

The Restorative Dental Technology Program is accredited by the Commission on Dental Accreditation (CODA) of the American Dental Association (ADA), a specialized accrediting body recognized by the United States Department of Education. The Program is also a member of the National Association of Dental Laboratories (NADL). Upon successful completion of the curriculum, a student is eligible to take the written Recognized Graduate Examination given by the National Board for Certification.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better. Pasadena City College will also award an Associate in Science Degree with a major in Restorative Dental Technology upon successful completion of courses prescribed for the Certificate of Achievement in the Restorative Dental Technology Program and completion of certain general education classes. Please consult with a college counselor or the college catalog for more information. Students must provide their own transportation to off-campus laboratory sites for their Clinical Experience course during the second year.

Fabricating a dental prosthesis is a tremendously detailed procedure that requires knowledge of structural mechanics, metallurgy, materials science, chemistry, biology, physiology, physics, head and neck anatomy, colorimetry and esthetics. A good restorative dental technologist not only possesses working knowledge in these areas, but also has great manual and perceptual skills. The Pasadena City College Restorative Dental Technology Program has been providing a well-rounded education in restorative dental technology since 1967.

ELIGIBILITY FOR ENTRANCE INTO THE RESTORATIVE DENTAL TECHNOLOGY PROGRAM:

1. Graduation from a U.S. accredited high school, GED, or the equivalent (such as officially translated/evaluated transcripts* from a high school or college in another country) with a 2.0 grade point average.
2. A Restorative Dental Technology Application for Admission signed, dated and filled out completely.
3. Satisfactory scores on Manual Dexterity and Hand/Eye Coordination Exams that are given by appointment with the Restorative Dental Technology Admissions Coordinator. Please call (626) 585-7200 to schedule an appointment.

4. One official U.S. high school transcript or official GED Certificate or official Equivalency Report from one of the college's acceptable companies; NOT required if Associate or higher degree is already posted on official U.S. college transcripts. *
5. One official transcript from ALL U. S. colleges and universities attended including Pasadena City College. *

* UNOFFICIAL TRANSCRIPTS AND PHOTOCOPIES OF DIPLOMAS ARE NOT ACCEPTABLE.

Please note that upon acceptance to the Restorative Dental Technology Program the College's Records Office will also require a second set of official transcripts and a health clearance by a physician.

The Restorative Dental Technology Program is accredited by the Commission on Dental Accreditation and has been granted the accreditation status of "Approval without reporting requirements". The Commission is a specialized accrediting body recognized by the United States Department of Education. The Commission on Dental Accreditation can be contacted at (312) 440-4653 or at 211 East Chicago Avenue, Chicago, IL 60611. The Commission's web address is: <http://www.ada.org/100.aspx>.

Program Outcomes:

1. Demonstrate competence in performing basic and advanced level laboratory procedures and techniques required to design and fabricate fixed and removable dental prostheses and basic orthodontic appliances appropriate for an entry-level restorative dental technologist as verified by skills and knowledge specified in the American Dental Association (ADA) Commission on Dental Accreditation (CODA) Standards for Dental Laboratory Technology.
2. Apply basic knowledge of physical properties, uses and manipulation of dental materials to insure proper materials are used in correct proportions for specific restorative procedures and that appropriate safety and disposal procedures are followed.
3. Design and fabricate fixed and removable dental prostheses that follow appropriate tooth form and function and take into consideration structures of the oral cavity, determinants of occlusal morphology, and physiology of mandibular movements.
4. Use oral, non-verbal, and written communication skills for effective professional interactions in the dental office or laboratory setting.
5. Function as a member of a diverse dental team demonstrating cultural sensitivity and no biases.
6. Be prepared to continue developing their dental, community and world awareness through attending conventions, lectures, and workshops as well as active participation in professional/non-professional organizations.
7. Apply ethical and legal principles to the dental laboratory workplace and apply regulatory considerations related to bloodborne diseases.
8. Demonstrate work practices and safety protocols that promote a safe environment.
9. Secure employment as an entry-level restorative dental technologist.
10. Successfully challenge the Recognized Graduate Examination (first step in becoming a Board Certified Dental Laboratory Technologist as granted by the National Board for Certification in Dental Laboratory Technology).
11. Be prepared to transfer to a college or university for upper level studies in the health fields.

Requirements for the Certificate of Achievement (64 units)

Semester I

- RDT 125A – Beginning Crown and Bridge (4)
- RDT 130A – Beginning Complete Dentures (4)
- RDT 135A – Beginning Dental Anatomy (2.5)
- RDT 140A – Beginning Digital Dentistry CAD CAM I (1.5)
- RDT 145 – Dental Materials (2)
- RDT 150 – Dental Communication and Workplace Readiness Skills (0.5)

Semester II

RDT 125B – Advanced Crown and Bridge (5)
RDT 130B – Advanced Complete Dentures (5)
RDT 135B – Intermediate Dental Anatomy (2.5)
RDT 140B – Intermediate Digital Dentistry CAD CAM II (1.5)
RDT 155 – Anatomy of Oral and Facial Structures (1)
RDT 160 – Dental Calculations, Weights and Measures (0.5)

Semester III

RDT 225A – Beginning Removable Partial Dentures (RPDs) (4)
RDT 230A – Beginning Dental Ceramics (5)
RDT 235A – Functional Occlusion and Articulator Instrumentation (2.5)
RDT 240 – Advanced Digital Dentistry CAD CAM III (1.5)
RDT 245 – Orthodontics and Pedodontics (3)
RDT 250 – Laboratory Bus. Mgmt/ Admin, Legalities, Ethics and Jurisprudence (1)

Semester IV

RDT 225B – Advanced Removable Partial Dentures (RPDs) (3)
RDT 230B – Advanced Dental Ceramics (5)
RDT 235B – Advanced Functional Occlusion and Biomechanics of the Masticatory System (2.5)
RDT 255 – Introduction to Dental Implants (2)
RDT 260 – Transition to the Restorative Dental Technology Profession (1.5)
RDT 265 – Clinical Experience (3)

Recommended Electives

ART 025 – Beginning Sculpture (3)
ART 034A – Crafts–Materials and Processes (3)
BUS 013 – Business Lectures (1)
BUS 116 – Small Business Management (3)
COUN 010 – Introduction to College (1)
COUN 011 – Learning Strategies and College Skills Development (1)
COUN 012 – Personal Growth and Development (3)
COUN 017 – Career Planning (2)
DA 110 – Introduction to Dental Essentials (3)
ENGL 450 – Introduction to English Essentials (3)

Requirements for the Associate in Science Degree – see page 89.

DESIGN STUDIES

(Visual Arts and Media Studies Division)

Industrial Design – Occupational Skills Certificate

Top Code: 1009.00

The curriculum prepares students with some prior design background to seek entry-level employment/internship in the industrial design professions, which encompass product, transportation, environmental and entertainment design. Students also use portfolios for transfer application to four-year and graduate institutions. Innovation and the creative design process are the focus of the program. Completion of the program results in a portfolio of projects.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Understand the fundamental purpose of the industrial design professions and its integral role in the business world.
2. Create hands-on projects that demonstrate basic design processes which include problem definition, research, concept development and refinement, and final presentation.
3. Perform appropriate technical skills using professional tools, materials and processes for application to design projects and presentations.
4. Analyze, evaluate and improve designs through the critique process.

Requirements for the Occupational Skills Certificate (15 units):

Recommended sequence:

Semester I

ART 018 – Rendering (3)

Semester II

ART 033A – Product Design Application (3)

ART 118 – Advanced Rendering (3)

or ART 015 – Sketching For Design (3)

Semester III ART 033B – Product Design Application (3)

Semester IV

ART 033C – Product Design Application (3)

Recommended Electives

ART 011A – Foundation Drawing (3)

ART 016 – Perspective (3)

ART 032A – Design–Three Dimensional (3)

ART 056 – Introduction to Digital Painting & Drawing (3)

ART 155A – 3-D Modeling and Sculpting (3)

PHOT 030 – Introduction to Digital Image Editing (3)

Interior Design – Occupational Skills Certificate

Top Code: 1302.00

The curriculum prepares students to transfer to a 4-year Interior Design program or seek employment in the interior design industry as entry-level designers. Emphasis is on a solid foundation in the area of Interior Design. Students will develop a portfolio.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate a command of the vocabulary of the interior design field, and an understanding of the components of interior design.
2. Create original design projects that analyze, define, and solve problems in interior design, including space planning, materials and furnishings, design communication and visualization.
3. Utilize the critique process to analyze design solutions and the effectiveness of the visual communication of projects.
4. Create and present a portfolio of original student work that represents the necessary skills and an understanding of the principles and elements of design relative to the profession of interior design.

Requirements for the Occupational Skills Certificate (15 units):

ART 016 – Perspective (3)
ART 032A – Design–Three Dimensional (3)
ART 041A – Interior Design: Space Planning and Materials I (3)
ART 041B – Interior Design: Space Planning and Materials II (3)
ART 041C – Interior Design: Space Planning and Materials III (3)

Recommended Electives

ART 001A – History of Western Art–Prehistoric through Medieval (3)
ART 001B – History of Western Art (3)
ART 031A – Color and Composition–Two Dimensional Design (3)
ART 031B – Color Theory (3)
ART 033A – Product Design Application (3)
ART 040 – Introduction to Digital Arts (3)

Jewelry/Metalworking – Occupational Skills Certificate

Top Code: 1009.10

This curriculum of design, metal fabrication, stone setting, and lost wax casting prepares students for entry-level employment in the jewelry design and manufacturing industry. This curriculum will also prepare the student seeking to transfer to a jewelry/metalworking program in a public or private four-year college.

An Occupational Skills Certificate is awarded upon the completion of all required courses with a grade of C or better.

Program outcomes:

1. Produce jewelry/objects that will demonstrate an understanding of basic design principles, stone setting, and jewelry/metalworking techniques.
2. Analyze and evaluate the jewelry/objects utilizing the critique process.

Requirements for the Occupational Skills Certificate (15 units):

Semester I

ART 034A – Crafts – Materials and Processes (3)
ART 036A – Jewelry/Metal Fabrication (3)

Semester II

ART 036B – Jewelry/Metal Fabrication (3)

Semester III

ART 036C – Jewelry Casting (3)

Semester IV

ART 135 – Portfolio Development of Jewelry and Metal Fabrication (3)
or ART 034B – Crafts – Materials and Processes (3)

Recommended Electives

ART 001A – History of Western Art–Prehistoric through Medieval (3)
ART 004D – History of Modern Art (3)
ART 015 – Sketching For Design (3)
ART 018 – Rendering (3)
ART 031A – Color and Composition–Two Dimensional Design (3)

ART 032A – Design–Three Dimensional (3)
ART 033A – Product Design Application (3)
ART 106 – Art Since 1945 (3)
PHOT 021 – Introduction to Black and White Photography (3)

Product Design – Certificate of Achievement, Associate in Science Degree

Top Code: 1013.00

The program prepares students with a portfolio to enter the product design profession as an entry-level designer. The courses develop a broad range of skills to seek employment in such diverse industries as product, transportation, environmental, entertainment and apparel/accessories design. Projects emphasize creativity, function, environmental, and social concerns.

Portfolios can also be used for transfer application to four-year and graduate programs.

A Certificate of Achievement is awarded upon successful completion of all required courses with a grade of C or better.

Program Outcomes:

1. Understand the innovative purpose of the product design profession and its integral role in the business world.
2. Create hands-on projects that demonstrate product design processes which include problem definition, research, concept development and refinement, and final presentation.
3. Analyze, evaluate and improve designs through the critique process.

Requirements for the Certificate of Achievement (33 units):

Recommended sequence:

Semester I

ART 015 – Sketching For Design (3)
ART 016 – Perspective (3)
ART 031A – Color and Composition–Two Dimensional Design (3)
DT 008A – Introduction to Digital Design & Fabrication (3)

Semester II

ART 018 – Rendering (3)
ART 033A – Product Design Application (3)
ART 050A – Introduction to Graphic Design & Advertising (3)

Semester III

ART 033B – Product Design Application (3)
ART 036A – Jewelry/Metal Fabrication (3)

Semester IV

ART 025 – Beginning Sculpture (3)
ART 033C – Product Design Application (3)
 or ART 038A – Ceramics (3)
 or FASH 001A – Fashion Survey (3)

Recommended Electives

ART 001A – History of Western Art–Prehistoric through Medieval (3)
ART 004D – History of Modern Art (3)
ART 011A – Foundation Drawing (3)
ART 026 – Sculpture (3)

ART 027 – Sculpture Technology–Metal Casting and Mold Making (3)
ART 031A – Color and Composition–Two Dimensional Design (3)
ART 034A – Crafts – Materials and Processes (3)
ART 034B – Crafts – Materials and Processes (3)
ART 036B – Jewelry/Metal Fabrication (3)
ART 036C – Jewelry Casting (3)
ART 038B – Ceramics (3)
ART 038C – Ceramics (3)
ART 050B – Intermediate Graphic Design & Advertising (3)
ART 050C – Advanced Graphic Design & Advertising (3)
ART 110A – Skills for Success in Design Digital Media (1)
ART 118 – Advanced Rendering (3)
BUS 002 – Personal Finance (3)
BUS 009 – Introduction to Business (3)
BUS 010 – Introduction to Management (3)
BUS 011A – Business Communications (3)
DT 008B – Intermediate Digital Design and Fabrication (3)
DT 008C – Advanced Systems Design & Fabrication (4)
DT 118 – A/E/C Modeling (3)
ENGR 002 – Descriptive Geometry (3)
ENGR 015A – Applied Mechanics–Statics (3)
MACH 220A – Introduction to Manufacturing Technology (3)
MRKT 020 – Principles of Marketing (3)
MRKT 133 – Marketing Trends (3)
PHOT 021 – Introduction to Black and White Photography (3)
WELD 044A – Introduction to Gas Welding (1)

Requirements for the Associate in Science Degree – see page 89.

Product Design – Graphics – *Certificate of Achievement, Associate in Science Degree*

Top Code: 1013.00

The program prepares students with an interest and strengths in graphics with a portfolio to enter the product design profession as an entry-level designer. The courses develop a focused range of knowledge and skills to seek employment with an emphasis on graphic application related to products. Projects emphasize creativity, function, environmental, and social concerns in addition to technical skills.

Portfolios can also be used for transfer application.

Completion of all courses with a grade of C or better is required for the certificate.

Program Outcomes:

1. Understand the fundamental purpose of graphic design with application to product design.
2. Create projects that demonstrate product-graphic design processes which include branding/identity, packaging, computer assisted drawing and painting.
3. Analyze, evaluate and improve designs through the critique process.

Requirements for the Certificate of Achievement (33 units):

Recommended sequence:

Semester I

ART 015 – Sketching For Design (3)

ART 016 – Perspective (3)

ART 031A – Color and Composition–Two Dimensional Design (3)

Semester II

ART 018 – Rendering (3)

ART 033A – Product Design Application (3)

ART 050A – Introduction to Graphic Design & Advertising (3)

Semester III

ART 033B – Product Design Application (3)

ART 051A – Typography – Lettering (3)

ART 056 – Introduction to Digital Painting & Drawing (3)

Semester IV

ART 033C – Product Design Application (3)

PHOT 030 – Introduction to Digital Image Editing (3)

Recommended Electives

ART 001A – History of Western Art–Prehistoric through Medieval (3)

ART 011A – Foundation Drawing (3)

PHOT 021 – Introduction to Black and White Photography (3)

Requirements for the Associate in Science Degree – see page 89.

Product Design – Technology – Certificate of Achievement, Associate in Science Degree

Top Code: 1013.00

The program prepares students with an interest and strengths in technology with a portfolio to enter the product design profession as an entry-level designer. The courses develop a focused range of knowledge and skills to seek employment as a product designer with an emphasis on production. Projects emphasize creativity, function, environmental, and social concerns in addition to technical skills.

Portfolios can also be used for transfer application.

Completion of all courses with a grade of C or better is required for the certificate.

Program Outcomes:

1. Understand the technical aspects of the industrial design profession.
2. Create hands-on projects that demonstrate basic technical design processes which include computer-aided drafting (CAD) and 3-dimensional modeling and animation.
3. Analyze, evaluate and improve design projects through the critique process.

Requirements for the Certificate of Achievement (36 units):

Recommended sequence:

Semester I

ART 015 – Sketching For Design (3)

ART 016 – Perspective (3)

ART 031A – Color and Composition–Two Dimensional Design (3)

Semester II

ART 018 – Rendering (3)

ART 033A – Product Design Application (3)

DT 008A – Introduction to Digital Design & Fabrication (3)

Semester III

ART 033B – Product Design Application (3)

PHOT 030 – Introduction to Digital Image Editing (3)

DT 017 – Building Construction Technical Graphics (3)

Semester IV

ART 033C – Product Design Application (3)

ART 155A – 3-D Modeling and Sculpting (3)

ARCH 010A – Architectural Design Fundamentals (3)

Recommended Electives

ART 001A – History of Western Art–Prehistoric through Medieval (3)

ART 011A – Foundation Drawing (3)

PHOT 021 – Introduction to Black and White Photography (3)

Requirements for the Associate in Science Degree – see page 89.

DESIGN TECHNOLOGY **(Engineering & Technology Division)**

CAD Designer – Architecture/Engineering/Construction – Occupational Skills Certificate

Top Code: 0953.10

The curriculum prepares students to be advanced users of three dimensional Computer-Aided Design – CAD and Building Information Modeling – BIM systems to solve building and construction design problems using the principles and standards of Sustainable Technology. A CAD Designer leads design activities with knowledge of sustainable production processes and industry standards. Job functions include interpreting building codes, LEED and current industry sustainability standards, formulas or data for engineering design, geometric problem solving, presentations of design reviews, and collaborating in design projects. This course of study prepares participants for successful completion of LEED accreditation at the Associates Level.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate an ability to communicate effectively using technical, graphical, oral and written formats.
2. Demonstrate appropriate mastery of industry technical graphic standards, Computer-Aided Design, Building Information Modeling strategies and techniques, and rapid prototyping and sustainable technologies in the design and representation of architectural, engineering and construction systems
3. Demonstrate appropriate mastery of industry technical graphical standards in the critical analysis of technical graphics and digital prototypes of architectural, engineering and construction systems or processes.

4. Collaborate effectively in teams to produce comprehensive design technology solutions to architectural, engineering and construction systems and processes.

Requirements for the Occupational Skills Certificate (13 units):

DT 017 – Building Construction Technical Graphics (3)
DT 110 – Sustainable Technologies (3)
DT 114 – Building Information Modeling Design (BIM Design) (4)
DT 118 – A/E/C Modeling (3)

CAD Modeling & Animation – Architecture/Engineering/Construction – Occupational Skills Certificate
Top Code: 0953.10

The curriculum prepares students to apply CAD systems to model industry specific architectural and engineering projects. Job functions include creating models of engineering designs and structures, creating associative drawings to models, generating computerized visualizations of architectural models.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate appropriate fluency of industry specific drawing standards and Computer-Aided-Design techniques in the development of architectural plans.
2. Demonstrate appropriate mastery of industry specific drawing standards through the analysis of written and tabular code data, and building processes.
3. Demonstrate an ability to effectively communicate through the use of two-dimensional appropriate and three-dimensional graphics, oral and written presentations.
4. Perform basic mathematical calculations in units of measure consistent with the architectural/engineering/construction industry.

Requirements for the Occupational Skills Certificate (13 units):

Semester I

DT 008A – Introduction to Digital Design & Fabrication (3)

Semester II

DT 017 – Building Construction Technical Graphics (3)

Semester III

DT 114 – Building Information Modeling Design (BIM Design) (4)
DT 118 – A/E/C Modeling (3)

CAD Technician – Architecture/Engineering/Construction – Occupational Skills Certificate
Top Code: 0953.10

The curriculum prepares students to be functional within two-dimensional CAD systems used in the architecture/engineering/construction industry. A CAD technician is an entry level position working in a team of architects or engineers. Job functions would include generating drawings from existing designs, plotting drawings, and electronic file handling and file management.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate appropriate mastery of basic orthographic projection techniques.
2. Demonstrate an ability to effectively communicate through the use of two-dimensional graphics, oral and written presentations.
3. Perform basic mathematical calculations in units of measure consistent with the architectural/engineering/construction industry.

Requirements for the Occupational Skills Certificate (9 units):**Semester I**

DT 008A – Introduction to Digital Design & Fabrication (3)

TECH 107A – Technical Calculations (3)

Semester II DT 017 – Building Construction Technical Graphics (3)

CAD Technician – Mechanical Design and Manufacturing – Occupational Skills Certificate

Top Code: 0953.40

The curriculum prepares students to read and create technical graphics and design and produce digital prototypes for the design of mechanical components within a manufacturing process. Technologies utilized in the program include parametric solid modeling CAD systems to generate 3D models, technical graphics and analysis, and to produce laser cut and 3D printed mechanical prototypes. Interpretation of engineering drawings is based on American Society of Mechanical Engineers (ASME) Y14 standards.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate an ability to communicate effectively using technical, graphical, oral and written formats.
2. Demonstrate appropriate mastery of industry technical graphic standards. Computer-Aided Design techniques, sustainable technology and rapid prototyping and additive production technologies in the design of components, systems or processes of mechanical design.
3. Demonstrate appropriate mastery of industry technical graphical standards in the analysis of technical graphics and digital prototypes of mechanical design components, systems or processes.
4. Collaborate effectively in teams to produce comprehensive design technology solutions to mechanical and manufacturing processes and systems.

Requirements for the Occupational Skills Certificate (13 units):

DT 008A – Introduction to Digital Design & Fabrication (3)

DT 008B – Intermediate Digital Design and Fabrication (3)

DT 008C – Advanced Systems Design & Fabrication (4)

DT 110 – Sustainable Technologies (3)

Design Technology Pathway – Occupational Skills Certificate

Top Code: 0999.00

The curriculum prepares students for success in a wide variety of design-related disciplines through developmental Math and English contextualized for Design and Digital Fabrication. In addition to qualifying for entry-level positions in a variety of design fabrication facilities, the curriculum can be used as the first step towards a Certificate of Achievement, Associate in Science Degree, Associate of Arts Degree or transfer to a 4- or 5-year institution for professional degrees. The Certificate offers

a strong foundation in interdisciplinary Design Fundamentals, real world design processes, and prototyping technologies in a state of the art Fabrication Laboratory (Fablab). Additional emphasis is on marketplace needs for professional skills and practices including teamwork, problem solving, critical thinking, and communication ensuring an adaptable skill set for lifelong learning.

To enter the program, students first apply to the Design Technology Pathway at <http://www.pasadena.edu/designtech/> and after obtaining their assessment tests results, it is determined they require developmental Math and English. It is encouraged that students have a strong interest in a design-based career in one of the following disciplines: Architecture, Engineering, Fashion, Film or Television, Graphic Design, Interior Design, Jewelry, Manufacturing Technologies, Product Design, Theatre, Photography, Print Technology, and Robotics.

Apply at <http://www.pasadena.edu/designtech/>

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Originate creative solutions to basic interdisciplinary problems through design thinking methodologies.
2. Apply appropriate technologies, strategies and calculations to develop successful design prototypes.
3. Effectively communicate successful design solutions through audience specific verbal, written and visual presentation techniques and materials.
4. Build productive teamwork through collaboration.

Requirements for the Occupational Skills Certificate (15 units):

Recommended sequence:

Semester I

ENGL 100 – Reading and Writing Skills (4)

MATH 402 – Prealgebra (4)

DT 100 – Design Technology (3)

Semester II

MATH 125 – Beginning Algebra (4)

Design Technology Mechanical + Manufacturing – Certificate of Achievement, Associate in Science Degree

Top Code: 0953.00

The Design Technology Mechanical + Manufacturing program prepares students to work in mechanical design, industrial design, or manufacturing areas as entry level designers, virtual and rapid prototype builders, or Computer Aided Design (CAD)/Computer Aided Manufacturing (CAM) technicians. The program builds on the CAD Technician – Mechanical Design & Manufacturing Occupational Skills Certificate and leads to the Associate of Arts Degree in Engineering and Technology, as well as providing a transfer pathway to Baccalaureate programs in Engineering Technology.

The emphasis is on creating original solutions to engineering design technology problems through rigorous design and prototyping processes, using digital rapid prototyping technologies, within a collaborative, project-based environment consistent with advanced manufacturing industry demands of a globalized, sustainable economy.

With a focus on communication skills and creative critical thinking, entry level students develop engineering design solutions through research, prototyping, analysis and evaluation in an iterative process involving preliminary sketching, 2D and 3D CAD drawing and parametric modeling, rapid prototyping using 3D printing, laser and plasma cutting, CNC milling and forming, micro controllers and mechatronics. Advanced students develop complex design solutions integrating multiple

technologies and procedures for real world application in competitions, entrepreneurial ventures and startups in an industry incubator model.

The program includes integrated, contextualized academics, industry credentialing, interdisciplinary collaboration, professional development and work experience opportunities to develop long term transferable skills sets aligned to work force needs evidenced through advisory groups and industry engagement. Graduating students work under the supervision of qualified engineers, industrial designers, product designers or advanced manufacturing technicians at professional offices meeting customer requirements and deadlines by realizing products in a production system.

This program prepares students for entry into high demand fields in advanced manufacturing, industrial design, engineering and specialized fabrication areas from aerospace to entertainment and medical technology.

A Certificate of Achievement is awarded upon completion of all courses with a grade of C or better.

Program Outcomes:

1. Apply design technology principles and processes to create original, comprehensive solutions to complex engineering design and fabrication problems.
2. Utilize appropriate technologies and techniques to produce complex iterative prototypes within a digital workflow to meet industry standards and criteria.
3. Communicate effectively using audience appropriate technical, graphical, oral and written formats in the critical evaluation of processes and products.
4. Collaborate effectively in diverse teams to identify, analyze and solve technical problems of contemporary professional, societal and global importance.

Requirements for the Certificate of Achievement (20–28 units):

DT 008A – Introduction to Digital Design & Fabrication (3)
DT 008B – Intermediate Digital Design and Fabrication (3)
DT 008C – Advanced Systems Design Fabrication (4)
ENGL 100 – Reading and Writing Skills (4)
MATH 125 – Beginning Algebra (4)

Required Electives – Select one course from the following:

ARCH 014 – Materials and Processes of Construction (2)
ART 033A – Product Design Application (3)
ART 036A – Jewelry/Metal Fabrication (3)
DT 101 – Fabrication Laboratory (2)
DT 105 – Emerging Applied Technologies (2)
DT 110 – Sustainable Technologies (3)
ELTN 130 – Introduction to Electronics (3)
FASH 001A – Fashion Survey (3)
MACH 101 – Beginning Metalworking Skills (3)
MIT 101 – Introduction to Robotics (4)
WELD 200A – Introduction to Welding (10)

Requirements for the Associate in Science Degree – see page 89.

Engineering & Technology – Associate in Arts Degree

Top Code: 924.00

The Engineering and Technology area of emphasis allows students the opportunity to pursue multidisciplinary programs of study at the university level. This area of emphasis provides a flexible environment for high-achieving students to study complex engineering disciplines such as architectural engineering, biochemical engineering, computer sciences, electromechanical engineering, mathematics, mechanical engineering, engineering mathematics, engineering physics, and other similar disciplines at CSU, UC, and private universities.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. *When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Program Outcomes:

1. Cognition / Curriculum: Analyze and evaluate disciplinary concepts and principles to solve complex problems
2. Information Competency / Resource Planning: Synthesize research findings, disciplinary techniques and technology in the resolution of a capstone assessment
3. Student Goals: Successfully realize cumulative achievement to achieve Degree attainment or transfer.

Requirements for the area of emphasis (18 units minimum)

Courses must be completed with a grade of C or better. All courses must be numbered 001–099. Students must complete 18 units with at least 3 units in three of the disciplines listed below.

Architecture:

ARCH 010A – Architectural Design Fundamentals (3)
ARCH 010B – Design Fundamentals (3)
ARCH 011 – Introduction to Architecture (2)
ARCH 012A – Visual Communications I (3)
ARCH 012B – Visual Communications II (3)
ARCH 014 – Materials and Processes of Construction (2)
ARCH 020A – Architectural Design (6)
ARCH 020B – Architectural Design (6)
ARCH 022A – Architectural Practice (5)
ARCH 022B – Architectural Practice (5)
ARCH 024A – History of Architecture (3)
ARCH 024B – History of Architecture (3)

Computer Information Systems:

CIS 001 – Introduction to Computers (3)
CIS 002 – Introduction to Info Systems and Programming (5)
CIS 010 – Introduction to Information Systems (3)
CIS 011 – Information and Communication Technology Essentials (4)
CIS 014 – C++ Programming (3)
CIS 016 – Java Programming (3)
CIS 022 – Introduction to the Internet (3)
CIS 030 – Networks and Telecommunications (3)
CIS 031 – Database Systems (3)
CIS 036 – Introduction to Visual Basic (3)
CIS 038 – Advanced Visual Basic (3)
CIS 040 – UNIX Administration (3)
CIS 050 – Survey of E-Commerce/E-Business Technology (3)
CIS 055 – Introduction to E-Business Practices (3)
CIS 060 – E-Commerce Fundamentals (3)

CIS 062 – Introduction to Systems Analysis (3)
CIS 066 – Assembly Language Programming (3)
CIS 074 – Introduction to Object Oriented Systems Analysis and Design (3)
CIS 080 – Microcomputer Applications (3)

Computer Science:

CS 001 – Introduction to Computers and Programming (5)
CS 003A – Fundamentals of Computer Science II (C++) (4)
CS 003B – Fundamentals of Computer Science II (Java) (4)
CS 004 – Programming Languages (3)
CS 006 – Introduction to Applied Logic Design (4)
CS 008 – Fundamentals of Computer Science III – Data Structures (4)
CS 010 – Pascal (4)
CS 012 – C Programming (3)
CS 018 – UNIX Scripting With Bash (4)
CS 038 – Introduction to Software Engineering (5)
CS 039 – Introduction to Computer Architecture (4)
CS 043 – Fortran (4)
CS 045 – Discrete Structures with Computer Science Applications (5)
CS 050 – Introduction to Numerical Methods (5)
CS 066 – Assembly Language Programming for the Sciences and Mathematics (4)
CS 080 – Seminar in Computer Science and Computer Engineering (2)

Electricity and Electronics:

ELTY 012 – Basic Electricity–Electronics (Industrial Arts) (2)
ELTN 009 – Principles of DC and AC Network Analysis (5)
ELTN 015 – Computer Aided Electronic Drafting (3)
ELTN 025 – Logic & Microcomputer Electronics (4)
ELTN 031 – Circuit Analysis (5)
ELTN 032 – Digital and Control Electronics (4)

Engineering:

ENGR 001A – Surveying (3)
ENGR 001B – Surveying (3)
ENGR 002 – Engineering Graphics (3)
ENGR 006 – Engineering Drawing (2)
ENGR 010 – Introduction to Engineering (2)
ENGR 014 – Materials of Construction (3)
ENGR 015A – Applied Mechanics–Statics (3)
ENGR 015B – Applied Mechanics (3)
ENGR 016 – Engineering Circuits (3)
ENGR 017 – Dynamics (3)

Design Technology:

DT 008A – Introduction to Digital Design and Fabrication (3)
DT 008B – Intermediate Digital Design and Fabrication (3)
DT 008C – Advanced Systems Design and Fabrication (4)
DT 017 – Building Construction Technical Graphics (3)

Mathematics:

MATH 003 – College Algebra (4)
MATH 005A – Single Variable Calculus I (5)
MATH 005B – Single Variable Calculus II (5)
MATH 005C – Multivariable Calculus (5)

MATH 007A – Mathematical Analysis 1 (4)
MATH 007B – Mathematical Analysis 2 (4)
MATH 008 – Trigonometry (4)
MATH 009 – Precalculus Mathematics (5)
MATH 010 – Linear Algebra and Applications (5)
MATH 022 – Discrete Mathematics (4)
MATH 055 – Differential Equations (5)

Physics:

PHYS 001A – General Physics (5)
PHYS 001B – General Physics (5)
PHYS 001C – General Physics (5)
PHYS 001D – General Physics (5)
PHYS 002A – General Physics (4)
PHYS 002B – General Physics (4)
PHYS 031A – General Physics (5)
PHYS 031B – General Physics (5)

Requirements for the Associate in Arts Degree – see page 85.

DIGITAL MEDIA

(Visual Arts and Media Studies Division)

Digital Media – Foundation – *Occupational Skills Certificate*

Top Code: 0614.00

Completion of the Digital Media – Foundation Certificate will prepare students for entry-level employment in graphic design, interactive design, web design, motion graphic design, and/or other related occupations. Students will establish a strong foundation in both the technical and artistic aspects of the digital media industry.

This one-year foundation program will emphasize production processes, creativity, problem solving, visual design thinking, project management, and collaborative teamwork.

An Occupational Skills Certificate is awarded upon completion of all required courses with a C or better.

All courses in this certificate require literacy and proficiency in writing and math. Projects require written, oral, and visual presentations as well as the application of basic math principles and skills.

Program Outcomes:

1. Apply the elements and principles of design in finished digital images and time-based works.
2. Produce digital images and time-based work through various digital media input and output methods.
3. Examine and describe contemporary approaches, language, and aesthetics in digital media.
4. Evaluate and critique digital images and time-based media works utilizing relevant terminology and concepts.
5. Demonstrate competence in the use of tools, materials, and concepts for creating original art and design projects.

Requirements for the Occupational Skills Certificate (15 units):

Recommended sequence:

Semester I

ART 011A – Foundation Drawing (3)
ART 031A – Color and Composition–Two Dimensional Design (3)
PHOT 031 – Beginning Digital Photography (3)

Semester II

ART 040 – Introduction to Digital Arts (3)
 or ART 050A – Introduction to Graphic Design & Advertising (3)
ART 056 – Introduction to Digital Painting & Drawing (3)

Recommended Electives

ART 001A – History of Western Art–Prehistoric through Medieval (3)
ART 001B – History of Western Art (3)

Digital Media – Graphic Design – Certificate of Achievement, Associate in Science Degree

Top Code: 1030.00

The curriculum prepares students to seek employment in the advertising/graphic design industry as entry-level production designers or junior graphic designers. Emphasis is on a solid foundation in the area of commercial art. Students will develop a portfolio.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate a command of the vocabulary of the graphic design field, and a thorough understanding of the components of graphic design/advertising.
2. Create advanced original design projects that analyze, define, and solve problems in visual communications.
3. Utilize the critique process to analyze the effectiveness of visual communications on graphic design/advertising projects.
4. Demonstrate competency in the operation of computer graphics applications and hardware to produce graphic design and advertising projects.
5. Create and present a portfolio of original student work that represents an advanced understanding of visual communication and design principles.

Requirements for the Certificate of Achievement (48 units):

Recommended sequence:

Semester I

ART 011A – Foundation Drawing (3)
ART 015 – Sketching For Design (3)
ART 031A – Color and Composition–Two Dimensional Design (3)
PHOT 021 – Introduction to Black and White Photography (3)

Semester II

ART 016 – Perspective (3)
ART 032A – Design–Three Dimensional (3)
ART 050A – Introduction to Graphic Design & Advertising (3)
ART 051A – Typography – Lettering (3)

Semester III

ART 018 – Rendering (3)
ART 050B – Intermediate Graphic Design & Advertising (3)
ART 056 – Introduction to Digital Painting & Drawing (3)
PHOT 030 – Introduction to Digital Image Editing (3)

Semester IV

ART 001A – History of Western Art–Prehistoric through Medieval (3)
 or ART 001B – History of Western Art (3)
ART 050C – Advanced Graphic Design & Advertising (3)
ART 052A – Introduction to Illustration (3)
PHOT 130 – Advanced Digital Image Editing (3)

Recommended Electives

ART 024 – Printmaking – Silk Screen (3)
ART 031B – Color Theory (3)
ART 034A – Crafts – Materials and Processes (3)
ART 040 – Introduction to Digital Arts (3) *(recommended for students with no computer graphic software experience)*
ART 051B – Typography – Application (3)
ART 118 – Advanced Rendering (3)
BUS 002 – Personal Finance (3)
BUS 009 – Introduction to Business (3)
BUS 010 – Introduction to Management (3)
BUS 011A – Business Communications (3)
GRFX 010 – Introduction to Graphic Communications Technology (2)
MRKT 020 – Principles of Marketing (3)
MRKT 133 – Marketing Trends (3)
PHOT 023A – Color Photography (3)
PHOT 024A – Alternative Processes in Photography (3)
PHOT 026A (CINE 026A) – Beginning Electronic Filmmaking (3)
PHOT 026B (CINE 026B) – Intermediate Filmmaking – Electronic (3)
PHOT 026C (CINE 026C) – Advanced Filmmaking (3)

Requirements for the Associate in Science Degree – see page 89.

ELECTRICAL AND ELECTRONIC TECHNOLOGY **(Engineering & Technology Division)**

Applied Circuits & Systems – Occupational Skills Certificate

Top Code: 0934.00

The curriculum prepares the student for employment and career development in the Electrical industry. Students enrolling will have the opportunity to receive instruction and hands-on laboratory experience in theory and applications of direct current and alternating current circuits. Explanation of electrical terms, components, electrical codes and standards and applications and interaction of power distribution, energy management, cogeneration and alternate energy will be covered.

Additional studies include print and specifications, electrical code requirements and standards, conduits, lighting systems, control and protective devices, grounding systems, transformers, specialty systems and power generation and distribution systems. The use of precision test and measurement instruments such as analyzer and diagnostic scan tools keep students current with the latest industry standards. All related applicable specifications and technical calculations are covered.

This program also meets the standards set by the California Department of Apprenticeship Standards towards the current California Electrician Certification testing. Once a student has completed the program, that student will be allowed to register to take the Electrician's Certificate Exam. California Division of Apprenticeship Standards approved School: #133.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate an understanding of the basic principles of electricity, electrical laws, circuit concepts, application of DC and AC, and series/parallel/combo circuits.
2. Demonstrate knowledge and skills required to perform basic apprentice level electrical duties per electrical codes, and safety practices.
3. Differentiate and apply the proper selection of tools and materials for electrical service, installation and repairs.
4. Demonstrate an understanding of the principles of power production, generation, transmission and distribution of electrical energy.
5. Demonstrate an understanding of hardware/software and application of Programmable Logic Controller (PLC) Systems and their use in the manufacturing process.

Requirements for the Occupational Skills Certificate (16 units):

Recommended sequence:

ELTY 248A – Introduction to Electrical Technology (4)

ELTY 248B – Electrical Power Generation and Control Circuits (4)

ELTY 248C – Electrical Power Distribution Systems and Machinery (4)

ELTY 248D – Programmable Controllers/Solid State Devices/Electronic Application (4)

Recommended electives

ELTY 217 – Electrical Inspection and Codes (2)

BLDG 212 – Print Reading for Construction (3)

BLDG 213 – Building Construction Codes and Standards (3)

Electrical Technology – Certificate of Achievement, Associate in Science Degree

Top Code: 0934.00

The Electrical Technology program provides leading edge technical training, which will prepare students for career opportunities in the electrical industry.

The curriculum offers technical training to acquire knowledge and skills related to the design and installation of electrical equipment, materials, devices and lighting fixtures for the Building Construction Program. Hands-on laboratory experiments will offer the necessary experience for safe use and operation of electrical hand and power tools. Technical training includes National Electrical Codes and standards. The program offers basic concepts and principles of electricity, machinery, and programming programmable logical controllers. Students will be instructed with state of the art technology test and measurement instruments.

This program also meets the standards set by the California Department of Apprenticeship Standards towards the current California Electrician Certification testing. Upon successful completion of the program, that student will be allowed to register to take the Electrician's Certificate Exam. California Division of Apprenticeship Standards approved School: #133.

Employment opportunities may include positions such as electrical assistant, electrical technician, maintenance technician, public utilities and sales representative, engineering technician along with purchasing and project administrator.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Describe principles of Direct and Alternating current, Ohm's law, current/voltage/power laws both verbally and in writing.
2. Demonstrate an installation of a residential branch circuit for a three-way switch.
3. Differentiate and apply the proper selection of materials, tools and test equipment for residential and commercial Electrical installation and repairs.
4. Demonstrate knowledge and skills required to perform basic apprentice-level electrician duties required by National Electrical code (NEC) for residential wiring.

Requirements for the Certificate of Achievement (18 units):

Recommended sequence:

ELTY 217 – Electrical Inspection and Codes (2)
ELTY 248A – Introduction to Electrical Technology (4)
ELTY 248B – Electrical Power Generation and Control Circuits (4)
ELTY 248C – Electrical Power Distribution Systems and Machinery (4)
ELTY 248D – Programmable Controllers/Solid State Devices/Electronic Application (4)

Recommended electives

ELTY 250 – Introduction to Photovoltaic Systems (4)
ELTY 251 – Photovoltaic Theory and Installation Techniques (4)
TECH 107A – Technical Calculations (3)

Requirements for the Associate in Science Degree – see page 89.

Electronics Technology Basic Digital Technician – Occupational Skills Certificate

Top Code: 0934.00

The curriculum contained in this certificate of completion provides a student with the necessary skills to seek entry-level employment as an electronics technician working on digital electronics systems. Students completing this certificate program will have the basic skills needed to work with electronic digital and microprocessor based equipment. In addition to the ability to use common electronics test equipment, such as oscilloscopes and digital multimeters, they will have an understanding of microcontroller hardware and software and the ability to prototype, test, and debug simple microcontroller based systems.

A Certificate of Completion is awarded upon completion of all required courses with a grade of C or better.

Requirements for the Occupational Skills Certificate (12 units):**Semester I**

ELTN 115 – Printed Circuit & Electronic Hardware Design (2)
ELTN 130 – Introduction to Electronics (3)

Semester II

ELTN 117 – Introduction to Microcontrollers and Embedded Design (3)

Semester III

ELTN 132 – Digital and Control Electronics (4)

Photovoltaic Design & Installation – Certificate of Achievement, Associate in Science Degree

Top Code: 0946.00

This program provides a comprehensive introduction to solar photovoltaic (PV) energy systems, including system sizing, design and installation. Basic electrical theories and National Electrical Code related to photovoltaic will be studied. Hands-on experiments and laboratory assignments with state-of-the-art test instruments will provide testing and troubleshooting techniques. Successful participants will also be qualified to sit for the North American Board of Certified Energy Practitioners (NABCEP) "PV Installer Entry Level Certificate of Knowledge" examination.

Employment opportunities may include positions such as photovoltaic installer, inspector, electrical assistant, electrical technician, maintenance technician, public utilities and sales representative, engineering technician along with purchasing and project administrator.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Explain residential and commercial photovoltaic system terminology and installation techniques both verbally and in writing
2. Demonstrate an apprentice-level installation of a residential rooftop photovoltaic system
3. Demonstrate knowledge and skills required to install basic ground and pole mount photovoltaic systems
4. Differentiate and apply the proper selection of materials, tools and test equipment for residential photovoltaic system installation and repairs.
5. Demonstrate the use of the Sun pathfinder calculator for shading analysis

Requirements for the Certificate of Achievement (18 units):

Recommended sequence:

ELTY 217 – Electrical Inspection and Codes (2)
ELTY 248A – Introduction to Electrical Technology (4)
ELTY 248B – Electrical Power Generation and Control Circuits (4)
ELTY 250 – Introduction to Photovoltaic Systems (4)
ELTY 251 – Photovoltaic Theory and Installation Techniques (4)

Recommended electives

BLDG 212 – Print Reading for Construction (3)
DT 008A – Engineering Graphics (3)
TECH 107A – Technical Calculations (3)

Requirements for the Associate in Science Degree – see page 89.

EMERGENCY MEDICAL (Health Sciences Division)

Emergency Medical Technician I-A – Occupational Skills Certificate

Top Code: 1250.00

The EMT curriculum provides the student with the necessary skills to seek employment with ambulance service companies as an Emergency Medical Technicians I-A. Emphasis is on the fundamental principles and skills required to provide emergency medical care for patients at the scene of an accident or the onset of sudden illness and during transport to a medical care facility.

Upon completion of the EMT I-A curriculum the student will receive an Occupational Skills Certificate and is eligible to take the Los Angeles County examination for an Emergency Medical Technician I-A.

A grade of C or better must be achieved to receive an Occupational Skills Certificate.

Prerequisites:

1. Minimum age of 18.
2. A completed health form evidencing good physical and emotional health including required immunizations.

Program Outcomes:

1. Develop the necessary skills and knowledge in human anatomy and physiology, diagnostic signs and interpretations of illness and injuries, and procedures of emergency rescue and care.
2. Be able to provide emergency medical care at the scene of an accident, at the onset of sudden illness, and during transport to a medical facility.
3. Be prepared to take the certification examination for employment as an Emergency Medical Technician (EMT-1) for ambulance service companies, law enforcement agencies, and fire departments in California.

Required course for the Occupational Skills Certificate (5 units):

EMED 101A – Emergency Medical Technology (5)

ENGLISH

(English Division)

English – Associate in Arts Degree for Transfer to CSU

Top Code: 1501.00

The Associate in Arts in English for Transfer Degree introduces students to a wide range of literary expression while grounding them in the core skills of writing, literary analysis, and critical thinking necessary for success as English majors at a transfer university.

English majors enroll in core classes in the methods of literary study and then take survey courses which expose them to a range of types and styles of literature. Students complete the program by choosing among English courses on genres, ethnic literature, special topics in literature, film, and creative writing. Aside from being well prepared to continue their studies, students who complete the Associate in Arts in English for Transfer Degree at PCC will be informed and skilled in ways which will help them negotiate their place in a changing world.

The Associate in Arts in English for Transfer Degree will be awarded upon completion of coursework totaling 60 California State University (CSU) transferable units including the above major requirements and the Intersegmental General Education Transfer Curriculum (IGETC-CSU) or California State University General Education (CSUGE) requirements with a minimum grade point average of 2.0. All courses in the major must be completed with a grade of “C” or better. (Students completing this degree are not required to fulfill additional local graduation requirements.)

Associate in Arts in English for Transfer Degree

REQUIRED CORE: 8 units

- ENGL 001B – Reading and Composition (4)
- ENGL 001C – Intermediate Composition–Critical Thinking and Argument (4)

LIST A: Select any two courses (6 units)

- ENGL 030A – American Literature (3)
- ENGL 030B – American Literature (3)

- ENGL 030C – American Literature (3)
- ENGL 044A – World Literature: Antiquity to 1500 (3)
- ENGL 044B – World Literature: 1500 to 1800 A.D. (3)
- ENGL 044C – World Literature: 1800 to Mid–20th Century (3)
- ENGL 046A – English Literature (3)
- ENGL 046B – English Literature (3)
- ENGL 053 – Interpreting Poetry (3)
- ENGL 060 – Masterpieces of Drama (3)
- ENGL 061 – Introduction to the Novel (3)

LIST B: Select one or two course(s) from below or any course from List A not used (3–6 units)

- ENGL 005A – Creative Writing (3)
- ENGL 006 – Short Story Writing (3)
- ENGL 008 – Writing Poetry (3)
- ENGL 009 – Creative Nonfiction (3)
- ENGL 047 – Mexican and Chicano Literature (3)
- ENGL 050 – Afro-American Literature (3)
- ENGL 052 – Asian-American Literature (3)
- ENGL 078A – Introduction to Shakespeare (3)
- ENGL 078B – Introduction to Shakespeare (3)

LIST C: Select one course from below or any course from List A and B not used (3 units)

- ENGL 005B – Creative Writing (3)
- ENGL 007 – Inscape Magazine Publication (3)
- ENGL 024 – A Literature in Translation (3)
- ENGL 025A – Interpreting Modern Literature (3)
- ENGL 025C – Women in Literature (3)
- ENGL 025D – Science Fiction and Fantasy (3)
- ENGL 025E – Literature of Horror (Gothic Novel) (3)
- ENGL 025F – Comedy and Literature (3)
- ENGL 025G – Mystery and Crime Fiction (3)
- ENGL 025H – American Journeys (3)
- ENGL 025I – Post-Colonial Literatures (3)
- ENGL 025J – Utopian and Dystopian Literature (3)
- ENGL 026 – Introduction to Literature Theory and Criticism (3)
- ENGL 034 – Major Novelist (3)
- ENGL 035 – Major Dramatist (3)
- ENGL 036 – Major Poet (3)
- ENGL 037 – Major Critic (3)
- ENGL 045A – Literature of The Bible (3)
- ENGL 045B – Literature of The Bible (3)
- ENGL 048 – Asian Literature (3)
- ENGL 049A – Film as Dramatic Literature (3)
- ENGL 049B – Film as Dramatic Literature (3)
- ENGL 051 – Native American Mythology and Literature (3)
- ENGL 054 – California Literature (3)
- ENGL 057 – Modern Drama (3)
- ENGL 059 – Children’s Literature (3)
- ENGL 082A – Introduction to Mythology (3)
- ENGL 082B – Introduction to Mythology (3)
- ENGL 082C – Introduction to Mythology (3)

REQUIRED SUBTOTAL..... 20
 CSU General Education or IGETC Pattern 39–41
 Transferable Electives (as needed to reach 60 transferable units)

DEGREE TOTAL 60

Student Learning Outcomes:

1. Demonstrate sensitivity to and an analytical grasp of the nuances of literary language.
2. Demonstrate critical thinking skills, specifically in relation to poetry, drama, fiction, or other types of literature.
3. Demonstrate an understanding of the ways that literature helps to illuminate the human condition.
4. Demonstrate reading skills relevant to literary study.
5. Demonstrate writing skills relevant to literary study.

English Literature – Associate in Arts Degree

Top Code: 1501.00

This area of emphasis is intended to align student course work with preparation for transfer to universities in such majors as English, Literature, Comparative Literature, World Literature, and other similar disciplines in CSU, UC, and private schools. Courses in this major encompass traditional literary history and interpretation as well as cross-cultural inquiry and current theoretical debates. Literature majors are trained in critical reading, writing, and thinking, as well as in literary interpretation. Literature is the study of representation, ideas, language, and culture. As such, it is a source of knowledge and pleasure, as well as a field of study. Literary texts are social documents in artistic form which speak to us as much about historical issues as about aesthetic matters. Literature students learn to think critically and to understand the role that texts play in a given society, past or present.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. *When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Program Outcomes:

1. Demonstrate sensitivity to and an analytical grasp of the nuances of literary language
2. Demonstrate critical thinking skills, specifically in relation to poetry, drama, fiction, or other types of literature
3. Demonstrate an understanding of the ways that literature helps to illuminate the human condition
4. Demonstrate reading skills relevant to literary study
5. Demonstrate writing skills relevant to literary study.

Requirements for the area of emphasis (18 units minimum)

Courses must be completed with a grade of C or better. All courses must be numbered 001–099. Students must complete English 001C or English 026 and 15 units consisting of courses from at least three of the five categories listed below and including a minimum of two Literary Survey courses.

Literary Survey (2 courses):

- ENGL 030A – American Literature (3)
- ENGL 030B – American Literature (3)
- ENGL 030C – American Literature (3)
- ENGL 044B – World Literature: 1500–1800 A.D. (3)
- ENGL 044C – World Literature: 1800–Mid 20th Century (3)
- ENGL 046A – English Literature (3)
- ENGL 046B – English Literature (3)

Literary Origins:

- ENGL 044A – World Literature: Antiquity to 1500 (3)
- ENGL 045A – Literature of the Bible (3)
- ENGL 045B – Literature of the Bible (3)
- ENGL 078A – Introduction to Shakespeare (3)
- ENGL 078B – Introduction to Shakespeare (3)
- ENGL 082A – Introduction to Mythology (3)

ENGL 082B – Introduction to Mythology (3)
ENGL 082C – Introduction to Mythology (3)

Gender and Ethnic Literature:

ENGL 024 – A Literature in Translation (3)
ENGL 025C – Women in Literature (3)
ENGL 047 – Mexican and Chicano Literature (3)
ENGL 048 – Asian Literature (3)
ENGL 050 – African-American Literature (3)
ENGL 051 – Native American Mythology and Literature (3)
ENGL 052 – Asian American Literature (3)

Genre and Modes in Literature:

ENGL 025A – Interpreting Modern Literature (3)
ENGL 025D – Science Fiction and Fantasy (3)
ENGL 025E – Literature of Horror (Gothic Novel) (3)
ENGL 025F – Comedy and Literature (3)
ENGL 025G – Mystery and Crime Fiction (3)
ENGL 034 – Major Novelist (1)
ENGL 035 – Major Dramatist (1)
ENGL 036 – Major Poet (1)
ENGL 037 – Major Critic (1)
ENGL 049A – Film as Dramatic Literature (3)
ENGL 049B – Film as Dramatic Literature (3)
ENGL 053 – Interpreting Poetry (3)
ENGL 057 – Modern Drama (3)
ENGL 060 – Masterpieces of Drama (3)
ENGL 061 – Introduction to the Novel (3)

Special Topics in Literature:

ENGL 025H – American Journeys (3)
ENGL 025I – Post-Colonial Literatures (3)
ENGL 025J – Utopian and Dystopian Literature (3)
ENGL 026 – Introduction to Literary Theory and Criticism (3)
ENGL 054 – California Literature (3)
ENGL 059 – Children’s Literature (3)

Requirements for the Associate in Arts Degree – see page 85.

FASHION

(Visual Arts and Media Studies Division)

Fashion Assistant – Certificate of Achievement

Top Code: 1303.00

The curriculum prepares students for the workplace environment with skills required to work as an assistant to a fashion designer, merchandiser, stylist, production manager, or design room manager. The coursework covers essential skills in apparel construction, flat pattern and draping. Introduction to apparel industry concepts and design principles will also be

taught. Fashion sketch, spec sheets, production flats, and costing are part of the training program. Upon completion of the required courses, the student will have a working vocabulary and basic knowledge of the apparel industry.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Design entry level fashion garments using external and historical fashion influences and appropriate fabric selection.
2. Create a design portfolio and industry marketing materials and production documents.
3. Utilize current draping and drafting methods to create original patterns.
4. Demonstrate an intermediate proficiency in operating industrial equipment for apparel industry garment construction and fabric selection.

Requirements for the Certificate of Achievement (24 units):

Recommended sequence:

Semester I

- FASH 001A – Fashion Survey (3)
- FASH 002 – Introduction to Fashion Industry (3)
- FASH 021 – Principles of Fashion (3)
- FASH 110 – Fashion Illustration (3)

Semester II

- FASH 005 – Pattern Drafting (3)
- FASH 009 – Beginning Textiles (3)
- FASH 111A – Introduction to Fashion Design (3)
- FASH 124 – History of Costume (3)

Fashion – Design – Certificate of Achievement, Associate in Science Degree

Top Code: 1303.00

The curriculum prepares students for the apparel industry. Instruction is offered in all phases of industrial clothing construction, patternmaking, fashion design, and technical sketch. Computer studies are also part of the required curriculum. Studies include fashion trends, design principles, ethnic costume, color theory and the understanding of the apparel industry. Marker making, cost sheets, and production sketches are part of the technical skills learned.

The Fashion Design option will prepare the graduate to work in a design room as assistant designer, junior designer, merchandiser, stylist, illustrator or graphic artist. A design room internship is part of this training program in design. Studies include advanced design and illustration, computer assisted illustration, historical and ethnic costume studies, along with current color and textile trends in the apparel industry. A portfolio of designs and a fashion collection is part of the final requirements.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Design groups of advanced level fashion garments using external and historical fashion influences and appropriate fabric selection.
2. Create a professional portfolio and industry marketing materials and production documents.
3. Utilize current draping and drafting methods to create original well-fitting patterns.
4. Demonstrate an advanced level proficiency in operating industrial equipment for apparel industry garment construction and fabric selection.

Requirements for the Certificate of Achievement (43–45 units):

Recommended sequence:

Semester I

FASH 001A – Fashion Survey (3)
FASH 002 – Introduction to Fashion Industry (3)
FASH 021 – Principles of Fashion (3)
FASH 110 – Fashion Illustration (3)

Semester II

FASH 005 – Pattern Drafting (3)
FASH 009 – Beginning Textiles (3)
FASH 111A – Introduction to Fashion Design (3)
FASH 124 – History of Costume (3)

Semester III

FASH 108 – Patternmaking by Draping (3)
FASH 111B – Intermediate Fashion Design (3)

Select 2 courses from this list:

FASH 001B – Intermediate Clothing Construction (3)
FASH 001C – Advanced Clothing Construction (3)
FASH 109 – Computer Aided Fashion Design (3)
FASH 115 – Intermediate Computer-Assisted Fashion Graphics (2)

Semester IV Select 3 courses from this list:

FASH 001B – Intermediate Clothing Construction (3)
FASH 001C – Advanced Clothing Construction (3)
FASH 105 – Intermediate Fashion Drafting and Draping (3)
FASH 106 – Advanced Pattern Drafting and Draping (3)
FASH 109 – Computer Aided Fashion Design (3)
FASH 111C – Advanced Fashion Design (3)
FASH 115 – Intermediate Computer-Assisted Fashion Graphics (2)
FASH 130 – Fashion Workshop (3)

Requirements for the Associate in Science Degree – see page 89.

Fashion Marketing – Occupational Skills Certificate

Top Code: 1303.00

The curriculum prepares an individual for the workplace environment with skills that apply to the business of apparel sales, assistant in a manufacturing or marketing business or other position where knowledge of the apparel industry and general business principles are an advantage.

With this background, the student may choose to work in retail or wholesale buying or sales, prepare visual presentations, and contribute to styling, display, and marketing ventures.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate an understanding of entry level fashion merchandising concepts that integrate fashion with business technologies.
2. Demonstrate a command of the basic vocabulary of the fashion industry.
3. Create entry level original projects that analyze, define, and solve problems in fashion marketing.
4. Demonstrate an understanding of entry level business concepts and their relationship to the fashion industry.
5. Demonstrate a command of basic business vocabulary.

Requirements for the Occupational Skills Certificate (18 units):

FASH 002 – Introduction to Fashion Industry (3)
FASH 009 – Beginning Textiles (3)
 or FASH 124 – History of Costume (3)
FASH 021 – Principles of Fashion (3)
BIT 102 – Spreadsheet Basics (1)
BIT 109 – Business Software–Microsoft PowerPoint (2)
BUS 009 – Introduction to Business (3)
BUS 010 – Introduction to Management (3)
 or MRKT 020 – Principles of Marketing (3)
 or MRKT 125 – Merchandising (3)

Recommended electives

FASH 001A – Fashion Survey (3)

Historical Costume Making – Occupational Skills Certificate

Top Code: 1303.00

Upon completion of the requirements, the costume student will be prepared to pattern, cut and sew historical costumes. The use of industrial sewing equipment, patternmaking, tools and materials are part of the training program. Historical costumes will be studied and created by the student as part of the program to train students to enter the field of costume technician or sewer.

This training serves to offer the basic skills required to qualify for employment in a costume business, or as a costume assistant. Studies in the history of fashion, both modern and historical clothing construction, alterations, and patternmaking by draped methods are part of the course of study.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Design and create an historical costume based on historical research using appropriate fabric selection.
2. Utilize current draping and drafting methods to create original patterns that become garments that fit the human body well.
3. Demonstrate an intermediate proficiency in operating industrial equipment for apparel industry garment construction and fabric selection.

Requirements for the Occupational Skills Certificate (15 units):

FASH 001A – Fashion Survey (3)
FASH 002 – Introduction to Fashion Industry (3)
FASH 005 – Pattern Drafting (3)
FASH 124 – History of Costume (3)
FASH 126 – Historical Costume Making (3)

Recommended electives

FASH 001B – Intermediate Clothing Construction (3)
FASH 001C – Advanced Clothing Construction (3)
FASH 108 – Patternmaking by Draping (3)
FASH 110 – Fashion Illustration (3)
THRT 015 – Costume Crafts (3)

FIRE TECHNOLOGY
(Business Division)**Fire Academy Preparation – Occupational Skills Certificate**

Top Code: 2133.00

This certificate program is designed to prepare future firefighters for the academic rigors of a fire academy. Though this certificate does not guarantee admission into a fire academy, the program is designed to: (1) meet the course requirements specified by local fire academies, (2) significantly enhance the student's ability to compete for academy positions, and (3) increase the student's probability of success while in the fire academy. Using the knowledge and courses from this program, the students can continue their training to the next level which is the Certificate of Achievement in Fire Technology.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Discuss the role of the fire service in the community and the importance of its Mission Statement.
2. Identify variables that impact the growth/spread/hazards of structure fires.
3. Describe the ten standard firefighting orders and their application during a wildland fire.
4. Define typical fire detection and alarm systems.
5. Recognize the elements of building construction and conditions under which they are likely to fail.

Requirements for the Occupational Skills Certificate (15 units):

Recommended sequence:

FIRE 110 – Introduction to Fire Technology (3)
FIRE 112 – Fundamentals of Fire Behavior and Control (3)
FIRE 115 – Fundamentals of Personal Safety and Emergency Action (3)
FIRE 128 – Fundamentals of Fire Protection Equipment and Detection (3)
FIRE 142 – Building Construction for Fire Protection (3)

Recommended electives

EMED 101A – Emergency Medical Technology (5)
KINA 037 – Police-Fire Agility Training (1)

Fire Technology – Certificate of Achievement, Associate in Science Degree

The curriculum prepares students to seek employment in fire protection and related fields in federal, state, local and private fire protection agencies. Instruction is offered in all phases of the fire service and provides the student with a thorough understanding of fire science and the fireground.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Discuss the role of the fire service in the community and the importance of its Mission Statement.
2. Identify variables that impact the growth/spread/hazards of structure fires.
3. Describe different safeguards for fire prevention risks in flammable liquids, solid storage and storage of gasses.
4. Demonstrate the ability to recognize a hazardous materials incident based on auditory and visual clues.
5. Define typical fire detection and alarm systems.

Requirements for the Certificate of Achievement (41 units):

Recommended sequence:

Semester I

FIRE 110 – Introduction to Fire Technology (3)
FIRE 112 – Fundamentals of Fire Behavior and Control (3)
TECH 107A – Technical Calculations (3)
ENGL 001A – Reading and Composition (4)
or ENGL 100 – Reading and Writing Skills (4)

Semester II

FIRE 114 – Fundamentals of Fire Prevention (3)
FIRE 116 – Fire Fighting Tactics and Strategy (3)
FIRE 120A – Hazardous Materials (3)
SPCH 001 – Fundamentals of Speech (3)
or SPCH 010 – Interpersonal Communication (3)

Semester III

FIRE 124 – Applied Chemistry (3)
FIRE 128 – Fundamentals of Fire Protection Equipment and Detection (3)
KINA 037 – Police-Fire Agility Training (1)

Semester IV

FIRE 115 – Fundamentals of Personal Safety and Emergency Action (3)
FIRE 142 – Building Construction for Fire Protection (3)
FIRE 146 – Fire Investigation (3)

Recommended Electives

BLDG 213 – Building Construction Codes and Standards (3)
ELTY 217 – Electrical Inspection and Codes (2)
FIRE 120B – Hazardous Materials (3)

Requirements for the Associate in Science Degree – see page 89.

GENDER, ETHNICITY, AND MULTICULTURAL STUDIES
(Social Sciences Division)**Gender, Ethnicity, and Multicultural Studies – Associate in Arts Degree**

Top Code: 4901.00

In this area of emphasis history, culture, and contemporary issues are explored and analyzed through the intersecting perspectives of ethnicity, race, class, and gender. The curriculum combines an interdisciplinary knowledge of our socio-cultural world. Courses are open to all students in the College. Enrollment is encouraged for those who are seriously

concerned about diversity and the quality of life in the 21st century. This area of emphasis prepares students for Gender, Ethnicity, and Multicultural Studies; Ethnic Studies; Women's Studies; and similar disciplines at CSU, UC, and private schools. Fields in which such concerns can find application are teaching, urban planning, social services, politics, recreation, law, the ministry, and many others. Such fields of study typically require advanced degrees.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. *When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Program Outcomes:

1. Explore and analyze different areas of history, culture, and contemporary issues through perspectives of ethnicity, class, race and gender.
2. Develop critical thinking skills in global and sociocultural issues as outlined in one or more of the core courses for G.E.M.S.

Requirements for the area of emphasis (18 units minimum)

Courses must be completed with a grade of C or better. All courses must be numbered 001–099. Students must complete at least one course from at least three of the categories listed below:

Multicultural Studies

ANTH 002 – Cultural Anthropology (3)
ENGL 012 – Intercultural Communication (3)
ENGL 025I – Post-Colonial Literatures (3)
GEOG 002 – Cultural Geography (3)
GEOG 003 – World Regional Geography (3)
HIST 008 – History of California (3)
LING 012 – Intercultural Communication (3)
MUSC 023 – Music Cultures of the World (3)
SOC 014 – Introduction to Ethnic Studies (3)

Gender Studies

ENGL 025C – Women in Literature (3)
HIST 025B – Women in American Society (3)

African American Studies

ART 002 – History of African and African-American Art (3)
DANC 004A – World Ethnic Dance: Africa (1)
ENGL 050 – African-American Literature (3)
HIST 027A – Traditional Africa (3)
HIST 027B – Modern Africa (3)
HIST 029A – African American History to 1865 (3)
HIST 029B – African American History from 1865 (3)
MUSC 025 – African American Music (3)
PSYC 029 – Psychology of the Afro-American (3)
SOC 029 – Sociology of the African-American (3)

American Indian/Native American Studies

ANTH 012 – American Indian Cultures (3)
ENGL 051 – Native American Mythology and Literature (3)
HIST 012 – The North American Indian (3)

Asian American/Pacific Islander Studies

ART 003A – History of Asian Art (3)
ART 003B – History of Asian Art (3)

CHIN 010 – Chinese Civilization (3)
CHIN 012 – Chinese Literature in Translation (3)
DANC 004C – World Ethnic Dance: Asia (Central/Southeast) (1)
DANC 004E – World Ethnic Dance: India (1)
ENGL 048 – Asian Literature (3)
ENGL 052 – Asian American Literature (3)
HIST 018 – History of South Asia, Southeast Asia and the Pacific (3)
HIST 019 – History of China, Japan and Korea (3)
HIST 041 – History of Asian Pacific Americans (3)
JAPN 010 – Japanese Civilization (3)
JAPN 011 – Inside Japan (1)
JAPN 012 – Japanese Literature in Translation (3)
MUSC 027 – Asian Music (3)
PSYC 041 – Psychology of the Asian American (3)
SOC 041 – Sociology of the Asian American (3)

Mexican American/Chicano/Latino Studies

ANTH 031 – Mexican and Chicano Culture (3)
ART 007 – Pre-Columbian Art (3)
ART 008 – History of Mexican and Chicano Art (3)
DANC 004B – World Ethnic Dance: The Americas (1)
DANC 004H – World Ethnic Dance: Spain/Portugal (1)
ENGL 047 – Mexican and Chicano Literature (3)
HIST 009A – Latin America: Pre-Colombian to 1825 (3)
HIST 009B – Latin America: 1825 to the Present (3)
HIST 030 – History of Mexico (3)
HIST 031 – History of Mexican Americans in the United States (3)
MUSC 026 – Latin American Music (3)
PHIL 031 – Contemporary Chicano Philosophy (3)
PSYC 031 – Studies In Chicano Behavior (3)
SOC 031 – Chicano Sociology (3)
SPAN 031 – Language of the Barrio (3)
SPAN 042A – Civilization of Spain and Portugal (3)
SPAN 042B – Civilization of Spain and Portugal (3)
SPAN 044A – Civilization of Latin America (3)
SPAN 044B – Civilization of Latin America (3)

Requirements for the Associate in Arts Degree – see page 85.

GEOGRAPHY

(Natural Sciences Division)

Geography – Associate in Arts Degree for Transfer to CSU

Top Code: 2206.00

The Associate in Arts in Geography for Transfer degree provides students with a foundation in Geography for continued training at the upper division level for Geography majors. It also provides students a foundation for majors in environmental science, geology, geographic information systems, and natural sciences. Geography majors are increasingly needed to understand environmental changes and human impacts on the environment. Earning a degree in geography is a starting

point for careers as surveyors, cartographers and photogrammetrists, surveying and mapping technicians, urban and regional planners, and geoscientists.

The Associate in Arts in Geography for Transfer degree requirements:

1. Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.
3. A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. All courses in the major must be completed with a grade of "C" or better.
6. A "P" (Pass) grade is not acceptable grade for courses in the major. (Students completing this degree are not required to fulfill additional local graduation requirements.)

Program Outcomes:

1. Develop the ability to analyze and interpret geographic data.
2. Increase global awareness and multicultural literacy.
3. Develop an understanding of the usefulness of geography to real world problems.

Associate in Arts Degree in Geography for Transfer

REQUIRED CORE

- GEOG 001 – Physical Geography (3)
- GEOG 001L – Physical Geography Lab (1)
- GEOG 002 – Physical Geography Lab (3)

LIST A: Select two to three (6–9)

- GEOG 003 – World Regional Geography (3)
- GEOG 004 – Introduction to Weather and Climate (3)
- GEOG 011 – Introduction to Geographic Systems (3)
- GEOG 030 – Field Studies and Methods in Geography (1)

LIST B: Select two (6)

- ANTH 002 – Cultural Anthropology (3)
or ANTH 002H – Cultural Anthropology Honors (3)
- GEOL 001 – Physical Geology (4)

REQUIRED SUBTOTAL.....	19–24
CSU General Education or IGETC Pattern.....	39–41
DEGREE TOTAL	60

Geotech (GIS) – Occupational Skills Certificate

Top Code: 2206.10

The curriculum prepares students to apply entry level workplace geospatial competencies to solve industry specific problems in Technician/Technologist geospatial (GST) occupations. Job functions would include geospatial data entry, preparing maps using a GIS, interpret aerial photographs, and maintain GIS databases.

An occupational skills certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate appropriate fluency of basic geospatial data entry, digitization and conversion, and geospatial data building, modeling, or analysis.
2. Perform analysis of geospatial data to identify spatial relationships or display results of analyses, using maps, graphs, or tabular data.
3. Demonstrate the ability to effectively communicate through the design or preparation of graphic representations of Geographic Information Systems (GIS).
4. Maintain or modify existing Geographic Information Systems (GIS) databases.

Requirements for the Occupational Skills Certificate (12 units):

Recommended sequence:

GEOG 011 – Introduction to Geographic Information Systems and Techniques, with Lab (3)

GEOG 012 – Map Interpretation and Spatial Analysis (3)

GEOG 013 – Data Acquisition & Management (3)

GEOG 014 – Cartographic Design (3)

GEOLOGY

(Natural Sciences Division)

Geology – Associate Degree in Science for Transfer to CSU

Top Code: 1914.00

The Associate in Science Degree in Geology for Transfer provides a foundation in the physical sciences necessary for continued training at the upper division level for geology majors. It is a starting point for students who are preparing for careers in education, geoscience research, and government, where scientific and technical skills are in great demand.

All courses must be completed with a grade of C or better. All courses must be numbered 001–099. Students must complete a minimum of 28 units, as set forth below. Additional CSU transferable units may be used to reach the 60 unit maximum for the degree if necessary.

The Associate in Science Degree in Geology for Transfer degree will be awarded upon completion of coursework totaling 60 California State University (CSU) transferable units including the above major requirements and the Intersegmental General Education Transfer Curriculum (IGETC-CSU) or California State University General Education (CSUGE) requirements with a minimum grade point average of 2.0. All courses in the major must be completed with a grade of “C” or better. (Students completing this degree are not required to fulfill additional PCC graduation requirements.)

Associate in Science Degree in Geology for Transfer

REQUIRED CORE (28 units)

GEOL 001 – Physical Geology (4)

GEOL 002 – Historical Geology (4)

- CHEM 001A – General Chemistry and Chemical Analysis (5)
- CHEM 001B – General Chemistry and Chemical Analysis (5)
- MATH 005A – Single Variable Calculus I (5)
- MATH 005B – Single Variable Calculus II (5)

REQUIRED SUBTOTAL..... 28
 CSU General Education or IGETC Pattern..... 39–41
 CSU transferable units to meet 60
 maximum units for degree 1–3

DEGREE TOTAL 60

Student Learning Outcomes:

1. Demonstrate an understanding of the physical structure and morphology of the earth and operation of earth systems through the plate tectonic paradigm.
2. Articulate the general physical and biological history of the Earth through time.
3. Identify and classify earth materials, and demonstrate an understanding of their chemical makeup.

**GERONTOLOGY
 (Health Sciences Division)**

Elder Care – Occupational Skills Certificate

Top Code: 1299.00

The Occupational Skills Certificate in Elder Care provides geriatrics and gerontology education and training for entry level health care professionals. Persons completing this certificate program are prepared to provide specialized, quality care for older adults. This certificate program is offered to students who are currently enrolled in the PCC Registered Nursing Program course NURS 050 or higher or the equivalent foundational nursing courses at other colleges or students who have graduated from the PCC Registered Nursing Program. Transcript reflecting equivalent courses with a grade of C or better is required.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Recognize the cultural, social, political, spiritual, health, and economic components of aging.
2. Provide basic care for elder clients.
3. Advocate for elder clients and families.

Required Units for the Occupational Skills Certificate: (12 units)

- GERO 001 – Introduction to Gerontology (3)
- NURS 050 – Foundational Nursing Care (3)
- NURS 050L – Foundational Nursing Care – Clinical (5)
- NURS 050S – Foundational Nursing – Seminar (1)

Gerontology – Certificate of Achievement, Associate in Science Degree

Top Code: 1309.00

Gerontology is concerned with the study and application of knowledge about the physical, social, and economic conditions of older people. Aging affects all aspects of human activity, thus gerontology is multidisciplinary in nature. The program prepares students for careers in the field of aging. Graduates from this program can expect to find career placements in county councils on aging, area agencies on aging, social services agencies, housing authorities, long-term care, recreation facilities, and many other public and private agencies. Job titles in the field include:

With Completion of an Associate Degree:

Home Care Companion
Activity Director
Adult Educator
Transportation Coordinator
Meal Coordinator
Admission Coordinator
Marketing Coordinator
Travel/Tour Specialist
Home Safety/Home Organization Specialist

With Completion of a B.A. or M.A.:

Department of Human Services Worker
Senior Center Director
Administrator for assisted living
Administrator for independent living
Marketing Director
Care Manager
Geriatric Social Worker
Gerontologist

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate knowledge of relationships among older adults, their families, and society.
2. Apply current theory and research in the interdisciplinary field of gerontology and its role in society to assess biological, social, and psychological issues that impact older adults and those who work with and care for them.
3. Analyze aspects of ageism in American society and socially conscious behavior regarding the older population.
4. Apply acquired interdisciplinary knowledge of older adults in varied career applications, such as design of services for older adults, patient care, and engineering and technology for independent living.

Requirements for the Certificate of Achievement (18 units)

GERO 001 – Introduction to Gerontology (3)
GERO 022 – Directed Studies in Gerontology (3)
GERO 140 – Applied Health Care Management in Gerontology (3)
HUM 002 – Humanities, Science and Technology (3)
PSYC 022 – Developmental Psychology: The Adult (3)
SOC 022 – Sociology of Aging (3)

Requirements for the Associate in Science Degree – see page 89.

GRAPHIC COMMUNICATIONS TECHNOLOGY **(Visual Arts and Media Studies Division)**

Apparel Graphics & Printing – Occupational Skills Certificate Top Code: 0936.00

Students learn the parameters and printing applications for various types of textiles and ready-made apparel. Interdisciplinary classes that are part of this certificate broaden the student's knowledge of fabrics, garment construction, computer software used in the fashion industry, and design considerations for garment printing.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Discuss standard printing applications related to the garment industry.
2. Perform necessary functions to prepare screens and inks for textile printing.
3. Produce single- and multi-color graphic designs appropriate to screen printing on textiles.

Requirements for the Occupational Skills Certificate (17.5 units):

ART 031A – Color and Composition–Two Dimensional Design (3)
ART 056 – Introduction to Digital Painting & Drawing (3)
FASH 110 – Fashion Illustration (3)
FASH 115 – Intermediate Computer-Assisted Fashion Graphics (2.5)
GRFX 115 – Beginning Screen Printing for Textile Applications (2)
GRFX 116 – Advanced Screen Printing for Textile Applications (2)
GRFX 135 – Intro to Electronic Prepress Techniques for Screen Printing (2)

Recommended electives

BUS 116 – Small Business Management (3)
FASH 128B – Surface Design Techniques–Dyeing, Painting, Batik (1)
GRFX 013 – Screen Printing–Plastics (3)
GRFX 245A – Basic Photoshop Techniques for Graphic Communications Technology (3)
GRFX 245B – Advanced Photoshop Techniques for Graphic Communications Technology (3)

Graphic Communications Technology – Computer Imaging & Composition – Certificate of Achievement, Associate in Science Degree

The curriculum prepares students to work in the imaging and electronic prepress areas of Graphic Communications industry. The program qualifies students to seek employment in entry-level and intermediate positions as electronic prepress technicians, digital color specialists and digital prepress operators.

Instruction is provided on Macintosh computers and specialized imaging equipment typically found in the production and prepress areas of the printing industry. Emphasis is on technical skills, common software applications and proper use of scanners, computers and digital output systems.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate an understanding of the academic and technical skills required to enter a career in Graphic Communications Technology.
2. Explain the ethical and social responsibilities that apply to a career in the Graphic Communications Technology field.

3. Explain the safety aspects of teamwork as it applies to the production requirements in the field of Graphic Communications Technology.
4. Demonstrate an understanding of the career paths available in Screen Printing, Electronic Prepress and Digital Imaging professions.
5. Understand the technical steps to good typographical and imaging skills for high-end print production.

Requirements for the Certificate of Achievement (30 units):

Recommended sequence:

Semester I

- GRFX 010 – Introduction to Graphic Communications Technology (2)
- GRFX 199 – Introduction to Desktop Publishing (3)
- BIT 010 – Basic Computer Keyboarding (1)
- BIT 107 – Business Software–Windows (1)
- GRFX 030 – Basic Composition and Imaging (6)
- or GRFX 220 – Basic Digital Imaging (3)
- & GRFX 221 – Advanced Digital Imaging –Web (3)

Semester II

- GRFX 031 – Advanced Composition and Imaging (6)
- GRFX 035 – Introduction to Electronic Prepress (2)

Semester III

- GRFX 245A – Basic Photoshop Techniques for Graphic Communications Technology (3)
- GRFX 222 – Intermediate Digital Imaging–Print (3)

Semester IV

- GRFX 036 – Electronic Image Assembly (1)
- GRFX 190 – Imaging Techniques for Large Format Printing (2)

Recommended electives

- BUS 112 – Business English (3)
- CIS 010 – Introduction to Information Systems (3)
- PHOT 030 – Introduction to Digital Image Editing (3)
- PHOT 130 – Advanced Digital Image Editing (3)
- GRFX 192 – Introduction to Web Authoring (3)
- GRFX 300A – Production Printing (2)
- GRFX 300B – Production Printing (2)
- GRFX 103 – Ink, Paper and Quality Control (2)
- GRFX 104 – Bindery and Finishing Operations (2)

Requirements for the Associate in Science Degree – see page 89.

Electronic Prepress – Occupational Skills Certificate

Top Code: 0936.00

Accelerated course of study leading to an Occupational Skills Certificate in Electronic Prepress. This program is designed for an individual to enter or return to the workplace. This occupational skills certificate curricula responds to the knowledge

and skills required by the industry for the electronic preflighting and imaging operations. In this segment of the printing industry current technical knowledge and software knowledge are required in order to gain employment.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Evaluate the components and specifications of a Graphic communications product, relating to the technical requirements of its final reproduction process(es).
2. Edit, combine and compose the text, graphic, and art components into a graphic product that fulfills the client's communication needs.
3. Demonstrate production flow skills to image, deliver, proof and archive the final print, document file.

Requirements for the Occupational Skills Certificate (17 units):

GRFX 035 – Introduction to Electronic Prepress (2)

GRFX 036 – Electronic Image Assembly (1)

GRFX 220 – Basic Digital Imaging (3)

GRFX 221 – Advanced Digital Imaging–Web (3)

GRFX 245A – Basic Photoshop Techniques for Graphic Communications Technology (3)

GRFX 245B – Advanced Photoshop Techniques for Graphic Communications Technology (3)

Graphic Communications Technology – Screen Printing – *Certificate of Achievement, Associate in Science Degree*

Top Code: 0936.00

This curriculum prepares students in the state-of-the-art techniques used to apply text, graphics and other images to a wide variety of surfaces and materials. Our goal is to prepare students to plan, anticipate, accurately prepare for and print, and thoroughly clean up a job in any one of the many printing areas. Students can learn the basics or expand on skills they have already attained. Instruction covers a wide range of techniques, inks and surfaces; safety and health issues; and training on common types of equipment. Employment opportunities are vast, in local sign, t-shirt and supply firms, both large and small. Many students opt to open their own businesses.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate basic and advanced techniques for screen printing on a variety of standard substrates.
2. Discuss organization, clean up and safety issues for a screen printing shop.
3. Produce accurately registered multiple color graphics on a variety of standard substrates with appropriate inks.
4. Demonstrate an understanding of the career paths available in Screen Printing.

Requirements for the Certificate of Achievement (34–39 units):

Recommended sequence:

Semester I

ART 031A – Color and Composition–Two Dimensional Design (3)

GRFX 115 – Beginning Screen Printing for Textile Applications (2)

GRFX 132A – Introductory Screen Printing (4)

or GRFX 013 – Screen Printing–Plastics (3)

& GRFX 134A – Screen Printing Fundamentals for Sales and Marketing (3)

Semester II

GRFX 116 – Advanced Screen Printing for Textile Applications (2)
GRFX 135 – Intro to Electronic Prepress Techniques for Screen Printing (2)
GRFX 132B – Intermediate Screen Printing (4)
or GRFX 113 – Intermediate Screen Printing (3)
& GRFX 134B – Screen Printing for Sales and Marketing (3)

Semester III

GRFX 137 – Screen Printing Techniques for Flat Stock (2)
GRFX 220 – Basic Digital Imaging (3)
GRFX 133A – Advanced Screen Printing for Plastics and Rigid Substrates (4)
or GRFX 114A – Production Screen Printing (3)
& GRFX 134C – Screen Printing–Two and Three Colors (2)

Semester IV

GRFX 221 – Advanced Digital Imaging –Web (3)
GRFX 133B – Production Screen Printing (5)
or GRFX 114B – Advanced Screen Printing (3)
& GRFX 134D – Screen Printing–Four and Six Colors (2)

Recommended electives

ART 050A – Introduction to Graphic Design & Advertising (3)
BUS 112 – Business English (3)
BUS 116 – Small Business Management (3)
GRFX 245A – Basic Photoshop Techniques for Graphic Communications Technology (3)

Requirements for the Associate in Science Degree – see page 89.

Screen Printing for Small Business – Occupational Skills Certificate

Top Code: 0936.00

This is an accelerated course of study designed for the individual seeking to understand the basic requirements of owning and operating a small business in Screen Printing. Current approaches emphasize accurate and efficient printing of various jobs, including flatwork and textiles; good business planning and practices; and successful client relations.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Perform independently basic functions for a standard variety of screen printing applications.
2. Describe the equipment, studio layout and safety issues related to a screen printing business.
3. Identify key concerns for owning, promoting and managing a screen printing business.

Requirements for the Occupational Skills Certificate (16 units):

ART 031A – Color and Composition–Two Dimensional Design (3)
BUS 116 – Small Business Management (3)
GRFX 013 – Screen Printing–Plastics (3)
GRFX 113 – Intermediate Screen Printing (3)
GRFX 220 – Basic Digital Imaging (3)

Textile Printing – Occupational Skills Certificate

Top Code: 1030.00

This two-semester program of study is designed to concentrate on intermediate- to advanced-level work in textile Screen Printing. Students work with many contemporary inks on a variety of textile substrates. Training includes technical core classes, classes in basic design principles, and classes to build awareness of the fashion business.

Program Outcomes:

1. Communicate with client to determine need for, and to coordinate production of, printed textile products.
2. Create and prepare appropriate digital artwork for printed production.
3. Compare, choose, and apply best print application depending on textile & substrate.
4. Produce printed products through screen printing or dye sublimation techniques.

Requirements for the Occupational Skills Certificate (15 units):

Semester I

ART 031A – Color and Composition–Two Dimensional Design (3)

FASH 009 – Beginning Textiles (3)

GRFX 115 – Beginning Screen Printing for Textile Applications (2)

Semester II

FASH 002 – Introduction to Fashion Industry (3)

GRFX 116 – Advanced Screen Printing for Textile Applications (2)

GRFX 135 – Intro to Electronic Prepress Techniques for Screen Printing (2)

HISTORY

(Social Sciences Division)

History – Associate in Arts Degree for Transfer to CSU

Top Code: 2205.00

Knowledge of the past is a prerequisite for understanding the present and preparing for the future. The Associate in Arts in History for Transfer Degree offers an array of courses designed to enable students to comprehend how they, their nation, and the contemporary world have been shaped by historical events and forces. It is only by studying the history of other civilizations and cultures that we hope to gain perspective on our own. In addition to producing teachers and historical researchers, the AA-T in History helps prepare students for other careers. Majoring in history is excellent preparation for students interested in a teaching career, the legal profession, or advanced work in the discipline. Students wishing to become business executives, administrators, and public servants profit immensely by gaining the methodological skills of the historian. Historians learn to gather, synthesize, analyze, and interpret evidence; they become skilled in presenting their conclusions to a general audience in a lucid and logical manner. History is an excellent foundation for a broadly based education in the liberal arts.

The Associate in Arts in History for Transfer Degree will be awarded upon completion of coursework totaling 60 California State University (CSU) transferable units including the above major requirements and the Intersegmental General Education Transfer Curriculum (IGETC-CSU) or California State University General Education (CSUGE) requirements with a minimum grade point average of 2.0. All courses in the major must be completed with a grade of “C” or better. (Students completing this degree are not required to fulfill additional local graduation requirements.)

Associate in Arts in History for Transfer Degree

Required Core: 6 units

- HIST 007A – United States History to 1876 (3)
- HIST 007B – United States History from 1876 (3)

LIST A: Select two courses (6 units)

- HIST 002A – History of World Civilizations to 1500 (3)
or
- HIST 001A – History of European Civilization to 1715 (3)
- HIST 002B – History of World Civilizations from 1500 (3)
or
- HIST 001B – History of European Civilization from 1715 (3)

LIST B: Select one course from each group not already used (6 units)

GROUP 1

- HIST 002A – History of World Civilizations to 1500 (3)
- HIST 002B – History of World Civilizations from 1500 (3)
- HIST 009A – Latin America: Pre-Columbian to 1825 (3)
- HIST 009B – Latin America: 1825 to Present (3)
- HIST 012 – The North American Indian (3)
- HIST 016 – History of the Middle East (3)
- HIST 018 – History of South Asia, Southeast Asia, and the Pacific (3)
- HIST 019 – History of China, Japan, and Korea (3)
- HIST 025B – Women in American Society (3)
- HIST 027A – Traditional Africa (3)
- HIST 027B – Modern Africa (3)
- HIST 029A – African American History to 1865 (3)
- HIST 029B – African American History from 1865 (3)
- HIST 030 – History of Mexico (3)
- HIST 031 – History of Mexican Americans in the United States (3)
- HIST 041 – History of Asian Pacific Americans (3)

GROUP 2

- ANTH 002 – Cultural Anthropology (3)
- ANTH 003 – Introduction to Archaeology (3)
- ECON 001A – Principles of Economics (3)
- ECON 001B – Principles of Economics (3)
- GEOG 002 – Cultural Geography (3)
- HIST 001A – History of European Civilization to 1715 (3)
- HIST 001B – History of European Civilization from 1715 (3)
- HIST 002A – History of World Civilizations to 1500 (3)
- HIST 002B – History of World Civilizations from 1500 (3)
- HIST 005A – History of Great Britain to 1714 (3)
- HIST 005B – History of Great Britain from 1714 (3)
- HIST 008 – History of California (3)
- HIST 025A – Great Personalities in U.S. History (3)
- HIST 025C – The American West (3)
- HIST 025D – America's Relations with Other Nations (3)
- HIST 025F – America and the Two World Wars (3)
- HIST 025I – Issues of the Vietnam War (3)
- HIST 045A – Religious Issues, Personalities, and Values (3)
- HIST 050 – History and Historians (3)
- PHIL 037 – Philosophy of Religion (3)
- POLS 001 – Introduction to American Government and Politics (3)

- POLS 002 – Comparative Government (3)
- RELG 001 – Religious Issues, Personalities, and Values (3)
- SOC 014 – Introduction to Ethnic Studies (3)

REQUIRED SUBTOTAL..... 18
 CSU General Education or IGETC Pattern..... 39–41
 Transferable Electives (as needed to reach 60 transferable units)

DEGREE TOTAL 60

Student Learning Outcomes:

1. Demonstrate through original written and/or oral analysis the ability to identify important events in historical eras; evaluate variables of historical phenomena; and analyze the causes and impact of significant change in a global context.
2. Demonstrate awareness and critique the value of varied sources of historical information including professional lectures, secondary texts, primary documents, visual arts, fiction, oral histories, community studies, and/or current journalistic reports.
3. Demonstrate responsibility as self-directed listeners, readers, and researchers.
4. Compare and contrast the experiences and issues of subsets of minorities with that of mainstream in power, including concerns of race, class, and gender.
5. Demonstrate respect for diversity of opinions on historical debates.
6. Apply the analysis of history to create a plan for fulfilling civic responsibilities as community and international citizens.

HOSPITALITY MANAGEMENT
(Business Division)

Hospitality Management – Certificate of Achievement, Associate in Science Degree
 Top Code: 1307.00

The Hospitality Management curriculum offers the student the opportunity to receive an Associate Degree and/or a Hospitality Management Certificate of Achievement, as well as fulfill many of the required coursework of existing four-year Hospitality Management Programs throughout the country. The curriculum prepares students to seek entry-level management positions in the hospitality management industry. Related career opportunities abound in the industry, both locally and on a global basis and include such titles as Front Desk Manager, Social Director, Caterer, Hospitality Supervisor, Meeting Planner, Recreational Director and Travel Director. Graduates of the program have the potential of working throughout the world for major hotel, motel and restaurant companies, private clubs, business and industry food-service providers, theme parks and recreational facilities, consulting firms and other related industries.

The curriculum within this program includes a survey of the hospitality industry: operations management, financial management, human resource management, marketing and sales, accounting, business communications, mathematics, leadership, computer technology applications, and more, providing a practical base of hospitality management knowledge and abilities. The Program provides a work site/internship component providing the student with on-the-job experience with local employers while attending Pasadena City College.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Identify major components of hospitality industry and educational pathways.
2. Identify local health laws and basic food handling safety.
3. Demonstrate the knowledge of fundamental principles of leadership and model the behavior of effective leaders.
4. Develop a global perspective and an ability to work with diverse groups in multicultural settings.
5. Demonstrate knowledge and comprehension of sanitation and safety regulations in the hospitality industry.

Recommended sequence of courses (22 units):**Semester I**

- BIT 025 – Survey of Computer Technology in Business (3)
BUS 012A – Business Law (3)
HOSP 001 – Introduction to the Hospitality Industry (3)
HOSP 002 – Hospitality Supervision and Human Resource Management (3)

Semester II

- ACCT 010 – Bookkeeping–Accounting (4)
HOSP 004 – Hospitality Sanitation, Safety & Environmental Issues Management (3)
HOSP 130 – Hospitality Marketing, Sales, and Advertising (3)

Recommended electives:

- BUS 011A – Business Communications (3)
HOSP 101 – Hospitality Internship (3)

Requirements for the Associate in Science Degree – see page 89.

HUMANITIES

(Social Sciences Division)

Humanities – Associate in Arts Degree

Top Code: 4903.00

The term *Humanities* refers to a broad range of subjects, including art, architecture, history, music, dance, languages, literature, philosophy, ethics, and religion. Students who select Humanities as an area of emphasis study the achievements of the human heart and mind; they work within a variety of disciplines in order to acquire a deeper understanding of themselves, civilization, and the world. Students have the opportunity to study the diverse strands of human thought and culture. They train for a career where a broad humanistic understanding is appropriate, or acquire self-cultivation through interdisciplinary study. This area of emphasis is intended to align student course work with preparation for transfer to universities in such majors as Architecture, Art, English, Foreign Languages, History, Humanities, Music, Philosophy, Religious Studies, Theatre Arts, and other similar fields of study. Such majors are widely available in most CSU, UC, and private schools.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. *When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Program Outcomes:

1. Demonstrate a broad understanding of the Humanities and their relation to the student and the student's own goals, world civilization, and the natural world.
2. Demonstrate an understanding of the achievements of the human mind and heart in a variety of disciplines, such as Art, English Literature, Theatre Arts, Foreign Languages, History, Philosophy, and Religious Studies.

3. Be prepared to pursue preferred areas of study at transfer universities enriched by a strong background in the Humanities.

Requirements for the area of emphasis (18 units minimum)

Courses must be completed with a grade of C or better. All courses must be numbered 001–099. Students must complete 18 units with at least 3 units in three of the disciplines listed below.

Architecture

ARCH 010A – Architectural Design Fundamentals (3)
ARCH 011 – Introduction to Architecture (2)
ARCH 012A – Visual Communications I (3)

Art

ART 001A – History of Western Art–Prehistoric through Medieval (3)
ART 001B – History of Western Art (3)
ART 002 – History of African and African-American Art (3)
ART 003A – History of Asian Art (3)
ART 003B – History of Asian Art (3)
ART 004A – History of Ancient Art in the West (3)
ART 004B – History of European Medieval Art (3)
ART 004C – History of European Renaissance and Baroque Art (3)
ART 004D – History of Modern Art (3)
ART 005 – Art Fundamentals (3)
ART 007 – Pre-Columbian Art (3)
ART 008 – History of Mexican and Chicano Art (3)
ART 009 – History of Islamic Art (3)

English

ENGL 005A – Creative Writing (3)
ENGL 005B – Creative Writing (3)
ENGL 006 – Short Story Writing (3)
ENGL 008 – Writing Poetry (3)
ENGL 009 – Creative Nonfiction (3)
ENGL 010 – Introduction to Linguistics (3)
 or LING 010 – Introduction to Linguistics (3)
ENGL 011 – History of English Language (3)
 or LING 011 – History of English Language (3)
ENGL 012 – Intercultural Communication (3)
 or LING 012 – Intercultural Communication (3)
ENGL 024 – A Literature in Translation (3)
ENGL 025A – Interpreting Modern Literature (3)
ENGL 025C – Women in Literature (3)
ENGL 025D – Science Fiction and Fantasy (3)
ENGL 025E – Literature of Horror (Gothic Novel) (3)
ENGL 025F – Comedy and Literature (3)
ENGL 025G – Mystery and Crime Fiction (3)
ENGL 025H – American Journeys (3)
ENGL 025I – Post-Colonial Literatures (3)
ENGL 025J – Utopian and Dystopian Literature (3)
ENGL 026 – Introduction to Literary Theory and Criticism (3)
ENGL 030A – American Literature (3)
ENGL 030B – American Literature (3)

ENGL 030C – American Literature (3)
 ENGL 034 – Major Novelist (1)
 ENGL 035 – Major Dramatist (1)
 ENGL 036 – Major Poet (1)
 ENGL 037 – Major Critic (1)
 ENGL 044A – World Literature: Antiquity to 1500 (3)
 ENGL 044B – World Literature: 1500–1800 A.D. (3)
 ENGL 044C – World Literature: 1800–Mid 20th Century (3)
 ENGL 045A – Literature of the Bible (3)
 ENGL 045B – Literature of the Bible (3)
 ENGL 046A – English Literature (3)
 ENGL 046B – English Literature (3)
 ENGL 047 – Mexican and Chicano Literature (3)
 ENGL 048 – Asian Literature (3)
 ENGL 049A – Film as Dramatic Literature (3)
 ENGL 049B – Film as Dramatic Literature (3)
 ENGL 050 – African-American Literature (3)
 ENGL 051 – Native American Mythology and Literature (3)
 ENGL 052 – Asian American Literature (3)
 ENGL 053 – Interpreting Poetry (3)
 ENGL 054 – California Literature (3)
 ENGL 057 – Modern Drama (3)
 ENGL 059 – Children’s Literature (3)
 ENGL 060 – Masterpieces of Drama (3)
 ENGL 061 – Introduction to the Novel (3)
 ENGL 078A – Introduction to Shakespeare (3)
 ENGL 078B – Introduction to Shakespeare (3)
 ENGL 082A – Introduction to Mythology (3)
 ENGL 082B – Introduction to Mythology (3)
 ENGL 082C – Introduction to Mythology (3)

Foreign Language

ASL 001 – Elementary American Sign Language (4)
 ASL 002 – Elementary American Sign Language (4)
 ASL 010C – American Sign Language (3)
 ASL 010D – American Sign Language (3)
 ARBC 001 – Elementary Arabic (5)
 ARBC 002 – Elementary Arabic (5)
 ARMN 001 – Elementary Armenian (5)
 ARMN 002 – Elementary Armenian (5)
 CHIN 001 – Elementary Chinese (Mandarin) (5)
 CHIN 002 – Elementary Chinese (Mandarin) (5)
 CHIN 002A – Elementary Chinese (Mandarin) for Advanced Beginners (5)
 CHIN 003 – Intermediate Chinese (Mandarin) (5)
 CHIN 004 – Intermediate Chinese (Mandarin) (5)
 CHIN 005 – Advanced Chinese Reading and Composition (3)
 CHIN 008A – Introduction to Chinese Conversation (Mandarin) (2)
 CHIN 008B – Introduction to Chinese Conversation (Mandarin) (2)
 CHIN 009A – Chinese Conversation (Mandarin) (2)
 CHIN 009B – Chinese Conversation (Mandarin) (2)
 CHIN 009C – Chinese Conversation (Mandarin) (2)
 CHIN 010 – Chinese Civilization (3)
 CHIN 012 – Chinese Literature in Translation (3)
 CHIN 022 – Chinese Calligraphy (3)

CHIN 050 – Chinese Cinema (3)
 FRNC 001 – Elementary French (5)
 FRNC 002 – Elementary French (5)
 FRNC 003 – Intermediate French (5)
 FRNC 004 – Intermediate French (5)
 FRNC 006 – Introduction to the Study of French and Francophone Literature (4)
 FRNC 008A – French Conversation (2)
 FRNC 008B – French Conversation (2)
 FRNC 009A – French Conversation (2)
 FRNC 009B – French Conversation (2)
 FRNC 010 – French Civilization (3)
 FRNC 011 – Translating from French to English (2)
 FRNC 012 – French Literature in Translation (3)
 FRNC 014 – Writing in French (3)
 FRNC 015 – Reading in French (3)
 FRNC 016 – French Culture and Communication (3)
 FRNC 050 – French Cinema (3)
 GRMN 001 – Elementary German (5)
 GRMN 002 – Elementary German (5)
 GRMN 003 – Intermediate German (5)
 GRMN 004 – Intermediate German (5)
 GRMN 005 – Introduction to German Literature (3)
 GRMN 008A – Introduction to German Conversation (2)
 GRMN 008B – Introduction to German Conversation (2)
 GRMN 008C – Introduction to German Conversation (2)
 GRMN 009A – German Conversation (2)
 GRMN 009B – German Conversation (2)
 GRMN 009C – German Conversation (2)
 GRMN 010 – German Civilization (3)
 GRMN 012 – German Literature in Translation (3)
 ITAL 001 – Elementary Italian (5)
 ITAL 002 – Elementary Italian (5)
 ITAL 003 – Intermediate Italian (5)
 ITAL 004 – Intermediate Italian (5)
 ITAL 008A – Introduction to Italian Conversation (2)
 ITAL 008B – Introduction to Italian Conversation B (2)
 ITAL 009A – Italian Conversation (2)
 ITAL 009B – Italian Conversation (2)
 ITAL 009C – Italian Conversation (2)
 ITAL 010 – Italian Civilization (3)
 ITAL 012 – Introduction to Italian Literature (3)
 ITAL 050 – Italian Film as Dramatic Literature (3)
 JAPN 001 – Elementary Japanese (5)
 JAPN 002 – Elementary Japanese (5)
 JAPN 003 – Intermediate Japanese (5)
 JAPN 004 – Intermediate Japanese (5)
 JAPN 005 – Advanced Reading and Composition (3)
 JAPN 008A – Introduction to Japanese Conversation (2)
 JAPN 008B – Introduction to Japanese Conversation (2)
 JAPN 009A – Japanese Conversation (2)
 JAPN 009B – Japanese Conversation (2)
 JAPN 009C – Japanese Conversation (2)
 JAPN 010 – Japanese Civilization (3)
 JAPN 011 – Inside Japan (1)

JAPN 012 – Japanese Literature in Translation (3)
 LATN 001 – Elementary Latin (5)
 LATN 002 – Elementary Latin (5)
 PORT 001 – Elementary Portuguese–Level 1 (5)
 PORT 002 – Elementary Portuguese–Level 2 (5)
 PORT 003 – Intermediate Portuguese (5)
 PORT 004 – Intermediate Portuguese (5)
 RUSS 001 – Elementary Russian (5)
 RUSS 002 – Elementary Russian (5)
 RUSS 003 – Intermediate Russian (5)
 RUSS 004 – Intermediate Russian (5)
 RUSS 011 – Russian Civilization (3)
 SPAN 001 – Elementary Spanish (5)
 SPAN 002 – Elementary Spanish (5)
 SPAN 002A – Spanish for Spanish Speakers (5)
 SPAN 003 – Intermediate Spanish (5)
 SPAN 004 – Intermediate Spanish (5)
 SPAN 005 – Introduction to Spanish Literature (3)
 SPAN 006A – Introduction to Spanish-American Literature (3)
 SPAN 006B – Introduction to Spanish-American Literature (3)
 SPAN 008A – Introduction to Spanish Conversation (2)
 SPAN 008B – Introduction to Spanish Conversation (2)
 SPAN 009A – Spanish Conversation (2)
 SPAN 009B – Spanish Conversation (2)
 SPAN 009C – Spanish Conversation (2)
 SPAN 012 – Spanish Literature in Translation (3)
 SPAN 025 – Spanish Composition (3)
 SPAN 031 – Language of the Barrio (3)
 SPAN 042A – Civilization of Spain and Portugal (3)
 SPAN 042B – Civilization of Spain and Portugal (3)
 SPAN 044A – Civilization of Latin America (3)
 SPAN 044B – Civilization of Latin America (3)
 SPAN 050 – Spanish and Latin American Cinema (3)

History

HIST 001A – History of European Civilization to 1715 (3)
 HIST 001B – History of European Civilization from 1715 (3)
 HIST 002A – History of World Civilizations to 1500 (3)
 HIST 002B – History of World Civilizations from 1500 (3)
 HIST 005A – History of Great Britain to 1714 (3)
 HIST 005B – History of Great Britain from 1714 (3)
 HIST 007A – United States History to 1876 (3)
 HIST 007B – United States History from 1876 (3)
 HIST 008 – History of California (3)
 HIST 009A – Latin America: Pre-Colombian to 1825 (3)
 HIST 009B – Latin America: 1825 to the Present (3)
 HIST 012 – The North American Indian (3)
 HIST 016 – History of the Middle East (3)
 HIST 018 – History of South Asia, Southeast Asia and the Pacific (3)
 HIST 019 – History of China, Japan and Korea (3)
 HIST 024A – Special Topics in History–Africa (3)
 HIST 024B – Special Topics in History–Asia (3)
 HIST 024C – Special Topics in History–Europe (3)
 HIST 024D – Special Topics in History–Latin America (3)

HIST 024E – Special Topics in History–Middle East (3)
HIST 024F – Special Topics in History–United States (3)
HIST 024G – Special Topics in History–World (3)
HIST 025A – Great Personalities in U.S. History (3)
HIST 025B – Women in American Society (3)
HIST 025C – The American West (3)
HIST 025D – America’s Relations with Other Nations (3)
HIST 025E – Arts And Crafts Movement in the U.S. (3)
HIST 025F – America and the Two World Wars (3)
HIST 025I – Issues of the Vietnam Era (3)
HIST 029A – African American History to 1865 (3)
HIST 029B – African American History from 1865 (3)
HIST 030 – History of Mexico (3)
HIST 031 – History of Mexican Americans in the United States (3)
HIST 038 – History of Religion in America (3)
HIST 041 – History of Asian Pacific Americans (3)
HIST 050 – History and Historians (3)
HIST 027A – Traditional Africa (3)
HIST 027B – Modern Africa (3)

Humanities

HUM 001 – Introduction to the Humanities (3)
HUM 002 – Humanities, Science and Technology (3)
HUM 003 – Humanities and the Social Sciences (3)
HUM 004 – Humanities through the Arts (3)

Music

MUSC 007A – Music History and Literature (3)
MUSC 007B – Music History and Literature (3)
MUSC 021 – Music Appreciation (3)
MUSC 022 – Music in the Contemporary World (3)
MUSC 023 – Music Cultures of the World (3)
MUSC 024A – The Jazz Experience: Evolution and Essence (3)
MUSC 024B – History of Rock Music (3)
MUSC 025 – African American Music (3)
MUSC 026 – Latin American Music (3)
MUSC 027 – Asian Music (3)
MUSC 028 – History of Opera (3)

Philosophy

PHIL 001 – Introduction to Philosophy (3)
PHIL 003 – Ethics (3)
PHIL 007 – Contemporary Moral Problems (3)
PHIL 008 – Philosophy and Humanness (3)
PHIL 020A – History of Ancient Philosophy (3)
PHIL 020B – History of Modern Philosophy (3)
PHIL 025 – Introduction to Critical Thinking (3)
PHIL 030 – Logic (3)
PHIL 031 – Contemporary Chicano Philosophy (3)
PHIL 033 – Introduction to Symbolic Logic (3)
PHIL 037 – Philosophy of Religion (3)

Religious Studies

RELG 001 – Religious Issues, Personalities and Values (3)

RELG 002 – Comparative Religions: Far East (3)

RELG 003 – Comparative Religions: Near East (3)

Theatre Arts

THRT 002A – Acting I (3)

THRT 002B – Acting II (3)

THRT 002C – Advanced Acting Fundamentals (3)

THRT 005A – Theatre History I (3)

THRT 005B – Theatre History II (3)

THRT 006 – Play Writing (3)

THRT 007A (CINE 007A) – Early Film History (3)

THRT 007B (CINE 007B) – Contemporary Film History (3)

THRT 008 – Voice and Movement for the Performer (3)

THRT 012A – Technical Theater (4)

THRT 012B – Advanced Technical Theater (4)

Requirements for the Associate in Arts Degree – see page 85.

JOURNALISM

(Visual Arts and Media Studies Division)

Journalism – Associate in Arts Degree for Transfer to CSU

Top Code: 0602.00

The Journalism AA-T curriculum prepares students to seek employment with print and online newspapers, magazines, and digital publications. Graduates will be prepared to work as reporters, writers, news researchers, feature article writers, and editorial and design specialist. The curriculum features experience with computerized desktop publishing/editing and online publishing software.

This area of emphasis is intended to align students with preparation for transfer into the CSU system in the Journalism major sequence. It includes theory of mass communications, introduction to news writing, and practical experience reporting, writing and producing a weekly newspaper and its online edition.

The Associate in Arts in Journalism for Transfer degree will be awarded upon completion of coursework totaling 60 California State University (CSU) transferable units including the major requirements and the Intersegmental General Education Transfer Curriculum (IGETC-CSU) or California State University General Education (CSUGE) requirements with a minimum grade point average of 2.0. All courses in the major must be completed with a grade of “C” or better. (Students completing this degree are not required to fulfill additional local graduation requirements)

Associate in Arts in Journalism for Transfer Degree

Required core: 9 units

COMM 001 – Survey of Mass Communication (3)

JOUR 002 – Beginning Journalism (3)

JOUR 007A – Newswriting and Make-Up (4)

LIST A: Select one course (3 units)

- JOUR 004A – Reporting and Newswriting (3)
- JOUR 007B – Newswriting and Make-Up (4)
- JOUR 009 – Public Relations and Organizational Communication (3)
- JOUR 023 – Photojournalism (3)

LIST B: Select two courses (6 units)

- ECON 001A – Principles of Economics (3)
or ECON 001B – Principles of Economics (3)
- ENGL 001C – Intermediate Composition: Critical Thinking and Argument (4)
- PHOT 021 – Elementary Photography (3)
- POLS 001 – Introduction to American Government and Politics (3)
- POLS 002 – Comparative Government (3)
- PHIL 025 – Introduction to Critical Thinking (3)
- PHIL 030 – Logic (3)
or PHIL 033 – Introduction to Symbolic Logic (3)
- SPCH 006 – Argumentation and Debate (3)
- SPCH 013 – Introduction to Speech Communication (3)
- STAT 050 – Elementary Statistics (4)
or STAT 018 – Statistics for Social and Behavioral Sciences (4)

REQUIRED SUBTOTAL..... 19
 CSU General Education or IGETC Pattern..... 39–41
 Transferable Electives (as needed to reach 60 transferable units)

DEGREE TOTAL 60

Student Learning Outcomes:

1. Cooperate with editors and other staff members in a news room environment to produce and publish a weekly campus newspaper.
2. Produce a portfolio showing a range of published stories demonstrating skills in writing news, feature, opinion, and sports stories.
3. Direct staff members and organize page content to produce a weekly newspaper. Students will also act as publication editors and design the pages.

Journalism – Photojournalism – Associate in Science Degree, Certificate of Achievement

Top Code: 0602.00

The curriculum prepares students for employment in news, editorial or public relations organizations as photographers. Emphasis is placed on photography for print, web and mobile publications. Students completing the program will have developed a portfolio.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Work as self-directed individuals and team members to produce and publish a weekly campus newspaper.
2. Demonstrate an awareness of the principles and responsibilities of the professional photojournalist, including a commitment to accuracy, fairness, depth, and social conscience.

3. Produce a portfolio of photographs appropriate for professional publication that demonstrates the ability to gather, organize, report and interpret newsworthy events and information.

Requirements for the Certificate of Achievement (19 units):

Recommended sequence:

Semester I

JOUR 002 – Beginning Journalism (3)
JOUR 021 – Beginning Press Photography (3)
or PHOT 021 – Introduction to Black and White Photography (3)

Semester II

JOUR 022 – Advanced Press Photography (3)
PHOT 031 – Beginning Digital Photography (3)

Semester III

JOUR 107A – Online Journalism (4)
or JOUR 107B – News Leadership (4)

Semester IV

JOUR 023 – Photojournalism (3)

Recommended electives

ART 031A – Color and Composition–Two Dimensional Design (3)
COMM 001 – Survey of Mass Communication (3)
JOUR 004A – Reporting and Newswriting (3)
JOUR 005 – Magazine and Small Publications (3)
JOUR 007A – Newswriting and Make-Up (4)
JOUR 009 – Public Relations and Organizational Communication (3)
JOUR 110 – Journalism Field Practice (3)
PHOT 030 – Introduction to Digital Image Editing (3)

Requirements for the Associate in Science Degree – see page 89.

Journalism – Printed Media – Certificate of Achievement, Associate in Science Degree

Top Code: 0602.00

The curriculum prepares students to seek employment with newspapers, magazines, and organizational publications such as house organs, newsletters, and annual reports. Graduates will be prepared to work as reporters, writers, news researchers, feature article writers, and editorial and design specialists. The curriculum features computerized desktop publishing/editing and online publishing.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate skills in writing news, feature, opinion, and sports stories by producing a portfolio showing a range of published stories.
2. Contribute to production of a weekly newspaper by participating in story assignment, editing, page design and production.

Requirements for the Certificate of Achievement (18 units):

Recommended sequence:

Semester I

JOUR 002 – Beginning Journalism (3)

Semester II

JOUR 004A – Reporting and Newswriting (3)

JOUR 007A – Newswriting and Make-Up (4)

Semester III

JOUR 007B – Newswriting and Make-Up (4)

or JOUR 107A – Online Journalism (4)

or JOUR 107B – News Leadership (4)

Semester IV

JOUR 007B – Newswriting and Make-Up (4)

or JOUR 107A – Online Journalism (4)

or JOUR 107B – News Leadership (4)

Recommended electives

COMM 001 – Survey Of Mass Communication (3)

JOUR 005 – Magazine and Small Publications (3)

JOUR 009 – Public Relations and Organizational Communication (3)

JOUR 021 – Beginning Press Photography (3)

JOUR 110 – Journalism Field Practice (3)

Requirements for the Associate in Science Degree – see page 89.

KINESIOLOGY

(Kinesiology, Health, and Athletics Division)

Kinesiology – *Associate in Arts Degree for Transfer to CSU*

Top Code: 1270.00

Kinesiology is the study of movement as it relates to physical activity, health, disease prevention, exercise, and sport. Kinesiology Majors are grounded in an interdisciplinary body of knowledge which encompasses the biological, psychological, physical, and social sciences. They use this knowledge to understand how the human body responds to movement, exercise, exercise training, and overall fitness. Kinesiology majors can find employment in health care, coaching, sports officiating, and athletic training. Public schools also recruit kinesiologists for their physical education departments or programs. Lastly, a baccalaureate degree in Kinesiology can also lead to advanced degrees in Physical Therapy, Occupational Therapy, or Medical School.

Students must complete a minimum of 21 units.

The Associate in Arts Degree in Kinesiology for Transfer degree will be awarded upon completion of coursework totaling 60 California State University (CSU) transferable units including the above major requirements and the Intersegmental General Education Transfer Curriculum (IGETC) or California State University General Education (CSUGE) requirements with a minimum grade point average of 2.0. All courses in the major must be completed with a grade of “C” or better. (Students completing this degree are not required to fulfill additional PCC graduation requirements)

Pasadena City College may certify a maximum of 39 units as having fulfilled the CSU lower division general education requirements.

Associate in Arts Degree in Kinesiology for Transfer

REQUIRED CORE (14 units)

- ANAT 025 – Human Anatomy (4)
- KINT 003 – Introduction to Kinesiology (3)
- PYSO 001 – Human Physiology (4)

MOVEMENT-BASED COURSES (Minimum 3 units)

Select a maximum of one (1) course from any three (3) of the following areas:

AQUATICS

- KINA 003A– Beginning Swimming I (1)
- KINA 003B – Advanced Beginning Swimming II (1)
- KINA 003C – Intermediate Swimming (1)
- KINA 003D – Advanced Swimming and Diving (1)
- KINA 028A – Beginning Aquatic Fitness Activities (1)
- KINA 028B – Intermediate Aquatic Activities (1)

COMBATIVES

- KINA 034A – Self Defense (1)
- KINA 034B – Intermediate Self-Defense (1)
- KINA 048A – Beginning Fencing (1)
- KINA 048B – Intermediate Fencing (1)
- KINA 048C – Advance Fencing (1)

DANCE

- DANC 005A – Social Dance (1)
- DANC 005B – Social Dance (1)
- DANC 006A – Beginning Tap (1)
- DANC 009A – Modern Dance I (1)
- DANC 009C – Modern Dance III (1)
- DANC 011A – Ballet I (1)
- DANC 011C – Ballet III (1)
- DANC 013 – Pilates-Based Method for Alignment and Correction (1)
- DANC 015A – Beginning Jazz Dance (1)

FITNESS

- KINA 029A – Body Building (1)
- KINA 029B – Intermediate Body Building (1)
- KINA 029C – Advanced Body Building (1)
- KINA 030 – Fitness Testing and Independent Exercise (1)
- KINA 032A – Beginning Fitness Activities (1)
- KINA 032B – Intermediate Fitness Activities (1)
- KINA 032C – Advanced Fitness Activities (1)
- KINA 033 – Stretching Fitness Activity (1)
- KINA 036 – Aerobic Fitness (1)
- KINA 038 – Cardiovascular Conditioning (1)
- KINA 039A – Cycling For Fitness – Outdoor (1)
- KINA 039B – Cycling For Fitness – Stationary, Indoor (1)

TEAM SPORTS

- KINA 046A – Beginning Badminton (1)
- KINA 046B – Intermediate Badminton (1)
- KINA 046C – Advanced Badminton (1)
- KINA 054A – Beginning Tennis (1)
- KINA 054B – Intermediate Tennis (1)
- KINA 054C – Advanced Tennis (1)
- KINA 065A – Beginning Basketball (1)
- KINA 065B – Intermediate Basketball (1)
- KINA 065C – Advanced Basketball (1)
- KINA 069 – Soccer (1)
- KINA 081A – Beginning Volleyball (1)
- KINA 081B – Intermediate Volleyball (1)
- KINA 081C – Advanced Volleyball (1)

LIST A: Select 2 courses from below (7–10 units)

- STAT 018 – Statistics for Behavioral and Social Sciences (4)
 - or STAT 050 – Elementary Statistics (4)
- BIOL 011 – Human Biology (4)
 - or BIOL 010A – Cellular Biology, Genetics, and Evolution (4)
- CHEM 002A – Chemistry – General, Organic and Biochemistry (4)
 - or CHEM 001A – General Chemistry and Chemical Analysis (5)
- PHYS 002A – General Physics (5)
 - or PHYS 001A – General Physics (5)
- KINT 005 – First Aid–Responding To Emergencies (3)

REQUIRED SUBTOTAL..... 21–24
 CSU General Education or IGETC Pattern..... 36–39

DEGREE TOTAL 60

Student Learning Outcomes:

1. Identify and apply basic physiological principles of human movement in exercise and sports settings.
2. Identify and apply fundamental techniques to improve individual kinesthetic sport specific skills.

Kinesiology & Wellness – Associate in Arts Degree

Top Code: 4901.00

The area of emphasis in Kinesiology and Wellness provides for a student with an understanding of kinesiology, health promotion, and the mechanics of human bodily movement. The word kinesiology comes from the Greek, kinesis, which means to move. Kinesiology is the study of the art and science of human movement. The discipline of Kinesiology is dedicated to the study of human movement as it relates to sport, dance, and exercise. This area of emphasis is intended to align student course work with preparation for transfer to universities in such bachelor degree majors as Kinesiology, Exercise Science, Physical Education, and other similar fields of study. Kinesiology and Wellness is designed for the student preparing, in the long run, to become a physical education teacher, to study a health-related profession, or to pursue a career in other related fields that typically require a bachelor’s degree.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. *When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Program Outcomes:

1. Demonstrate a competence in human anatomy, chemistry, physiology, and biomechanical movement.
2. Understand the behavioral, historical and sociological aspects of human movement.
3. Comprehend theoretical approaches and major concepts of health and nutrition.
4. Have knowledge and apply the fundamentals, rules and regulations of a variety of sports.

**Requirements for the area of emphasis
(22 units minimum)**

Courses must be completed with a grade of C or better. All courses must be numbered 001–099. Students must complete 22 units with a minimum number of units in each of the categories listed below.

HED 044 – Health Education (3)
KINT 003 – Introduction to Kinesiology (3)
KINT 097 – Theory and Development of Fitness and Wellness (3)
or KINT 014 – Wellness for Life (3)

Kinesiology and Movement (3 units minimum; maximum 4 units):

HED 020 – Independent Study (1)
KATH 070 – Off-Season Conditioning Intercollegiate–Badminton (1)
KATH 071 – Off-Season Conditioning Intercollegiate–Baseball (1)
KATH 072 – Off-Season Conditioning Intercollegiate–Basketball (1)
KATH 073 – Off-Season Conditioning Intercollegiate–Cross Country (1)
KATH 074 – Off-Season Conditioning Intercollegiate–Football (1)
KATH 075 – Off-Season Conditioning Intercollegiate–Soccer (1)
KATH 076 – Off-Season Conditioning Intercollegiate–Softball (1)
KATH 077 – Off-Season Conditioning Intercollegiate–Swimming and Diving (1)
KATH 078 – Off-Season Conditioning Intercollegiate–Track and Field (1)
KATH 079 – Off-Season Conditioning Intercollegiate–Volleyball (1)
KATH 080 – Off-Season Conditioning Intercollegiate–Water Polo (1)
KATH 083 – Intercollegiate Sports–Baseball (3)
KATH 084 – Intercollegiate Sports–Basketball (1.5)
KATH 086 – Intercollegiate Sports–Football (3)
KATH 085 – Intercollegiate Sports–Cross Country (3)
KATH 089 – Intercollegiate Sports–Soccer (3)
KATH 090 – Intercollegiate Sports–Softball (3)
KATH 091 – Intercollegiate Sports–Swimming (3)
KATH 093 – Intercollegiate Sports–Track and Field (3)
KATH 094 – Intercollegiate Sports–Volleyball (3)
KATH 095 – Intercollegiate Sports–Water Polo (3)
KATH 096 – Intercollegiate Sports–Badminton (3)
KINA 003A – Beginning Swimming I (1)
KINA 003B – Advanced Beginning Swimming II (1)
KINA 003C – Intermediate Swimming (1)
KINA 003D – Advanced Swimming and Diving (1)
KINA 003E – Distance Swimming For Fitness (1)
KINT 005 – First Aid–Responding to Emergencies (3)
KINT 006 – Aquatic Certification (4)
KINA 027 – Adapted Fitness Activities (1)

KINT 027C – Early Childhood Physical Education (2)
KINA 028A – Beginning Aquatic Fitness Activities (1)
KINA 028B – Intermediate Aquatic Fitness Activities (1)
KINA 029A – Body Building (1)
KINA 029B – Intermediate Body Building (1)
KINA 029C – Advanced Body Building (1)
KINA 030 – Fitness Testing and Independent Exercise (1)
KINA 032A – Beginning Fitness Activities (1)
KINA 032B – Intermediate Fitness Activities (1)
KINA 032C – Advanced Fitness Activities (1)
KINA 033 – Stretching Fitness Activity (1)
KINA 034A – Self Defense (1)
KINA 034B – Intermediate Self-Defense (1)
KINA 036 – Aerobic Fitness (1)
KINA 037 – Police-Fire Agility Training (1)
KINA 038 – Cardiovascular Conditioning (1)
KINA 039A – Cycling For Fitness (1)
KINA 039B – Beginning Cycling For Fitness–Stationary, Indoor (1)
KINA 046A – Beginning Badminton (1)
KINA 046B – Intermediate Badminton (1)
KINA 046C – Advanced Badminton (1)
KINA 048A – Beginning Fencing (1)
KINA 048B – Intermediate Fencing (1)
KINA 048C – Advanced Fencing (1)
KINA 054A – Beginning Tennis (1)
KINA 054B – Intermediate Tennis (1)
KINA 054C – Advanced Tennis (1)
KINA 065A – Beginning Basketball (1)
KINA 065B – Intermediate Basketball (1)
KINA 065C – Advanced Basketball (1)
KINA 069 – Soccer (1)
KINA 081A – Beginning Volleyball (1)
KINA 081B – Intermediate Volleyball (1)
KINA 081C – Advanced Volleyball (1)
KINT 048 – Professional Activities–Physical Fitness (2)
KINT 061 – Theory of Coaching (3)

Behavioral Development and Diversity (3 units minimum):

COUN 010 – Introduction to College (1)
COUN 011 – Learning Strategies and College Skills Development (1)
COUN 017 – Career Planning (2)
PSYC 001 – Introductory Psychology (3)
PSYC 005 – Research Methods in Psychology (4)
PSYC 025 – Human Sexuality (3)
SOC 001 – Introductory Sociology (3)
SOC 014 – Introduction to Ethnic Studies (3)
SOC 029 – Sociology of the African-American (3)
SOC 031 – Chicano Sociology (3)
SOC 041 – Sociology of the Asian American (3)

Scientific and Nutrition Background (7 units minimum):

ANAT 025 – General Human Anatomy (4)
BIOL 010A – Cellular Biology, Genetics and Evolution (5)

BIOL 010B – The Diversity of Life on Earth: Structure, Function and Ecology (5)
BIOL 010C – Genetics (3)
CHEM 002A – Chemistry – General, Organic and Biochemistry (4)
ENVS 003 – Chemistry and the Environment (4)
PYSO 001 – Human Physiology (4)
NUTR 011 – Human Nutrition (3)

Requirements for the Associate in Arts Degree – see page 85.

LANGUAGES

(Languages Division)

Chinese – Associate in Arts Degree

Top Code: 1107.00

The Chinese program offers a broad spectrum of courses, ranging from language instruction to studies of civilization, culture, literature, and the arts. Language courses focus on all four skills—reading and listening comprehension, writing, and speaking. Non-language courses provide training in critical thinking while exploring cultural and literary themes in a historical context. The purpose of this major is twofold: to develop proficiency in written and spoken communication as well as to foster an understanding and appreciation of cultural diversity. The skills acquired will prepare students to pursue careers in education, journalism, business, linguistics, art, music, and international relations.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. *When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Program Outcomes:

1. Demonstrate language skills and cultural knowledge in Chinese by submission of a portfolio of completed work.

Requirements for the major in Chinese

(18 units minimum)

Courses must be completed with a grade of “C” or better. Students must complete a minimum of eighteen (18) units selected from the courses listed below.

CHIN 002 – Elementary Chinese (Mandarin) (5)
CHIN 002A – Elementary Chinese (Mandarin) for Advanced Beginners (5)
CHIN 003 – Intermediate Chinese (Mandarin) (5)
CHIN 004 – Intermediate Chinese (Mandarin) (5)
CHIN 005 – Advanced Chinese Reading and Composition (3)
CHIN 010 – Chinese Civilization (3)
CHIN 012 – Chinese Literature in Translation (3)
CHIN 022 – Chinese Calligraphy (3)

Limit of one course –

CHIN 008A – Introduction to Chinese Conversation (Mandarin) (2)
or CHIN 008B – Introduction to Chinese Conversation (Mandarin) (2)

Limit of one course –

- CHIN 009A – Chinese Conversation (Mandarin) (2)
or CHIN 009B – Chinese Conversation (Mandarin) (2)
or CHIN 009C – Chinese Conversation (Mandarin) (2)

Requirements for the Associate in Arts Degree – see page 85.

Foreign Language – Basic – Occupational Skills Certificate

The curriculum prepares students for reading, writing, speaking and understanding the language at a basic (high novice) level. It also provides fundamental cultural knowledge. This is an 11–13 unit Occupational Skills Certificate aligned with the national ACTFL Basic (High Novice) criteria of achievement.

<http://www.actfl.org/publications/guidelines-and-manuals/actfl-proficiency-guidelines-2012>

An Occupational Skills Certificate is awarded upon successful completion of all required courses with a grade of C or better.

Program Outcomes:

1. Listening comprehension
Demonstrate comprehension of high-novice* level conversations in the language.
*See ACTFL high-novice guidelines
http://www.actfl.org/sites/default/files/pdfs/public/ACTFLProficiencyGuidelines2012_FINAL.pdf
2. Reading
Demonstrate comprehension of high-novice* level texts in the language.
*See ACTFL high-novice guidelines
http://www.actfl.org/sites/default/files/pdfs/public/ACTFLProficiencyGuidelines2012_FINAL.pdf
3. Writing
Write high-novice* level paragraphs in the language using correct grammar and appropriate vocabulary.
*See ACTFL high-novice guidelines
http://www.actfl.org/sites/default/files/pdfs/public/ACTFLProficiencyGuidelines2012_FINAL.pdf
4. Speaking
Correctly ask and answer high-novice* level questions in the language.
*See ACTFL high-novice guidelines
http://www.actfl.org/sites/default/files/pdfs/public/ACTFLProficiencyGuidelines2012_FINAL.pdf
5. Cultural competency
Students will demonstrate fundamental knowledge of the culture of this language.

Requirements for the Occupational Skills Certificate (11–13 units):*Chinese Option (12–13 units)*

- CHIN 001 – Elementary Chinese (Mandarin) (5)
CHIN 002 – Elementary Chinese (Mandarin) (5)
or CHIN 002A – Elementary Chinese (Mandarin) for Advanced Beginners (5)
CHIN 050 – Chinese Cinema (3)
or CHIN 150A – Chinese for Business and Travel (2)
or CHIN 150B – Chinese for Business and Travel (2)
or CHIN 008A – Introduction to Chinese Conversation (Mandarin) (2)

French Option (12–13 units)

- FRNC 001 – Elementary French (5)
- FRNC 002 – Elementary French (5)
- FRNC 008A – French Conversation (2)
 - or FRNC 010 – French Civilization (3)
 - or FRNC 011 – Translating From French to English (2)
 - or FRNC 014 – Writing in French (3)
 - or FRNC 015 – Reading in French (3)
 - or FRNC 016 – French Culture and Communication (3)
 - or FRNC 050 – French Cinema (3)
 - or FRNC 140 – French Pronunciation (2)

Italian Option (12–13 units)

- ITAL 001 – Elementary Italian (5)
- ITAL 002 – Elementary Italian (5)
- ITAL 008A – Introduction to Italian Conversation (2)
 - or ITAL 010 – Italian Civilization (3)
 - or ITAL 012 – Introduction to Italian Literature (3)
 - or ITAL 050 – Italian Film as Dramatic Literature (3)

Japanese Option (11–12 units)

- JAPN 001 – Elementary Japanese (5)
- JAPN 002 – Elementary Japanese (5)
- JAPN 011 – Inside Japan (1)
 - or JAPN 008A – Introduction to Japanese Conversation (2)

Russian Option (12 units)

- RUSS 001 – Elementary Russian (5)
- RUSS 002 – Elementary Russian (5)
- RUSS 150A – Russian for Business and Travel (2)

Spanish Option (12–13 units)

- SPAN 001 – Elementary Spanish (5)
- SPAN 002 – Elementary Spanish (5)
- SPAN 008A – Introduction to Spanish Conversation (2)
 - or SPAN 012 – Spanish Literature in Translation (3)

Foreign Language – Intermediate – Occupational Skills Certificate

The curriculum prepares students for reading, writing, speaking and understanding the language at an intermediate level. It also provides substantial cultural knowledge. This is a 12–14 unit Occupational Skills Certificate aligned with the national ACTFL High Intermediate criteria of achievement.

<http://www.actfl.org/publications/guidelines-and-manuals/actfl-proficiency-guidelines-2012>.

An Occupational Skills Certificate is awarded upon successful completion of all required courses with a grade of C or better.

Program Outcomes:

1. Listening comprehension

Demonstrate comprehension of high intermediate* level conversations in the language.

*See ACTFL high-intermediate guidelines

http://www.actfl.org/sites/default/files/pdfs/public/ACTFLProficiencyGuidelines2012_FINAL.pdf

2. Reading

Demonstrate comprehension of high-intermediate* level texts in the language.

*See ACTFL high-intermediate guidelines

http://www.actfl.org/sites/default/files/pdfs/public/ACTFLProficiencyGuidelines2012_FINAL.pdf

3. Writing

Write high-intermediate* level paragraphs in the language using correct grammar and appropriate vocabulary.

*See ACTFL high-intermediate guidelines

http://www.actfl.org/sites/default/files/pdfs/public/ACTFLProficiencyGuidelines2012_FINAL.pdf

4. Speaking

Converse at a high-intermediate* level in the language.

*See ACTFL high-intermediate guidelines

http://www.actfl.org/sites/default/files/pdfs/public/ACTFLProficiencyGuidelines2012_FINAL.pdf

5. Cultural competency

Students will demonstrate substantial knowledge of the culture of this language.

Requirements for the Occupational Skills Certificate (12–14 units):

Chinese Option (12–13 units)

CHIN 003 – Intermediate Chinese (Mandarin) (5)

CHIN 004 – Intermediate Chinese (Mandarin) (5)

CHIN 008B – Introduction to Chinese Conversation (Mandarin) (2)

or CHIN 009A – Chinese Conversation (Mandarin) (2)

or CHIN 022 – Chinese Calligraphy (3)

French Option (12–14 units)

FRNC 003 – Intermediate French (5)

FRNC 004 – Intermediate French (5)

FRNC 008B – French Conversation (2)

or FRNC 009A – French Conversation (2)

or FRNC 006 – Introduction to the Study of French and Francophone Literature (4)

Italian Option (12 units)

ITAL 003 – Intermediate Italian (5)

ITAL 004 – Intermediate Italian (5)

ITAL 008B – Introduction to Italian Conversation B (2)

or ITAL 009A – Italian Conversation (2)

Japanese Option (12–13 units)

JAPN 003 – Intermediate Japanese (5)

JAPN 004 – Intermediate Japanese (5)

JAPN 010 – Japanese Civilization (3)

or JAPN 008B – Introduction to Japanese Conversation (2)

or JAPN 009A – Japanese Conversation (2)

Russian Option (13 units)

RUSS 003 – Intermediate Russian (5)

RUSS 004 – Intermediate Russian (5)

RUSS 011 – Russian Civilization (3)

Spanish Option (12–13 units)

SPAN 003 – Intermediate Spanish (5)

SPAN 004 – Intermediate Spanish (5)

SPAN 008B – Introduction to Spanish Conversation (2)

or SPAN 009A – Spanish Conversation (2)

or SPAN 050 – Spanish and Latin American Cinema (3)

Foreign Language – Advanced – Occupational Skills Certificate

The curriculum prepares students for reading, writing, speaking and understanding the language at an advanced level. It also provides substantial cultural knowledge.

This is a 10–12 unit Occupational Skills Certificate aligned with the national ACTFL Advanced criteria of achievement.

<http://www.actfl.org/publications/guidelines-and-manuals/actfl-proficiency-guidelines-2012>.

An Occupational Skills Certificate is awarded upon successful completion of all required courses with a grade of C or better.

Program Outcomes:

1. Listening comprehension

Demonstrate comprehension of mid-advanced* level conversations in the language.

*See ACTFL mid-advanced guidelines

http://www.actfl.org/sites/default/files/pdfs/public/ACTFLProficiencyGuidelines2012_FINAL.pdf

2. Reading

Demonstrate comprehension of mid-advanced* level texts in the language.

*See ACTFL mid-advanced guidelines

http://www.actfl.org/sites/default/files/pdfs/public/ACTFLProficiencyGuidelines2012_FINAL.pdf

3. Writing

Write at a mid-advanced* level in the language.

*See ACTFL mid-advanced guidelines

http://www.actfl.org/sites/default/files/pdfs/public/ACTFLProficiencyGuidelines2012_FINAL.pdf

4. Speaking

Converse at a mid-advanced* level in the language.

*See ACTFL mid-advanced guidelines

http://www.actfl.org/sites/default/files/pdfs/public/ACTFLProficiencyGuidelines2012_FINAL.pdf

5. Cultural competency

Demonstrate in-depth knowledge of the culture of this language.

Requirements for the Occupational Skills Certificate (10–12 units):

Chinese Option (10–11 units)

CHIN 005 – Advanced Chinese Reading and Composition (3)

Plus three courses from the following (7–8 units)

CHIN 009B – Chinese Conversation (Mandarin) (2)

CHIN 009C – Chinese Conversation (Mandarin) (2)

CHIN 010 – Chinese Civilization (3)

CHIN 012 – Chinese Literature in Translation (3)

Japanese Option (10 units)

JAPN 005 – Advanced Reading and Composition (3)

JAPN 009B – Japanese Conversation (2)

JAPN 009C – Japanese Conversation (2)

JAPN 010 – Japanese Civilization (3)

Spanish Option (10–12 units)

SPAN 005 – Introduction to Spanish Literature (3)

Plus three courses from the following:

SPAN 006A – Introduction to Spanish-American Literature (3)

SPAN 006B – Introduction to Spanish-American Literature (3)

SPAN 009B – Spanish Conversation (2)
SPAN 009C – Spanish Conversation (2)
SPAN 025 – Spanish Composition (3)
SPAN 042A – Civilization of Spain and Portugal (3)
SPAN 042B – Civilization of Spain and Portugal (3)
SPAN 044A – Civilization of Latin America (3)
SPAN 044B – Civilization of Latin America (3)

French – Associate in Arts Degree

Top Code: 1102.00

The French program offers a broad spectrum of courses, ranging from language instruction to studies of civilization, culture, literature, and the arts. Language courses focus on all four skills—reading and listening comprehension, writing, and speaking. Non-language courses provide training in critical thinking while exploring cultural and literary themes in a historical context. The purpose of this major is twofold: to develop proficiency in written and spoken communication as well as to foster an understanding and appreciation of cultural diversity. The skills acquired will prepare students to pursue careers in education, journalism, business, linguistics, art, music, and international relations.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. *When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Program Outcomes:

1. Demonstrate language skills and cultural knowledge in French by submission of a portfolio of completed work.

Requirements for the major in French (18 units minimum)

Courses must be completed with a grade of C or better. Students must complete a minimum of eighteen (18) units selected from the courses listed below.

Requirements for the major in French

FRNC 002 – Elementary French (5)
FRNC 003 – Intermediate French (5)
FRNC 004 – Intermediate French (5)
FRNC 005A – Survey of French Literature (3)
FRNC 005B – Survey of French Literature (3)
FRNC 006 – Introduction to the Study of French and Francophone Literature (4)
FRNC 010 – French Civilization (3)
FRNC 011 – Translating from French to English (2)
FRNC 012 – French Literature in Translation (3)
FRNC 014 – Writing in French (3)
FRNC 015 – Reading in French (3)
FRNC 016 – French Culture and Communication (3)
FRNC 050 – French Cinema (3)

Limit of one course –

FRNC 008A – French Conversation (2)
or FRNC 008B – French Conversation (2)

Limit of one course –

FRNC 009A – French Conversation (2)

or FRNC 009B – French Conversation (2)

Requirements for the Associate in Arts Degree – see page 85.**German – Associate in Arts Degree**

Top Code: 1103.00

The German program offers a broad spectrum of courses, ranging from language instruction to studies of civilization, culture, literature, and the arts. Language courses focus on all four skills—reading and listening comprehension, writing, and speaking. Non-language courses provide training in critical thinking while exploring cultural and literary themes in a historical context. The purpose of this major is twofold: to develop proficiency in written and spoken communication as well as to foster an understanding and appreciation of cultural diversity. The skills acquired will prepare students to pursue careers in education, journalism, business, linguistics, art, music, and international relations.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. *When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Program Outcomes:

1. Demonstrate language skills and cultural knowledge in German by submission of a portfolio of completed works.

**Requirements for the major in German
(18 units minimum)**

Courses must be completed with a grade of C or better. Students must complete a minimum of eighteen (18) units selected from the courses listed below.

GRMN 002 – Elementary German (5)

GRMN 003 – Intermediate German (5)

GRMN 004 – Intermediate German (5)

GRMN 005 – Introduction to German Literature (3)

GRMN 010 – German Civilization (3)

GRMN 012 – German Literature in Translation (3)

Limit of one course –

GRMN 008A – Introduction to German Conversation (2)

or GRMN 008B – Introduction to German Conversation (2)

or GRMN 008C – Introduction to German Conversation (2)

Limit of one course –

GRMN 009A – German Conversation (2)

or GRMN 009B – German Conversation (2)

or GRMN 009C – German Conversation (2)

Requirements for the Associate in Arts Degree – see page 85.

Italian – Associate in Arts Degree

Top Code: 1104.00

The Italian program offers a broad spectrum of courses, ranging from language instruction to studies of civilization, culture, literature, and the arts. Language courses focus on all four skills—reading and listening comprehension, writing, and speaking. Non-language courses provide training in critical thinking while exploring cultural and literary themes in a historical context. The purpose of this major is twofold: to develop proficiency in written and spoken communication as well as to foster an understanding and appreciation of cultural diversity. The skills acquired will prepare students to pursue careers in education, journalism, business, linguistics, art, music, and international relations.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. *When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Program Outcomes:

1. Demonstrate language skills and cultural knowledge in Italian by submission of a portfolio of completed work.

Requirements for the major in Italian (18 units minimum)

Courses must be completed with a grade of C or better. Students must complete a minimum of eighteen (18) units selected from the courses listed below.

ITAL 002 – Elementary Italian (5)
ITAL 003 – Intermediate Italian (5)
ITAL 004 – Intermediate Italian (5)
ITAL 010 – Italian Civilization (3)
ITAL 012 – Introduction to Italian Literature (3)
ITAL 050 – Italian Film as Dramatic Literature (3)

Limit of one course –

ITAL 008A – Introduction to Italian Conversation (2)
or ITAL 008B – Introduction to Italian Conversation B (2)

Limit of one course –

ITAL 009A – Italian Conversation (2)
or ITAL 009B – Italian Conversation (2)
or ITAL 009C – Italian Conversation (2)

Requirements for the Associate in Arts Degree – see page 85.

Japanese – Associate in Arts Degree

Top Code: 1108.00

The Japanese program offers a broad spectrum of courses, ranging from language instruction to studies of civilization, culture, literature, and the arts. Language courses focus on all four skills—reading and listening comprehension, writing, and speaking. Non-language courses provide training in critical thinking while exploring cultural and literary themes in a historical context. The purpose of this major is twofold: to develop proficiency in written and spoken communication as well as to foster an understanding and appreciation of cultural diversity. The skills acquired will prepare students to pursue careers in education, journalism, business, linguistics, art, music, and international relations.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. *When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Program Outcomes:

1. Demonstrate language skills and cultural knowledge in Japanese by submission of a portfolio of completed work.

**Requirements for the major in Japanese
(18 units minimum)**

Courses must be completed with a grade of C or better. Students must complete a minimum of eighteen (18) units selected from the courses listed below.

- JAPN 002 – Elementary Japanese (5)
- JAPN 003 – Intermediate Japanese (5)
- JAPN 004 – Intermediate Japanese (5)
- JAPN 005 – Advanced Reading and Composition (3)
- JAPN 010 – Japanese Civilization (3)
- JAPN 011 – Inside Japan (1)
- JAPN 012 – Japanese Literature in Translation (3)

Limit of one course –

- JAPN 008A – Introduction to Japanese Conversation (2)
- or JAPN 008B – Introduction to Japanese Conversation (2)

Limit of one course –

- JAPN 009A – Japanese Conversation (2)
- or JAPN 009B – Japanese Conversation (2)
- or JAPN 009C – Japanese Conversation (2)

Requirements for the Associate in Arts Degree – see page 85.

Russian – Associate in Arts Degree

Top Code: 1106.00

The Russian program offers a broad spectrum of courses, ranging from language instruction to studies of civilization, culture, literature, and the arts. Language courses focus on all four skills—reading and listening comprehension, writing, and speaking. Non-language courses provide training in critical thinking while exploring cultural and literary themes in a historical context. The purpose of this major is twofold: to develop proficiency in written and spoken communication as well as to foster an understanding and appreciation of cultural diversity. The skills acquired will prepare students to pursue careers in education, journalism, business, linguistics, art, music, and international relations.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. *When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Program Outcomes:

1. Demonstrate language skills and cultural knowledge in Russian by submission of a portfolio of completed work.

Requirements for the major in Russian (18 units minimum)

Courses must be completed with a grade of C or better. Students must complete a minimum of eighteen (18) units selected from the courses listed below.

RUSS 002 – Elementary Russian (5)
RUSS 003 – Intermediate Russian (5)
RUSS 004 – Intermediate Russian (5)
RUSS 011 – Russian Civilization (3)

Requirements for the Associate in Arts Degree – see page 85.

Spanish – Associate in Arts Degree

Top Code: 1105.00

The Spanish program offers a broad spectrum of courses, ranging from language instruction to studies of civilization, culture, literature, and the arts. Language courses focus on all four skills—reading and listening comprehension, writing, and speaking. Non-language courses provide training in critical thinking while exploring cultural and literary themes in a historical context. The purpose of this major is twofold: to develop proficiency in written and spoken communication as well as to foster an understanding and appreciation of cultural diversity and knowledge of the rich cultural and literary tradition of Spain and Latin America. The skills acquired will prepare students to pursue careers in education, journalism, business, linguistics, art, music, and international relations.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. *When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Program Outcomes:

1. Demonstrate language skills and cultural knowledge in Spanish by submission of a portfolio of completed work.

Requirements for the major in Spanish (18 units minimum)

Courses must be completed with a grade of C or better. Students must complete a minimum of eighteen (18) units selected from the courses listed below.

SPAN 002 – Elementary Spanish (5)
SPAN 002A – Spanish for Spanish Speakers (5)
SPAN 003 – Intermediate Spanish (5)
SPAN 004 – Intermediate Spanish (5)
SPAN 005 – Introduction to Spanish Literature (3)
SPAN 006A – Introduction to Spanish-American Literature (3)
SPAN 006B – Introduction to Spanish-American Literature (3)
SPAN 012 – Spanish Literature in Translation (3)
SPAN 025 – Spanish Composition (3)
SPAN 031 – Language of the Barrio (3)
SPAN 042A – Civilization of Spain and Portugal (3)
SPAN 042B – Civilization of Spain and Portugal (3)
SPAN 044A – Civilization of Latin America (3)

SPAN 044B – Civilization of Latin America (3)
SPAN 050 – Spanish and Latin American Cinema (3)

Requirements for the Associate in Arts Degree – see page 85.

Spanish – Associate in Arts Degree for Transfer to CSU

Top Code: 1105.00

The Associate in Arts in Spanish for Transfer Degree (AA-T in Spanish) develops competence in the ability to understand, speak, read and write Spanish, and to provide an understanding and appreciation of the Spanish language and the cultures of the Spanish-speaking world. The AA-T in Spanish prepares students to continue their education at a California State University (CSU) campus leading to a baccalaureate degree in Spanish.

All courses must be completed with a grade of C or better. All courses must be numbered 001–099. Students must complete a minimum of 21 units.

The Associate in Arts Degree in Spanish for Transfer degree will be awarded upon completion of coursework totaling 60 California State University (CSU) transferable units including the above major requirements and the Intersegmental General Education Transfer Curriculum (IGETC) or California State University General Education (CSUGE) requirements with a minimum grade point average of 2.0. All courses in the major must be completed with a grade of “C” or better. (Students completing this degree are not required to fulfill additional PCC graduation requirements)

Associate in Arts Degree in Spanish for Transfer

Required courses: (20 units)

- SPAN 001 – Elementary Spanish (5)
- SPAN 002 – Elementary Spanish (5)
- SPAN 003 – Intermediate Spanish (5)
- SPAN 004 – Intermediate Spanish (5)

LIST A: Select 2 courses (3–4 units)

- SPAN 005 – Introduction to Spanish Literature (3)
- SPAN 006A – Introduction to Spanish-American Literature (3)
- SPAN 006B – Introduction to Spanish-American Literature (3)
- SPAN 008A – Introduction to Spanish Conversation (2)
- SPAN 008B – Introduction to Spanish Conversation (2)
- SPAN 009A – Spanish Conversation (2)
- SPAN 009B – Spanish Conversation (2)
- SPAN 012 – Spanish Literature in Translation (3)
- SPAN 025 – Spanish Composition (3)
- SPAN 042A – Civilization of Spain and Portugal (3)
- SPAN 042B – Civilization of Spain and Portugal (3)
- SPAN 044A – Civilization of Latin America (3)
- SPAN 044B – Civilization of Latin America (3)
- SPAN 050 – Spanish and Latin American Cinema (3)

REQUIRED SUBTOTAL..... 21
CSU General Education or IGETC Pattern..... 39–41
Transferable Electives (as needed to reach 60 transferable units)

DEGREE TOTAL 60

Student Learning Outcomes

1. Demonstrate proficiency in language skills in Spanish.
2. Demonstrate cultural knowledge of Latin America and Spain.

LIBRARY

(Library Division)

Digitization Skills for Libraries & Cultural Heritage Institutions – Occupational Skills Certificate

Top Code: 1602.00

This curriculum prepares students to work in digital repositories found in libraries, archives, and museums. Instruction includes: project planning, digitization, metadata, copyright, preservation and end user access to digital materials. Students will gain practical experience using industry standards in order to prepare them for entering the workforce.

An Occupational Skills Certificate is awarded upon successful completion of all required courses with a grade of C or better.

Program Outcomes:

1. Identify the selection, technical, and preservation issues that impact the success of digital projects.
2. Follow established protocols and standards to digitize and provide through well-crafted metadata and current digital asset management systems, access to digital objects.

Requirements for the Occupational Skills Certificate

(8 units):

Recommended sequence:

- LIB 121 – Introduction to Technologies for Digital Collections (3)
- LIB 122 – Introduction to Metadata for Digital Objects (3)
- LIB 123 – Introduction to Copyright Issues for Digital Collections (1)
- LIB 126 – Digitization Internship (1)

Library Technology – Certificate of Achievement

Top Code: 1602.00

PCC's Library Technology Program prepares students for entry level Library Assistant and more specialized higher-level Library Technician positions in all types of libraries including public libraries, school libraries, college and university libraries and specialized libraries in corporations, museums, law firms, and medical centers. Library technicians and assistants generally work under the supervision of a librarian. These jobs may have other titles, such as: Library Specialist, Library Coordinator, Library Technical Assistant, Library Media Assistant, Library Services Specialist, Interlibrary Loan Coordinator, Library Reference Technician, Cataloging & Metadata Specialist, Resource Acquisitions Specialist or Circulation Supervisor.

PCC's Certificate of Achievement program is aligned with the American Library Association's Library Support Staff Certification (LSSC - <http://ala-apa.org/lssc/>). Students completing PCC's Certificate of Achievement are immediately eligible for the LSSC [<http://ala-apa.org/lssc/lta-program-recognition-project/pasadena-city-college-2>]. The Certificate coursework focuses on job-related skills and practices needed to enter and succeed in the library workplace. The program provides training for paraprofessionals entering the field and also provides continuing education opportunities for those currently employed. Practical instruction is offered in all aspects of library operations and services, including training in the use of specialized automated library systems, library service principles, and essential workplace customer service, technology, and workplace communication skills.

Program Outcomes:

1. Discuss principles, philosophy and roles of library organizations and summarize ethical, legal and social issues related to libraries and the communities they serve.
2. Apply knowledge and demonstrate library workplace skills to perform library technician-level job duties in various types of libraries.
3. Demonstrate effective public service, technology and workplace communication skills to successfully interact with library users and staff.

Requirements for the Certificate of Achievement (19 units):

Recommended sequence:

LIB 001 – College Research Skills (1)
LIB 101 – Introduction to Library Services for Paraprofessionals (3)
LIB 102 – Introduction to Reference Services (3)
LIB 103 – Introduction to Library Access Services (3)
LIB 104 – Library Technical Services: Acquisitions and Collection Development (3)
LIB 105A – Descriptive Cataloging Procedures in Online Environments (3)

Required Electives – One of the following courses – 3 units

BIT 025 – Survey of Computer Technology in Business (3)
BIT 106 – Business Software–Introduction to Microsoft Office System (3)
CIS 001 – Introduction to Computers (3)
CIS 010 – Introduction to Information Systems (3)

Recommended Electives

CHDV 024C – Special Topics in Child Development – Curriculum: Art, Literacy, Music, Dance Movement (2)
CHDV 118 – Language and Literacy in Early Childhood (3)
LIB 020 – Independent Study (1)
LIB 106 – Library Technology Internship (1)
SPCH 010 – Interpersonal Communication (3)

LINGUISTICS (Languages Division)

Linguistics – Associate in Arts Degree

Top Code: 1501.10

This program of study provides students with insight into the study of language and language behavior. The theoretical foundations of linguistics provide the basis for gaining insight into language structure and use. Multidisciplinary in nature, this area of emphasis includes social, psychological, and historical aspects of language. The goal of this field of study is to develop a student's capacity to observe, assess, and analyze how language operates. Students who complete this area of emphasis are prepared for advanced study in Linguistics and Foreign Languages at CSU, UC, and private universities. Employment in education, research, communication, psychology, speech pathology, cultural studies, and child development typically requires an advanced degree.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. *When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Program Outcomes:

1. Demonstrate understanding of the systems and functions of human languages.
2. Use critical thinking skills to analyze and synthesize various aspects of human languages.

**Requirements for the area of emphasis
(18 units minimum)**

Students must complete the core course and additional requirements. All courses must be completed with a grade of C or better.

Core course (required):

- LING 010 – Introduction to Linguistics (3)
or ENGL 010 – Introduction to Linguistics (3)

Students are strongly encouraged to take this course before other linguistic courses.

Additional requirements: Students must complete three courses (9 units) from the following:

- ANTH 005 – Introduction to Linguistic Anthropology (3)
LING 011 – History of English Language (3)
or ENGL 011 – History of English Language (3)
LING 012 – Intercultural Communication (3)
or ENGL 012 – Intercultural Communication (3)
LING 014 – Language in Society (3)
LING 016 – Psycholinguistics: Language and the Mind (3)
LING 017 – Introduction to Language Acquisition (3)
LING 020 – Independent Study (1)
SLPA 018 – Speech-Language Pathology and Audiology (3)

Additional Options: Students must also take either two additional courses (at least 6 units) listed above or two foreign language courses (at least 6 units) listed below. Students must take foreign language courses from the same language, if choosing a foreign language as an additional option.

American Sign Language:

- ASL 001 – Elementary American Sign Language (4)
ASL 002 – Elementary American Sign Language (4)
ASL 010C – American Sign Language (3)
ASL 010D – American Sign Language (3)

Arabic:

- ARBC 001 – Elementary Arabic (5)
ARBC 002 – Elementary Arabic (5)

Armenian:

- ARMN 001 – Elementary Armenian (5)
ARMN 002 – Elementary Armenian (5)

Chinese:

- CHIN 001 – Elementary Chinese (Mandarin) (5)
CHIN 002 – Elementary Chinese (Mandarin) (5)
CHIN 002A – Elementary Chinese (Mandarin) for Advanced Beginners (5)
CHIN 003 – Intermediate Chinese (Mandarin) (5)
CHIN 004 – Intermediate Chinese (Mandarin) (5)

French:

- FRNC 001 – Elementary French (5)
- FRNC 002 – Elementary French (5)
- FRNC 003 – Intermediate French (5)
- FRNC 004 – Intermediate French (5)

German:

- GRMN 001 – Elementary German (5)
- GRMN 002 – Elementary German (5)
- GRMN 003 – Intermediate German (5)
- GRMN 004 – Intermediate German (5)

Italian:

- ITAL 001 – Elementary Italian (5)
- ITAL 002 – Elementary Italian (5)
- ITAL 003 – Intermediate Italian (5)
- ITAL 004 – Intermediate Italian (5)

Japanese:

- JAPN 001 – Elementary Japanese (5)
- JAPN 002 – Elementary Japanese (5)
- JAPN 003 – Intermediate Japanese (5)
- JAPN 004 – Intermediate Japanese (5)
- JAPN 005 – Advanced Reading and Composition (3)

Latin:

- LATN 001 – Elementary Latin (5)
- LATN 002 – Elementary Latin (5)

Portuguese:

- PORT 001 – Elementary Portuguese–Level 1 (5)
- PORT 002 – Elementary Portuguese–Level 2 (5)
- PORT 003 – Intermediate Portuguese (5)
- PORT 004 – Intermediate Portuguese (5)

Russian:

- RUSS 001 – Elementary Russian (5)
- RUSS 002 – Elementary Russian (5)
- RUSS 003 – Intermediate Russian (5)
- RUSS 004 – Intermediate Russian (5)

Spanish:

- SPAN 001 – Elementary Spanish (5)
- SPAN 002 – Elementary Spanish (5)
- SPAN 002A – Spanish for Spanish Speakers (5)
- SPAN 003 – Intermediate Spanish (5)
- SPAN 004 – Intermediate Spanish (5)
- SPAN 025 – Spanish Composition (3)
- SPAN 031 – Language of the Barrio (3)

Requirements for the Associate in Arts Degree – see page 85.

MACHINE SHOP TECHNOLOGY

(Engineering & Technology Division)

Machine Shop Technology – *Certificate of Achievement, Associate in Science Degree*

Top Code: 0956.30

The curriculum prepares students to work in the metal processing trades. Emphasis is on basic manufacturing principles. The program qualifies students to seek employment in the areas of instrumentation, mold making, tool and die general machining, industrial maintenance and research and development. The curriculum includes: basic manufacturing principles, technical mathematics including trigonometry, principles of metallurgy, quality assurance practices, tool design and manufacturing, physics of metal processing, computer numerical control machining (CNC), principles and operations of the electro-discharge machine (EDM), and product design.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate an understanding of basic manufacturing principles.
2. Apply the skills need for: Instrumentation, mold making, tool and die general machining, industrial maintenance, and research and development.
3. Secure employment in the metal processing trades.

Requirements for the Certificate of Achievement (42 units):

Recommended sequence:

Semester I

MACH 220 – Machine Shop Technology (9)
or MACH 220A – Introduction to Manufacturing Technology (3)
or MACH 220B – Intermediate Machine Technology I (3)
or MACH 220C – Intermediate Machine Technology II (3)
TECH 107A – Technical Calculations (3)

Semester II

MACH 220D – Advanced Milling Operations I (3)
MACH 220E – Advanced Milling Operations II (3)
MACH 220F – Advanced Lathe Operations (3)
DT 008A – Introduction to Digital Design & Fabrication (3)

Semester III

MACH 220G – Production Technology I (3)
MACH 220H – Production Technology II (3)
MACH 220I – Production Technology III (3)

Semester IV

MACH 220J – Tool Making I (3)
MACH 220K – Tool Making II (3)
MACH 220L – Advanced Prototype Machining (3)

Recommended electives

DT 008B – Intermediate Digital Design and Fabrication (3)
DT 008C – Advanced Systems Design & Fabrication (4)
DT 017 – Building Construction Technical Graphics (3)
DT 118 – A/E/C Modeling (3)

MACH 230 – Computer Numerical Control (3)
PHYS 010 – Descriptive Introduction to Physics (3)
PHYS 010L – Descriptive Physics in the Laboratory (1)
WELD 044A – Introduction to Gas Welding (1)
WELD 044B – Introduction to Electric Arc Welding (1)

Requirements for the Associate in Science Degree – see page 89.

Industrial Fabricator – Occupational Skills Certificate

Top Code: 0956.30

This curriculum prepares students to seek employment as an entry-level machinist. Emphasis is on entry level skills: technical drawing, drill press, lathes, vertical milling machine operation, part set up, basic inspection and process plan development. Technical mathematics applications for industry.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Develop safety protocols for duty areas and machinery equipment.
2. Analyze inspection results to update procedures utilizing machinery equipment.
3. Develop process plans to achieve high level of accuracy from machinery equipment.

Requirements for the Occupational Skills Certificate (13 units):

MIT 101 – Introduction to Robotics (4)
MACH 101 – Beginning Metalworking Skills (3)
MACH 102 – Intermediate Metalworking Skills (3)
TECH 107A – Technical Calculations (3)

Manufacturing Technology II – Occupational Skills Certificate

Top Code: 0956.30

This curriculum prepares students to seek employment as an intermediate entry-level machine operator. Emphasis is on intermediate skills: milling and lathe operations including long tapers, inside and outside radius, single point threading, counter bores, steps, knurling. Production drilling of multiple parts introduction to surface grinding including grinding multiple parts parallel in size. Intermediate inspection techniques. Note: MACH 220B–L requires enrollment in or completion of the preceding course in this sequence.

An Occupational Skills Certificate is awarded upon completion with a grade of C or better.

Program Outcomes:

1. Demonstrate skills and knowledge at the intermediate level in: milling and lathe operations including long tapers, inside and outside radius, single point threading, counter bores, steps, knurling, and drilling and grinding of multiple parts.
2. Secure employment as an intermediate-level machine operator.

Requirements for the Occupational Skills Certificate (15 units):

MACH 220E – Advanced Milling Operations II (3)
MACH 220F – Advanced Lathe Operations (3)
MACH 220G – Production Technology I (3)
MACH 220H – Production Technology II (3)
DT 008A – Introduction to Digital Design & Fabrication (3)

Recommended electives

DT 008B – Intermediate Digital Design and Fabrication (3)
DT 008C – Advanced Systems Design & Fabrication (4)
DT 017 – Building Construction Technical Graphics (3)
DT 118 – A/E/C Modeling (3)
MACH 230 – Computer Numerical Control (3)
PHYS 010 – Descriptive Introduction to Physics (3)
PHYS 010L – Descriptive Physics in the Laboratory (1)
WELD 044A – Introduction to Gas Welding (1)
WELD 044B – Introduction to Electric Arc Welding (1)

MATHEMATICS

(Math & Computer Science Division)

Mathematics – Associate in Science Degree for Transfer to CSU

Top Code: 1701.00

The Associate in Science in Mathematics for Transfer (AS-T) prepares a student for transfer into the CSU system for further study in pure or applied mathematics. Earning a 4-year degree in mathematics prepares students for careers in which mathematical skills are in great demand, such as science, technology, engineering, computer science, business, industry, medicine, education or government.

The goal of this degree is to provide a clear pathway for transfer students applying to the California State University (CSU). Completion of the Associate in Science in Mathematics for Transfer (AS-T) ensures transfer students will complete the lower division general education requirements as well as the articulated lower division major requirements for the bachelor's degree in Mathematics prior to transferring. The Associate in Science Degree in Mathematics for Transfer degree will be awarded upon completion of coursework totaling 60 California State University (CSU) transferable units including the major requirements and the Intersegmental General Education Transfer Curriculum (IGETC-CSU) or California State University General Education (CSUGE) requirements with a minimum grade point average of 2.0. All courses in the major must be completed with a grade of "C" or better.

Associate in Science in Mathematics for Transfer Degree

REQUIRED COURSES (15 units)

MATH 005A – Single Variable Calculus I (5)
MATH 005B – Single Variable Calculus II (5)
MATH 005C – Multivariable Calculus (5)

LIST A: Select 1 course from below (5 units)

MATH 010 – Linear Algebra and Applications (5)

LIST B: Select 1 course from below (4–5 units)

CS 002 – Fundamentals of Computer Science (5)
MATH 055 – Differential Equations (5)

MATH 022 – Discrete Mathematics (4)
PHYS 001A – General Physics (5)
STAT 050 – Elementary Statistics (4)

REQUIRED SUBTOTAL..... 24–25
CSU General Education or IGETC Pattern..... 39–41

DEGREE TOTAL 60

Student Learning Outcomes:

1. Develop critical thinking and problem solving skills.
2. Increase the ability to read, write, and discuss mathematics.
3. Develop an understanding of the usefulness of mathematics to other disciplines and life.

MEDICAL ASSISTING
(Health Sciences Division)

Medical Assisting – Administrative & Clinical – *Certificate of Achievement, Associate in Science Degree*

Top Code: 1208.00

The program prepares students to seek employment in medical offices or clinics performing administrative and clinical duties including records management, financial systems, laboratory procedures and medical transcription. Students must provide their own transportation to off-campus clinical sites.

The program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) in coordination with the American Association of Medical Assistants. Upon successful completion of the curriculum, a student is eligible to take the certification examination to become a Certified Medical Assistant offered by the American Association of Medical Assistants (convicted felons may not be eligible).

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Requirements for admission into the Medical Assisting Program are:

1. Completed application for admission to the program.
2. Graduation from an accredited high school or equivalent with a 2.0 grade point average as well as in all college work.
3. Keyboarding speed of 30–35 wpm.
4. Eligibility for ENGL 001A.
5. After acceptance into the program, submit a completed health form evidencing physical and emotional health including required immunizations/ chest x-ray or Mantoux test.
6. Current CPR/BLS (Basic Life Support) card, which must be maintained while in the program.

Recommended preparation:

High school courses in human physiology, algebra, bookkeeping and typing.

Program Outcomes:

1. Demonstrate and perform technical skills related to administrative and clinical duties utilizing current technology and OSHA/CLIA standards required in the medical ambulatory settings.
2. Exhibit professionalism, skills required for employment and interpersonal skills in a culturally diverse community.
3. Apply cognitive skills to analyze, synthesize and evaluate ideas and information in a medical ambulatory setting.

Requirements for the Certificate of Achievement (39 units):

Recommended sequence:

Semester I

- MA 109 – Health Information Technology (1)
- MA 110 – Medical Office Microcomputer Management Applications (1)
- MA 111A – Medical Office Procedures I (4)
- MA 115 – Medical Terminology (3)
- MA 122A – Clinical Assisting Techniques I (2)
- MA 122B – Clinical Assisting Techniques II (2)
- PYSO 100 – Basic Physiology and Anatomy (3)

Winter Intersession

- MA 126 – Pharmacology for Medical Assistants (2)

Semester II

- MA 111B – Medical Office Procedures II (4)
- MA 113 – Human Disease (3)
- MA 122C – Clinical Assisting Techniques III (4)
- MA 124 – Medical Office Laboratory Procedures (3)
- MA 127 – Medical Insurance (3)

- Summer Intersession** MA 128 – Clinical Experience (4)

Requirements for the Associate in Science Degree – see page 89.

Medical Assisting – Medical Office Administration – *Certificate of Achievement, Associate in Science Degree*

Top Code: 1208.20

The medical assisting administrative curriculum prepares students with entry-level skills to seek employment as administrative medical office personnel. The student will learn about the front office including medical insurance billing, bookkeeping and beginning transcription.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Requirements for the Certificate of Achievement (27 units):

- MA 109 – Health Information Technology (1)
- MA 110 – Medical Office Microcomputer Management Applications (1)
- MA 111A – Medical Office Procedures I (4)
- MA 111B – Medical Office Procedures II (4)
- MA 113 – Human Disease (3)

MA 115 – Medical Terminology (3)
MA 122A – Clinical Assisting Techniques I (2)
MA 127 – Medical Insurance (3)
PSYC 024 – Lifespan Developmental Psychology (3)
PYSO 100 – Basic Physiology and Anatomy (3)

Recommended electives

MA 120 – Independent Study (1)

Requirements for the Associate in Science Degree – see page 89.

Medical Assisting – Medical Insurance Biller – *Certificate of Achievement, Associate in Science Degree*

Top Code: 1208.00

The medical insurance biller curriculum prepares students with entry-level skills to seek employment as medical office insurance billers. Instruction includes the universal claim form, state disability, private insurance billing, workers compensation, Medicare, Medi-Cal and basic coding using the CPT and ICD coding books.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Requirements for the Certificate of Achievement (22 units):

MA 109 – Health Information Technology (1)
MA 110 – Medical Office Microcomputer Management Applications (1)
MA 111A – Medical Office Procedures I (4)
MA 111B – Medical Office Procedures II (4)
MA 113 – Human Disease (3)
MA 115 – Medical Terminology (3)
MA 127 – Medical Insurance (3)
PYSO 100 – Basic Physiology and Anatomy (3)

Requirements for the Associate in Science Degree – see page 89.

Medical Office Receptionist – *Occupational Skills Certificate*

Top Code: 0514.20

The medical receptionist option prepares students with entry-level skills to seek employment in medical reception areas. Instruction includes interpersonal communication skills, greeting patients, scheduling appointments, computer data entry, initial processing of managed care patients, telephone techniques, interpersonal relations, oral communication, medical ethics and law, Occupational Health and Safety regulations, medical asepsis, vital signs and height-weight measurements, and initial medical record documentation.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Requirements for the Occupational Skills Certificate (15 units):

MA 109 – Health Information Technology (1)
MA 110 – Medical Office Microcomputer Management Applications (1)
MA 120 – Independent Study (1)
MA 122A – Clinical Assisting Techniques I (2)
PYSO 100 – Basic Physiology and Anatomy (3)
MA 115 – Medical Terminology (3)
MA 111A – Medical Office Procedures I (4)

Medical Office Transcription – Occupational Skills Certificate

Top Code: 0514.20

The medical office transcription option prepares students with entry-level skills to seek employment as medical office transcriptionists. Instruction includes formatting documents including the history and physical, correspondence, discharge summaries, operative reports and special laboratory reports using a transcriber and word processing program.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Requirements for the Occupational Skills Certificate (11 units):

MA 109 – Health Information Technology (1)
MA 110 – Medical Office Microcomputer Management Applications (1)
MA 113 – Human Disease (3)
MA 115 – Medical Terminology (3)
PYSO 100 – Basic Physiology and Anatomy (3)

MUSIC

(Performing and Communication Arts Division)

Commercial Music – Occupational Skills Certificate

Top Code: 1005.00

The Commercial Music Occupational Skills Certificate prepares students for employment in a variety of commercial music and music production settings such as sound designer assistant, sound editor assistant, automation dialogue replacement assistant and sound recordists. They will gain skills in applying musical skills in audio production, audio signal flow, using recording equipment, signal processing and audio editing and post-production.

An Occupational Skills Certificate is awarded upon successful completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate conventional, industry-standard recording techniques including microphone selection and placement.
2. Demonstrate proficiency in multi-track recording production by recording multi-track sessions that are enhanced with the use of compiled play-lists, quantization and elastic audio.
3. Demonstrate proficiency in audio post-production by mixing a multi-track recording session so that elements of the mix are clear, and the frequency range, stereo width, and perception of depth/dynamics are all to industry standards.

Prerequisite: One of the following: MUSC 001, 004A, 040 or 041A

Requirements for the Occupational Skills Certificate (16.5 units):

MUSC 093A – Introduction to the Music Business and Entrepreneurship (2)
MUSC 096A – Introduction to Music Recording and Production (3.5)
MUSC 096B – Music Recording & Production Applications (3.5)
MUSC 096C – Music Recording & Production Workshop (3.5)

Required electives – 4 units from the following:

MUSC 034A – Jazz Keyboard Skills (2)
MUSC 034B – Advanced Jazz Keyboard Skills (2)
MUSC 036A – Pop-Jazz Theory (3)
MUSC 036B – Jazz-Commercial Theory (3)
MUSC 041A – First Year Piano (2)
MUSC 071A – Voice Techniques (1)
MUSC 083A – Beginning Guitar (1)
MUSC 105 – Popular Songwriting (3)
MUSC 112A – Electric Bass Techniques (2)
MUSC 112B – Electric Bass Repertoire (2)
MUSC 115 – Contemporary Guitar Techniques (1)
MUSC 116 – Drum Set Techniques (1)
MUSC 117 – Rhythm Section Techniques (2)
MUSC 121 – Latin Percussion Techniques (2)
MUSC 144 – Introduction to Improvisation (1)
MUSC 171A – Techniques of Popular Singing (2)
MUSC 171B – Techniques of Popular Singing (2)
MUSC 171C – Vocal Jazz Performance Techniques (1)

Music – Associate in Arts Degree

Top Code: 1004.00

A degree in the Music major from Pasadena City College enables students to develop musical proficiency in Music Theory, Musicianship, Keyboard Harmony and Performance in preparation for transfer to Bachelor of Music degree programs at the university level or for their career goals in the field of music.

Music majors are expected to declare a primary performance area (instrument or voice), undertake applied lessons on their instrument, and perform in a large ensemble.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. *When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Program Outcomes:

1. Utilize theoretical principles in the analysis and composition of the music of the common-practice period.
2. Hear, internally, the melodic, harmonic, and rhythmic elements of the common-practice period. Display the musicianship skills necessary to participate successfully in various musical endeavors, including performance and composition.
3. Present successful solo performances using appropriate repertoire for their chosen instrument/voice with technical proficiency, musicality and stylistic awareness.
4. Perform and/or participate successfully in small and large ensembles, using time management and interpersonal skills to assist in the production of a collaborative musical work.
5. Using standard music references and resources (reference works, periodicals, software, etc.), write analytical, historical, critical, biographical, and research oriented projects on topics in music.

Requirements for the major (36 units minimum)

Courses must be completed with a grade of C or better. All courses must be numbered 001–099. Students must complete all of the following courses:

MUSC 001A – Music Theory I (3)
MUSC 001B – Music Theory II (3)
MUSC 001C – Music Theory III (3)
MUSC 001D – Music Theory IV (3)
MUSC 002A – Musicianship I (1)
MUSC 002B – Musicianship II (1)
MUSC 002C – Musicianship III (1)
MUSC 002D – Musicianship IV (1)
MUSC 004A – Keyboard Skills I (1)
MUSC 004B – Keyboard Skills II (1)
MUSC 004C – Keyboard Skills III (1)
MUSC 004D – Keyboard Skills IV (1)
MUSC 007A – Music History and Literature (3)
MUSC 007B – Music History and Literature (3)
MUSC 010 – Concert Music (0.5)*
*(MUSC 010 must be completed 4 times)

Select four units from the following options:

MUSC 009A – Individual Instruction I (1)
MUSC 009B – Individual Instruction II (Classical) (1)
or MUSC 009D – Individual Instruction II (Jazz/Commercial) (1)

Students must complete two units from the following:

MUSC 009C – Individual Instruction III (Classical) (1)
or MUSC 009E – Individual Instruction III (Jazz/Commercial) (1)

Students must complete four additional units from the following courses:

MUSC 043 – Piano Ensemble (1)
MUSC 044 – Piano Accompanying (1)
MUSC 056 – Vocal Jazz Ensemble (1)
MUSC 057A – Jazz Combo (1)
MUSC 057B – Lancer Jazz Big Band (1)
MUSC 057C – Studio Jazz Ensemble (1)
MUSC 057D – Swing Band (1)
MUSC 057E – Jazz Guitar Ensemble (1)
MUSC 057F – Latin Jazz Ensemble (1)
MUSC 057G – Dixieland/Swing Combo (1)
MUSC 059 – Chamber Orchestra (1)
MUSC 060 – College/Community Orchestra (1)
MUSC 061 – Lancer Marching Band (2)
MUSC 062 – Lancer Concert Band (2)
MUSC 063 – Concert Choir (1)
MUSC 064 – Chamber Singers (1)
MUSC 065 – College/Community Concert Band (1)
MUSC 066 – Madrigals (1)

MUSC 074 – Opera Workshop (2)
MUSC 075 – Musical Theater Workshop (2)
MUSC 082 – Guitar Ensemble (1)

Requirements for the Associate in Arts Degree – see page 89.

Music – Associate in Arts Degree for Transfer to CSU

Top Code: 1004.00

The Associate in Arts for Transfer in Music (AA-T in Music degree) prepares students to transfer to a Bachelor of Arts degree program, a capstone or terminal liberal arts degree with an emphasis on music. Students develop musical proficiency in theory, musicianship and performance on their primary instrument or voice.

Students who plan to pursue a professional career in music (in performance, composition, jazz, music technology, education or graduate study) should pursue the Associate of Arts in Music (AA in Music degree) which prepares students to transfer to a Bachelor of Music degree program. Students develop musical proficiency in theory, musicianship, keyboard harmony and music history while preparing to successfully audition on their primary instrument or voice for acceptance into a university music department.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific institutions.

Requirements for the Major

All courses must be completed with a grade of C or better. All courses must be numbered 1–99. Students must complete a minimum of 22 units, as set forth below.

The Associate in Arts Degree in Music for Transfer degree will be awarded upon completion of coursework totaling 60 California State University (CSU) transferable units including the above major requirements and the Intersegmental General Education Transfer Curriculum (IGETC) or California State University General Education (CSUGE) requirements with a minimum grade point average of 2.0. All courses in the major must be completed with a grade of “C” or better. (Students completing this degree are not required to fulfill additional PCC graduation requirements)

Pasadena City College may certify a maximum of 39 units as having fulfilled the CSU lower division general education requirements.

Associate in Arts Degree in Music for Transfer

REQUIRED CORE (21–22 units)

MUSC 001A – Music Theory I (3)
MUSC 001B – Music Theory II (3)
MUSC 001C – Music Theory III (3)
MUSC 001D – Music Theory IV (3)
MUSC 002A – Musicianship I (1)
MUSC 002B – Musicianship II (1)
MUSC 002C – Musicianship III (1)
MUSC 002D – Musicianship IV (1)

Applied Music (2 units)

MUSC 009A – Individual Instruction I (1)
MUSC 009B – Individual Instruction II Classical (1)

- MUSC 009C – Individual Instruction II Jazz/Commercial (1)
- MUSC 009D – Individual Instruction III Classical (1)
- MUSC 009E – Individual Instruction III Jazz/Commercial (1)

Large Ensemble (4 semesters)

- MUSC 043 – Piano Ensemble (1)
- MUSC 056 – Vocal Jazz Ensemble (1)
- MUSC 057A – Jazz Combo (1)
- MUSC 057B – Lancer Jazz Big Band (1)
- MUSC 057C – Studio Jazz Ensemble (1)
- MUSC 057D – Swing Band (1)
- MUSC 057E – Jazz Guitar Ensemble (1)
- MUSC 057F – Latin Jazz Ensemble (1)
- MUSC 060 – College/Community Orchestra (1)
- MUSC 061 – Lancer Marching Band (2)
- MUSC 062 – Lancer Concert Band (2)
- MUSC 063 – Concert Choir (1)
- MUSC 064 – Chamber Singers (1)
- MUSC 065 – College/Community Concert Band (1)
- MUSC 066 – Madrigals (1)
- MUSC 074 – Opera Workshop (1)
- MUSC 075 – Musical Theatre Workshop (1)
- MUSC 082 – Guitar Ensemble (1)

REQUIRED SUBTOTAL..... 22
 CSU General Education or IGETC Pattern..... 38

DEGREE TOTAL 60

Student Learning Outcomes:

- 1) Utilize theoretical principles in the analysis and composition of the music of the common-practice period.
- 2) Hear, internally, the melodic, harmonic, and rhythmic elements of the common-practice period. Display the musicianship skills necessary to participate successfully in various musical endeavors, including performance and composition.
- 3) Present successful solo performances using appropriate repertoire for their chosen instrument/voice with technical proficiency, musicality and stylistic awareness.
- 4) Perform and/or participate successfully in small and large ensembles, using time management and interpersonal skills to assist in the production of a collaborative musical work.

NATURAL SCIENCES
(Natural Sciences Division)

Natural Sciences – Associate in Arts Degree

Top Code: 4902.00

This area of emphasis offers a broad and interdisciplinary foundation in the sciences necessary for continued training at the upper division (or advanced) level for many bachelor degree programs in the natural sciences including biology, chemistry, geology, mathematics, physics, and many others. It is a starting point for students who are preparing for careers in business, industry, medicine, health sciences, education, and government, where scientific and technical skills are in great demand.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. *When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Program Outcomes:

1. Successfully apply the scientific method to solve problems and act as a responsible global citizen.
2. Synthesize the major paradigms in 3 of the 5 disciplines in the Natural Sciences Division.
3. Demonstrate adequate preparation for advanced study in one focal discipline within the Natural Sciences Division.

**Requirements for the area of emphasis
(18 units minimum)**

Courses must be completed with a grade of C or better. All courses must be numbered 001–099. Students must complete 18 units with at least 3 units in three of the following six categories listed below:

Biological Sciences

ANTH 001 – Physical Anthropology (3)
ANTH 001L – Laboratory in Physical Anthropology (1)
ANAT 025 – General Human Anatomy (4)
or PYSO 002A – Physiology and Anatomy (4)
BIOL 001A – Principles of Biology–Evolution, Diversity, and Ecology
BIOL 001B – Principles of Biology–Cellular and Organismal Biology
BIOL 001C – Principles of Biology–Introduction to Molecular Biology
BIOL 002 – Animal Biology (4)
BIOL 003 – Human Biology (4)
BIOL 004 – Plant Biology (4)
BIOL 005A – Topics in Applied Botany/Urban Tree Identification & Biology (1)
BIOL 005B – Topics in Applied Botany: Botany for School Gardens (1)
BIOL 010A – Cellular Biology, Genetics and Evolution (5)
BIOL 010B – The Diversity of Life on Earth: Structure, Function and Ecology (5)
BIOL 010C – Genetics (3)
BIOL 011 – General Biology (4)
BIOL 014 – Field Biology (4)
BIOL 016 – Marine Biology (4)
BIOL 025 – Field Studies (1)
BIOL 026 – Biology Field Studies (2)
BIOL 028 – Introduction to Bioinformatics (3)
BIOL 038 – Cell and Molecular Biology (4)
BIOL 039 – Modern Human Genetics (4)
MICR 002 – Microbiology (4)
NUTR 011 – Human Nutrition (3)
PYSO 001 – Human Physiology (4)
PYSO 002B – Physiology and Anatomy
PSYC 002 – Elementary Physiological Psychology (3)

Chemistry

CHEM 001A– General Chemistry and Chemical Analysis (5)
CHEM 001B – General Chemistry and Chemical Analysis (5)
CHEM 002A – Chemistry–General, Organic and Biochemistry (4)
CHEM 002B – Chemistry–General, Organic and Biochemistry (4)
CHEM 008A – Organic Chemistry (5)
CHEM 008B – Organic Chemistry (5)
CHEM 022 – Introductory Chemistry (4)

Environmental Sciences

- ENVS 001 – Introduction to Environmental Science (4)
- ENVS 002 – Human Impact on the Environment (3)
- ENVS 003 – Chemistry and the Environment (4)
- ENVS 030 – Environmental Field Investigations (2)
- ENVS 040 – Environmental Field Laboratory (1)

Geosciences

- GEOG 001 – Physical Geography (3)
- GEOG 001L – Physical Geography Laboratory (1)
- GEOG 004 – Weather and Climate (3)
- GEOL 001 – Physical Geology (4)
- GEOL 001F – Physical Geology Field Studies (1)
- GEOL 002 – Historical Geology (4)
- GEOL 002F – Historical Geology Field Studies (1)
- GEOL 003 – Earth and Space Science (4)
- GEOL 003F – Earth and Space Science Field Laboratory (1)
- GEOL 004 – Geology of California (3)
- GEOL 006 – Mineralogy (4)
- GEOL 008 – Petrology (4)
- GEOL 012 – Physical Oceanography (3)
- GEOL 012F – Physical Oceanography Field Studies (1)
- GEOL 012L – Physical Oceanography Laboratory (1)
- GEOL 016 – Introduction to Planetary Science (3)
- GEOL 022 – The Age of Dinosaurs (3)
- GEOL 023 – Natural Disasters (3)
- GEOL 024 – Science of Atmosphere (3)
- GEOL 030 – Geological Field Investigation (2)
- GEOL 030A – Channel Islands–Coastal California (2)
- GEOL 030C – Coast Ranges–San Andreas Fault (2)
- GEOL 030D – Sierra Nevada (2)
- GEOL 030E – Owens Valley–Death Valley (2)
- GEOL 030F – Geological Field Investigation–Rocky Mountains (2)
- GEOL 030G – Klamath Mountains–Northern California (2)
- GEOL 030H – International Study Areas (2)
- GEOL 030I – Problems in Structural Geology (2)
- GEOL 030J – Colorado Plateau (2)
- GEOL 030K – Problems in Regional Stratigraphy (2)
- GEOL 030L – Applications of Global Positional System (2)
- GEOL 030M – Geological Field Investigation–Pacific Rim /Pacific Islands (2)
- GEOL 040 – Geological Field Laboratory (1)

Mathematics & Statistics

- MATH 003 – College Algebra (4)
- MATH 005A – Single Variable Calculus I (5)
- MATH 005B – Single Variable Calculus II (5)
- MATH 005C – Multivariable Calculus (5)
- MATH 007A – Mathematical Analysis 1 (4)
- MATH 007B – Mathematical Analysis 2 (4)
- MATH 008 – Trigonometry (4)
- MATH 009 – Precalculus Mathematics (5)
- MATH 010 – Linear Algebra and Applications (5)
- MATH 022 – Discrete Mathematics (4)
- MATH 055 – Differential Equations (5)
- STAT 050 – Elementary Statistics (4)

Physics & Physical Sciences

ASTR 001 – Elementary Astronomy (4)
ASTR 012 – Descriptive Introduction to Astronomy (3)
PHSC 003 – Physical Sciences (3)
PHSC 003L – Laboratory for Physical Science (1)
PHYS 001A – General Physics (5)
PHYS 001B – General Physics (5)
PHYS 001C – General Physics (5)
PHYS 001D – General Physics (5)
PHYS 002A – General Physics (4)
PHYS 002B – General Physics (4)
PHYS 010 – Descriptive Introduction to Physics (3)
PHYS 010L – Descriptive Physics in the Laboratory (1)
PHYS 031A – General Physics (5)
PHYS 031B – General Physics (5)

Requirements for the Associate in Arts Degree – see page 85.

NURSING

(Health Sciences Division)

Certified Nursing Assistant – Occupational Skills Certificate

Top Code: 1230.30

The Certified Nursing Assistant course provides the student with the necessary skills to seek employment in long-term care facilities as Certified Nursing Assistants. Emphasis is on basic principles of nursing, development and application of nursing skills in long-term care facilities.

Upon completion of the Certified Nursing Assistant course the student will receive a Certificate of Course Completion and is eligible to take the State of California Department of Health Services written and practical examination to obtain a certificate as a Certified Nursing Assistant.

A grade of C or better must be achieved to receive the Occupational Skills Certificate.

Selection of Students:

CANDIDATES MUST SUBMIT WRITTEN APPLICATION IN THE NURSING DIVISION AND WILL BE SELECTED AND PRIORITIZED IN THE FOLLOWING ORDER:

1. Students who have been accepted into the Vocational Nursing program.
2. Students accepted into Registered Nursing program (Fall semester).
3. Vocational Nursing program applicants who have not been admitted into the program.
4. Applicants for CNA only.

Prerequisites:

Completion of 10th grade in high school
Minimum age of 16
Valid AHA CPR/Basic Life Support Card Course for health care providers

Certified Nursing Assistant Curriculum

Required course for the Occupational Skills Certificate (5 units)

NURS 103 – Nursing Assistant (5)

NURSING PROGRAMS

I. General admissions requirements for the Registered Nursing and Vocational Nursing Programs:

1. The student must formally apply to the College and is encouraged to make an appointment to see a counselor before enrolling in nursing prerequisite courses.
2. The student must be a United States high school graduate or have a G.E.D. or equivalent.
3. The student must have and maintain a current American Heart Association AHA CPR/Basic Life Support Card for health care providers and Nursing Malpractice Insurance while in a nursing program.
4. Students who have completed previous college nursing coursework and are requesting advanced placement must provide transcripts, a copy of course syllabi and/or catalog descriptions and a letter of clinical safety signed by previous Nursing Division Dean/Director. A petition for advanced placement must be filed in Student Services. If the petition is approved, an examination in theory and lab skills may be administered. A grade of C or better must be achieved on this examination.

II. Other Requirements

1. Admission to and continuation in a nursing program requires the student to maintain a grade of C or better in all required nursing courses (prerequisites, requisites, and corequisites) and a GPA of 2.5 in prerequisites.
2. Once accepted into a nursing program, the student is required to submit evidence of health documented by a recent physical examination (within the last year), with the required immunizations and/or titres.
3. Students are expected to comply with the division's clinical uniform standards.
4. Students must provide their own transportation to all on- and off-campus clinical sites. Assignments are scheduled between the hours of 6:30 a.m. and 11:30 p.m. daily, including Sat and Sun.
5. Each theory course has two corequisites, a seminar course and a laboratory course both of which must be taken concurrently with the theory course.
6. Nursing students must have the ability to communicate safely and effectively in a health care setting. To enhance success in a nursing program, students who have English as a second language are encouraged to enroll in SPCH 003, 010, and MA 115.
7. The California Board of Registered Nursing and the California Board of Vocational Nurses and Psychiatric Technician Examiners are required to protect the public by screening applicants for licensure to identify potentially unsafe practitioners. The law provides for denial of licensure for crimes or acts which are related to nursing qualifications, functions and/or duties. Program applicants who have questions related to eligibility for licensure may contact the Health Sciences Division for referral to the appropriate licensing board.

III. Selection of Students:

ALL ELIGIBLE APPLICANTS WHO MEET THE ABOVE REQUIREMENTS AND COURSE PREREQUISITES WILL BE SELECTED ACCORDING TO THE FOLLOWING CRITERIA:

BASIC RN PROGRAM

1. Prerequisites completed as described above.
2. Students who were previously admitted to the program and are eligible for readmission.

VOCATIONAL NURSING

1. New applicants to the VN program.
2. Students who withdrew from the VN program a year ago and are eligible for readmission.
3. Prerequisites completed as described above.

CAREER LADDER – LVN TO REGISTERED NURSING

1. Prerequisites completed as described above and valid California Licensed Vocational Nursing License.
2. Students who were previously admitted to the program and are eligible for readmission.

The Division of Health Sciences will inform RN, LVN to RN, LVN and approved CNA candidates of the results by mail approximately six to eight weeks after the application deadline.

Program Outcomes:

The PCC Nursing Program's outcomes reflect standards of competency as delineated by the California State Boards of Nursing and the Department of Health Services. SLOs are synthesized in all courses as noted:

1. Apply theoretical knowledge and concepts of nursing roles through foundations of nursing care, beginning nursing care, intermediate care, and advanced nursing care, ending with the program outcomes of advocate, clinician, critical thinker, leader and teacher. (NURS 050/050L, 051/051L, 052/052L, 053/053L, 125/125L, 126/126L, 127/127L)
2. Communicate theoretical knowledge and concepts of nursing roles through foundations of nursing care, beginning nursing care, intermediate care, and advanced nursing care, ending with the program outcomes of advocate, clinician, critical thinker, leader and teacher. (All NURS courses)
3. Demonstrate safe and effective basic procedural skills with emphasis on elderly patients. (NURS 103)

Nursing – Registered Nursing – *Certificate of Achievement, Associate in Science Degree*

Top Code: 1230.10

The Registered Nursing Program is accredited by the California Board of Registered Nursing: BRN, 400 R Street, Suite 4030, Sacramento, CA, 95814–6200, (916) 322–3350.

The Registered Nursing Program is accredited by the California Board of Registered Nursing. The Registered Nursing Program curriculum provides students the opportunity to seek licensure as an RN and employment in a variety of health care settings. Emphasis is placed on nursing theory and concepts to promote, maintain, and restore health in individuals with common and complex health problems throughout the life span. Additionally, the development and application of the nursing knowledge, skills, and attitudes needed to use the nursing process in the care of individuals is emphasized. Upon completion of the Registered Nursing curriculum, the student receives a Certificate of Achievement, an Associate Degree of Science, and is eligible to apply to take the National Council Licensing Examination Registered Nursing (NCLEX-RN) exam and if successful will qualify to receive a license from the Board of Registered Nursing to practice nursing in the State of California.

Required Courses

Prerequisites:

- ENGL 001A or 001AH or 001AS
- MICR 002
- ANAT 025
- PYSO 001
- MATH 402 or higher
- Valid AHA CPR/Basic Life Support Card Course for health care providers

Required Non-nursing Courses:

- NUTR 011
- PSYC 024
- SPCH 010 (preferred)
or SPCH 001
- SOC 001

The Human Nutrition, Psychology across the Lifespan, Speech, and Sociology are required by the Board of Registered Nursing even when the student holds previous academic degrees.

English, Humanities, Political Science and U.S. History or American Institutions 125, PE, Critical Thinking (See Associate in Science Degree requirements)

It is recommended that the student complete as many of these non-nursing classes as possible prior to beginning the program.

Program Outcomes:

1. Deliver **patient-centered care** that recognizes the patient or designee as the source of control and full partner in providing compassionate and coordinated nursing care based on respect for patient's preferences and values and needs.
2. Use **teamwork and collaboration** to function effectively within nursing and inter-professional teams, fostering open communication, mutual respect and shared decision-making to achieve quality patient care.
3. Develop an **evidence-based practice** by integrating best current evidence with clinical nursing expertise and patient/family preferences and values for delivery of optimal health care.
4. Improve **safety** by minimizing risk of harm to patients and providers through individual nursing performance and **quality improvement** system methods to continuously improve the quality of health care systems.
5. Use **informatics**, including information and technology, to communicate, manage knowledge, mitigate error, and support nursing decision making.
6. Adhere to standards of professional nursing practice by being responsible for personal actions and behaviors and practicing nursing within legal, ethical, and regulatory standards.

Registered Nursing Curriculum

THE FOLLOWING SEQUENCE MUST BE FOLLOWED:

These courses must be completed prior to taking the NCLEX-RN and licensure as required by the State of California Board of Registered Nursing:

Requirements for the Certificate of Achievement (39 units):

Sequence to be followed:

Semester I

- NURS 050 – Foundational Nursing Care (3)
- NURS 050L – Foundational Nursing Care Lab/Clinical (5)
- NURS 050S – Foundational Nursing–Seminar (1)
- NURS 137 – Pharmacology: Drugs and Solutions (1)
- NURS 138 – Pharmacology: Process and Problems (1)

Semester II

- NURS 040 – Maternal Newborn Nursing (1)
- NURS 040L – Maternal Newborn Nursing Lab (2)
- NURS 041 – Pediatric Nursing (1)
- NURS 041L – Pediatric Nursing Lab (2)
- NURS 051A – Beginning Medical Surgical Nursing (1)
- NURS 051L – Beginning Medical Surgical Nursing Lab (2)
- NURS 051S – Beginning Nursing–Seminar (1)

Semester III

- NURS 042 – Psychiatric Mental Health Nursing (1)
- NURS 042L – Psychiatric Mental Health Nursing Lab (1.5)
- NURS 052A – Intermediate Medical Surgical Nursing (2)
- NURS 052L – Intermediate Medical Surgical Nursing Lab (3.5)
- NURS 052S – Intermediate Nursing Care–Seminar (1)

Semester IV

NURS 053L – Advanced Medical-Surgical Nursing–Clinical (5)

NURS 053S – Advanced Nursing Seminar (1)

NURS 053 – Advanced Medical-Surgical Nursing (3)

Recommended electives

CHEM 002A – Chemistry–General, Organic and Biochemistry (4)

GERO 001 – Introduction to Gerontology (3)

GERO 022 – Directed Studies in Gerontology (3)

GERO 140 – Applied Health Care Management in Gerontology (3)

MA 115 – Medical Terminology (3)

NURS 103 – Nursing Assistant (5)

NURS 139 – Intermediate Clinical Pharmacology (2)

NURS 201 – Basic Strategies for Success in Nursing Education (1)

NURS 202 – Basic Clinical Skills (3)

NURS 211 – Basic Cardiac Dysrhythmias (1)

NURS 213 – Intravenous Therapy and Blood Withdrawal (1)

Requirements for the Associate in Science Degree – see page 89.

Nursing – Vocational Nursing – Certificate of Achievement, Associate in Science Degree

Top Code: 1230.20

I. General admissions requirements for the Vocational Nursing Programs:

1. The student must formally apply to the college and is encouraged to make an appointment to see a counselor before enrolling in nursing prerequisite courses
2. The student must be a United States high school graduate or have a G.E.D. or equivalent.
3. The student must have and maintain a current AHA CPR/Basic Life Support Card, for health care provider.
4. Students who have completed previous college nursing course work and are requesting advanced placement must provide transcripts and submit a petition to the college for advanced placement. If the petition is approved, an examination in theory and lab skills may be administered. A grade of C or better must be achieved on this examination.

II. Other Requirements

1. Admission to and continuation in a nursing program requires the student to maintain a grade of C or better in all required nursing courses (prerequisites, requisites, and corequisites) and GPA of 2.5 in prerequisites.
2. Once accepted into a nursing program, the student is required to submit evidence of good health documented by a recent physical examination (within the last year), with the required immunizations.
3. Students must provide their own transportation to all on- and off-campus clinical sites. Assignments are scheduled between the hours of 6:30 a.m. and 11:30 p.m., daily.
4. Each theory course has a laboratory course that must be taken concurrently.
5. Nursing students must have the ability to communicate effectively. To enhance success in a nursing program, students who have English as a second or third language are encouraged to enroll in Speech 003, 010 and Medical Assisting 115.

6. The California Board of Vocational Nurses and Psychiatric Technician Examiners are required to protect the public by screening applicants for licensure to identify potentially unsafe practitioners. The law provides for denial of licensure for crimes or acts which are related to nursing qualifications, functions and/or duties. Program applicants who have questions related to eligibility for licensure may contact the Health Sciences Division for referral to the appropriate licensing board.

III. Selection of Students:

ALL ELIGIBLE APPLICANTS WHO MEET THE ABOVE REQUIREMENTS AND COURSE PREREQUISITES WILL BE SELECTED ACCORDING TO THE FOLLOWING CRITERIA:

VOCATIONAL NURSING

1. New applicants to the VN program.
2. Students who withdrew from the VN program a year ago and are eligible for readmission.
3. Prerequisites completed as described above.

The Vocational Nursing curriculum provides students with skills that will afford them the opportunity to seek employment in hospitals, clinics, private physicians' offices, and skilled nursing in extended and long-term care facilities.

Emphasis is on nursing theory, development and application of nursing skills in the basic care of individuals throughout the life span.

Upon completion of this curriculum the student will receive a Certificate of Achievement and will be eligible to take the National Council Licensing Examination-Vocational Nurse (NCLEX-VN) and if successful will qualify to receive a license from the Board of Vocational Nurse and Psychiatric Technician Examiners regulations to practice in the State of California.

A grade of C or better in all Vocational Nursing course work is required to meet the California Board of Vocational Nurse and Psychiatric Technician Examiners regulations.

NOTE: The following sequence must be followed.

Vocational Nursing Curriculum

Requirements for the Certificate of Achievement (56 units – includes prerequisites):

Sequence must be followed:

Prerequisites

NURS 103

PYSO 100

MATH 400 A and B, or 402, or higher

NUTR 011

PSYC 024-

The PCC Nursing Program's outcomes reflect standards of competency as delineated by the California State Boards of Nursing and the Department of Health Services.

Required Nursing Classes (37 units)

Semester I

NURS 108A – Nursing Skills Laboratory–VN (1)

NURS 122 – Medication Administration for Vocational Nurses–Theory (3)

NURS 125 – Fundamentals of Vocational Nursing–Theory (5)

NURS 125L – Fundamentals of Vocational Nursing–Clinical (5)

Semester II

NURS 108B – Nursing Skills Laboratory–VN (1)
NURS 124 – Mental Health Nursing for Vocational Nurses (2)
NURS 126 – Intermediate Vocational Nursing – Theory (5)
NURS 126L – Intermediate Vocational Nursing–Clinical (5)

Semester III

NURS 127 – Advanced Vocational Nursing–Theory (6)
NURS 127L – Advanced Vocational Nursing–Clinical (4)

Program Outcomes:

1. Utilize the nursing process in health promotion, restoration, and disease and illness prevention.
2. Apply evidence based practice in providing therapeutic nursing interventions for clients and families.
3. Apply Quality Safety Education for Nursing (QSEN) knowledge, skills, and attitudes (ksa) to client care.
4. Apply clinical reasoning skills to client care.
5. Provide health education to individuals, families and communities
6. Demonstrate competency in vocational nursing procedural skills.
7. Advocate for clients and families.
8. Provide culturally sensitive nursing care.

Requirements for the Associate in Science Degree – see page 89.

Licensed Vocational Nurse to Registered Nurse – *Certificate of Achievement, Associate in Science Degree*

Top Code: 1230.10

The Licensed Vocational Nurse to Registered Nurse Associate of Science curriculum provides the student with the theory and skills to seek employment in hospitals, clinics, private physician offices, and skilled nursing in extended and long-term care facilities as Registered Nurses in California. There are limitations with this license as it is not accepted in all states.

Emphasis is on building nursing theory and re-enforcing concepts to promote, maintain and restore health in individuals with common and complex health problems throughout the life span. Additionally the development and application of nursing skills and concepts utilizing the nursing process in the care of these individuals is emphasized.

The Licensed Vocational Nurse to Registered Nurse Associate of Science student will receive an Associate of Science degree and a certificate of achievement and will be eligible to take the National Council Licensing Examination-Registered Nurse (NCLEX-RN) and if successful will qualify to receive a license from the Board of Registered Nursing to practice nursing in the State of California.

A grade of C or better in all program course work is required to meet the California Board of Registered Nursing regulations.

The PCC Nursing Program's outcomes reflect standards of competency as delineated by the California State Boards of Nursing and the Department of Health Services.

The PCC Nursing Program's outcomes reflect standards of competency as delineated by the California State Boards of Nursing and the Department of Health Services.

English, Humanities, Political Science, US History or American Institutions 125, PE, Critical Thinking are Associate in Science Degree requirements for Pasadena City College.

It is recommended that the student complete as many of the aforementioned non-nursing courses prior to starting the LVN to RN Program.

Program Outcomes:

1. Deliver patient centered care that recognizes the patient or designee as the source of control and full partner in providing compassionate and coordinated care based on respect for patient's preferences and values and needs.
2. Use teamwork and collaboration to function effectively within nursing and interprofessional teams, fostering open communication, mutual respect and shared decision-making to achieve quality patient care.
3. Develop an evidence based practice by integrating best current evidence with clinical expertise and patient/family preferences and values for delivery of optimal health care.
4. Improve safety by minimizing risk of harm to patients and providers through individual performance and quality improvement system methods to continuously improve the quality of health care systems
5. Use informatics, including information and technology, to communicate, manage knowledge, mitigate error, and support decision making.
6. Adhere to standards of professional practice by being responsible for his/her actions and behaviors and practicing nursing within legal, ethical, and regulatory standards.

Licensed Vocational Nurse to Registered Nurse (A.S. Degree) Curriculum

NOTE: The following sequence must be followed:

Prerequisites:

ENGL 001A
PYSO 001
ANAT 025
MICR 002
MATH 402 or higher

Required Courses

Transition

NURS 210 – Nursing Role Transition (2)

Psychiatric Mental Health Nursing

NURS 042 – Psychiatric Mental Health Nursing (1)
NURS 042L – Psychiatric Mental Health Nursing Lab (1.5)

Intermediate Medical Surgical Nursing

NURS 052A – Intermediate Medical Surgical Nursing (2)
NURS 052L – Intermediate Medical Surgical Nursing Lab (3.5)
NURS 052S – Intermediate Nursing Care – Seminar (1)

Advanced Medical Surgical Nursing

NURS 053 – Advanced Medical-Surgical Nursing (3)
NURS 053L – Advanced Medical-Surgical Nursing – Clinical (5)
NURS 053S – Advanced Nursing Seminar (1)

Recommended Electives

ANAT 110 – Dissection Anatomy (2)
CHEM 002A – Chemistry – General, Organic and Biochemistry (4)
NURS 139 – Intermediate Clinical Pharmacology (2)
NURS 202 – Basic Clinical Skills (3)
NURS 211 – Basic Cardiac Dysrhythmias (1)
NURS 213 – Intravenous Therapy and Blood Withdrawal (1)

Licensed Vocational Nurse to Registered Nurse – Non-Degree, 30-Unit Option

The Licensed Vocational Nurse to Registered Nurse 30-Unit Option curriculum provides the student with the theory and skills to seek employment in hospitals, clinics, private physician offices, and skilled nursing in extended and long-term care facilities as Registered Nurses in California. There are limitations with this license as it is not accepted in all states.

Emphasis is on building nursing theory and re-enforcing concepts to promote, maintain and restore health in individuals with common and complex health problems throughout the life span. Additionally the development and application of nursing skills and concepts utilizing the nursing process in the care of these individuals is emphasized.

The Licensed Vocational Nurse to Registered Nurse 30-Unit Option student will receive a Certificate of Achievement and will be eligible to take the National Council Licensing Examination-Registered Nurse (NCLEX-RN) and if successful will qualify to receive a license from the Board of Registered Nursing to practice nursing in the State of California.

A grade of C or better in all program course work is required to meet the California Board of Registered Nursing regulations.

The PCC Nursing Program's outcomes reflect standards of competency as delineated by the California State Boards of Nursing and the Department of Health Services.

As specified by the California Board of Registered Nursing, the additional education required of licensed vocational nurse applicants using the LVN 30 Unit Option shall not exceed a maximum of 30 semester units, including prerequisites. The PCC LVN 30 Unit Option includes a total of 29 semester units and meets BRN requirements.

Program Outcomes:

1. Deliver patient centered care that recognizes the patient or designee as the source of control and full partner in providing compassionate and coordinated care based on respect for patient's preferences and values and needs.
2. Use teamwork and collaboration to function effectively within nursing and interprofessional teams, fostering open communication, mutual respect and shared decision-making to achieve quality patient care.
3. Develop an evidence based practice by integrating best current evidence with clinical expertise and patient/family preferences and values for delivery of optimal health care.
4. Improve safety by minimizing risk of harm to patients and providers through individual performance and quality improvement system methods to continuously improve the quality of health care systems
5. Use informatics, including information and technology, to communicate, manage knowledge, mitigate error, and support decision making.
6. Adhere to standards of professional practice by being responsible for his/her actions and behaviors and practicing nursing within legal, ethical, and regulatory standards.

Licensed Vocational Nurse to Registered Nurse Curriculum

Prerequisites:

PYSO 001

MICR 002

Required courses

Transition

NURS 210 – Nursing Role Transition (2)

Psychiatric Mental Health Nursing

NURS 042 – Psychiatric Mental Health Nursing (1)

NURS 042L – Psychiatric Mental Health Nursing (1.5)

Intermediate Medical Surgical Nursing

NURS 052A – Intermediate Medical Surgical Nursing Care (2)
NURS 052L – Intermediate Medical Surgical Nursing Lab (3.5)
NURS 052S – Intermediate Nursing Care – Seminar (1)

Advanced Medical Surgical Nursing

NURS 053 – Advanced Medical-Surgical Nursing (3)
NURS 053L – Advanced Medical-Surgical Nursing–Clinical (5)
NURS 053S – Advanced Nursing Seminar (1)

Recommended Electives

ANAT 110 – Dissection Anatomy (2)
CHEM 002A – Chemistry–General, Organic and Biochemistry (4)
MA 109 – Health Information Technology (1)
MA 115 – Medical Terminology (3)
NURS 139 – Intermediate Clinical Pharmacology (2)
NURS 200 – Nursing Laboratory (1)
NURS 202 – Basic Clinical Skills (3)
NURS 211 – Basic Cardiac Dysrhythmias (1)
NURS 213 – Intravenous Therapy and Blood Withdrawal (1)

PARALEGAL STUDIES

(Business)

Paralegal Studies – Certificate of Achievement, Associate in Science Degree

Top Code: 1402.00

The curriculum prepares students to assist attorneys as paralegals (legal assistants) in administrative agencies, corporations, insurance companies, private law firms, government, and other legal environments. Emphasis is on training students in both civil and criminal matters. Some of the services that the paralegal (legal assistant) provides are legal research, development of law office systems, client interviews, drafts pleadings, briefing cases, legal calendaring, preparing discovery for litigated cases, preparing wills and trusts, maintaining corporate records and minutes. This program has been approved by the American Bar Association.

A Certificate of Achievement is awarded upon completion of all required Paralegal Studies core courses with a grade of C or better.

Program Outcomes:

1. The ability to cope with case management, complete paralegal tasks, and understand the client relationship.
2. The people skills to be a competent paralegal.
3. Competence to work in the legal environment.

NOTE: A Paralegal (Legal Assistant) may not engage in, encourage, or contribute to any act which could constitute the unauthorized practice of law.

In order to be eligible to receive a Certificate of Achievement in Paralegal Studies, a student must (1) be a graduate of an accredited high school, or have a G.E.D., and (2) complete a total of 60 units, consisting of the following courses:

1. All required Legal core courses listed below (32 units):
 - BUS 012A, Business Law (3)
 - PLGL 134, Introduction to Paralegal Studies (3)
 - PLGL 135A, Wills, Trusts, and Probate Administration (3)
 - PLGL 137, Legal Writing and Drafting (3)
 - PLGL 138, Paralegal Studies Field Practice (4)
 - PLGL 139, Tort Law and Claims Investigation (3)
 - PLGL 141, Civil and Criminal Evidence (3)
 - PLGL 142, Law Office Procedure and Ethics (3)
 - PLGL 145A, Legal Research (3)
 - PLGL 145B, Computer Aided Research (1)
 - PLGL 146, Computer use for the Law Office (2)
 - PLGL 150, Paralegal Studies Graduate Seminar (1)

Recommended sequence:

Semester I

- BUS 012A – Business Law (3)
- PLGL 134 – Introduction to Paralegal Studies (3)
- PLGL 135A – Wills, Trusts, Probate Administration (3)
- PLGL 139 – Tort Law and Claims Investigation (3)

Semester II

- PLGL 137 – Legal Writing and Drafting (3)
- PLGL 138 – Paralegal Studies Field Practice (4)
- PLGL 146 – Computer use for the Law Office (2)
- Elective

Semester III

- PLGL 141 – Civil and Criminal Evidence (3)
- PLGL 142 – Law Office Procedures and Ethics (3)
- PLGL 145A – Legal Research (3)
- Elective

Semester IV

- PLGL 145B – Computer Aided Research (1)
- PLGL 150 – Paralegal Studies Graduate Seminar (1)
- Elective
- Elective

NOTE: Those students enrolling in the Paralegal Studies program with a Bachelor’s degree need to complete only the Paralegal core courses listed under #1 above; items #2 and #3 below are not required.

2. 18 units of General Education courses, listed in the Pasadena City College Catalog, in the section titled, “Associate in Sciences Degree Requirements,” to be chosen from the following categories:
 - a. Category Two, A, Natural Sciences, 3 units
 - b. Category Two, B, Social & Behavioral Sciences, 3 units
 - c. Category Two, C, Humanities, 3 units
 - d. Category Two, D, Language & Rationality, 9 units chosen from:
 - (1) English Composition (3)
 - (2) Oral Communication (3)
 - (3) Mathematics/Critical Thinking (3)
 General Education courses that are excluded from the list of acceptable courses are: MICR 108, BUS 011A, BUS 014AB, BUS 115, CS 006, CIS 062, ELTN 010, ELTN 109B.

Note: Courses taken to complete the 18 units required in #2 above may not be used to satisfy any of the optional General Education course selections.

It is strongly recommended that students complete the general education course requirements prior to taking the legal specialty courses.

3. 10 elective units, chosen from the following elective courses (any combination of General Education or Paralegal Studies):

General Education:

American Institutions 125 (3)
Health Education, any (2)
History 007AB, 025A–D, 029AB, 041 (3)
Physical Education, any (2)
Political Sciences 001, 007 (3)

Paralegal Studies core courses:

BUS 012B, Business Law Transactions & Organizations (3)
PLGL 135B, Wills, Trusts and Probate Administration (3)
PLGL 136, Property Law, Bankruptcy and Creditor's Rights (3)
PLGL 138, Paralegal Studies Field Practice repeat (4)
PLGL 140, Family Law and Dissolution Procedures (3)
PLGL 143, Workers' Compensation Law (3)
PLGL 148, Immigration Law (3)

Program Outcomes:

1. Cope with case management, complete paralegal tasks, and understand the client relationship.
2. Should have the people skills to be a competent paralegal.
3. Should be competent to work in the legal environment.

Requirements for the Associate in Science Degree – see page 89.

PHOTOGRAPHY

(Visual Arts and Media Studies Division)

Cinema – Cinematography – Occupational Skills Certificate

Top Code: 0612.20

The curriculum prepares students for entry-level employment in motion picture camera crews for dramatic, documentary, advertising, or industrial films. The program introduces students to the responsibilities of, and skills needed for the Director of Photography, Camera Operator and Camera Assistants. Emphasis is placed on understanding cinematography as a part of a holistic approach to filmmaking.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Operate the tools of the medium.
2. Acquire fundamental technical knowledge and creative principles.
3. Demonstrate critical thinking, i.e., recognize the technical qualities, cultural elements, and aesthetic values of their own and others' work.
4. Demonstrate ability to communicate effectively using a visual medium.

Requirements for the Occupational Skills Certificate (15 units):

Recommended sequence:

PHOT 026A (CINE 026A) – Beginning Electronic Filmmaking (3)
PHOT 026B (CINE 026B) – Intermediate Filmmaking–Electronic (3)
PHOT 027 (CINE 027) – Cinematography (3)
PHOT 126 (CINE 126) – Digital Film Narrative (3)
PHOT 127 (CINE 127) – Advanced Cinematography (3)

Recommended electives

ART 011A – Foundation Drawing (3)
ART 015 – Sketching For Design (3)
ART 057 – Motion Graphics (3)
ART 155A – 3-D Modeling and Sculpting (3)
PHOT 021 – Introduction to Black and White Photography (3)
PHOT 025 (CINE 025) – Film Art (3)
PHOT 026C (CINE 026C) – Advanced Filmmaking (3)
PHOT 030 – Introduction to Digital Image Editing (3)
THRT 007A (CINE 007A) – Early Film History (3)
THRT 007B – Contemporary Film History (3)

Cinema – Cinema Production/Filmmaking – Occupational Skills Certificate

Top Code: 0612.20

The curriculum prepares students with entry-level skills to seek employment in the motion picture (cinema and other forms of media distribution) industry. The program introduces students to a broad range of knowledge and skills required to be successful in the industry. Emphasis is placed on development of creative thinking and processes alongside current professional practices.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Operate the tools of the medium.
2. Acquire fundamental technical knowledge and creative principles.
3. Demonstrate critical thinking, i.e., Recognize the technical qualities, cultural elements, and aesthetic values of their own and others' work.
4. Demonstrate ability to communicate effectively using a visual medium.

Requirements for the Occupational Skills Certificate (15 units):

Recommended sequence:

Semester I

PHOT 026A (CINE 026A) – Beginning Electronic Filmmaking (3)

Semester II

PHOT 026B (CINE 026B) – Intermediate Filmmaking–Electronic (3)
PHOT 126 (CINE 126) – Digital Film Narrative (3)

Semester III

PHOT 026C (CINE 026C) – Advanced Filmmaking (3)

Semester IV

PHOT 129 (CINE 129) – Cinema Production Portfolio (3)

Recommended electives

ART 011A – Foundation Drawing (3)

ART 015 – Sketching for Design (3)

ART 031A – Color and Composition–Two Dimensional Design (3)

ART 032A – Design–Three Dimensional (3)

PHOT 021 – Introduction to Black and White Photography (3)

PHOT 025 (CINE 025) – Film Art (3)

PHOT 030 – Introduction to Digital Image Editing (3)

THRT 007A (CINE 007A) – Early Film History (3)

THRT 007B (CINE 007B) – Contemporary Film History (3)

Digital Image Editing – Occupational Skills Certificate

Top Code: 0614.00

This certificate provides students with the skills for entry-level work as a digital image editing specialist in a variety of settings, including advertising, freelance, or a photography studio or lab. Emphasis is on creative application of digital image editing software.

An Occupational Skills Certificate is awarded upon successful completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate thorough understanding of cameras, exposure controls, and photographic principles.
2. Perform digital image editing techniques for color correction, compositing, and file preparation.

Requirements for the Occupational Skills Certificate (12 units):

PHOT 021 – Introduction to Black and White Photography (3)

PHOT 030 – Introduction to Digital Image Editing (3)

PHOT 031 – Beginning Digital Photography (3)

PHOT 130 – Advanced Digital Image Editing (3)

Foundation in Photography – Occupational Skills Certificate

Top Code: 1012.00

This certificate provides students with general photographic skills required to work in a freelance capacity or as an assistant to a portrait, wedding, event, headshot, product, food, industrial, news, or fine art photographer. Skills acquired include digital photography, digital workflow, professional lighting, working with models/subjects, and large format photography. If students decide to pursue the more in depth Photography Certificate of Achievement, many of the courses from the Portrait Photography Occupational Skills Certificate will apply to the Photography Certificate of Achievement.

Program Outcomes:

1. Demonstrate thorough understanding of film and digital cameras, exposure controls, and photographic principles.
2. Produce a portfolio of images that exhibits knowledge of natural and artificial lighting techniques, large format photography, and portraiture techniques.

Requirements for the Occupational Skills Certificate (12 units):

PHOT 021 – Introduction to Black and White Photography (3)
PHOT 022A – Large Format Photography (3)
PHOT 031 – Beginning Digital Photography (3)
 or PHOT 033 – Portrait Photography (3)
PHOT 040 – Fashion Photography (3)

Photography – Certificate of Achievement, Associate in Science Degree

Top Code: 1012.00

The certificate curriculum prepares students to seek entry-level employment in a variety of commercial photographic specialties (for example, photojournalism, portraiture, fashion, architectural, product, etc.). Instruction is offered in cameras, aesthetics, color and black and white, film and digital, darkroom procedures, digital image editing, lighting, and business practices for photographers. Students completing the program will have developed a portfolio.

A Certificate of Achievement is awarded upon successful completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate technical knowledge through the effective use of tools.
2. Analyze aesthetic and cultural values inherent in photographic works.
3. Demonstrate through the creation of a portfolio of work (for transfer or entry-level employment) the ability to communicate effectively.

Requirements for the Certificate of Achievement (33 units):

Recommended sequence:

Semester I

ART 031A – Color and Composition–Two Dimensional Design (3)
PHOT 010 – History of Photography (3)
 or ART 001B – History of Western Art (3)
PHOT 021 – Introduction to Black and White Photography (3)

Semester II

PHOT 030 – Introduction to Digital Image Editing (3)
PHOT 031 – Beginning Digital Photography (3)
 or PHOT 023A – Color Photography (3)
PHOT 033 – Portrait Photography (3)
 or PHOT 040 – Fashion Photography (3)

Semester III

PHOT 022A – Large Format Photography (3)
PHOT 132 – Advanced Digital Photography (3)
 or PHOT 023B – Advanced Color Photography (3)
PHOT 136 – Video for Photographers (3)

Semester IV

PHOT 135 – Advanced Photography (3)
PHOT 140 – Professional Practices For Photographers (3)

Recommended electives

ART 005 – Art Fundamentals (3)
ART 011A – Foundation Drawing (3)
ART 016 – Perspective (3)
ART 050A – Introduction to Graphic Design & Advertising (3)
ART 050B – Intermediate Graphic Design & Advertising (3)
ART 050C – Advanced Graphic Design & Advertising (3)
ART 104 – History of American Art (3)
BUS 116 – Small Business Management (3)
GRFX 080 – Graphic Reproduction Fundamentals (2)
JOUR 021 – Beginning Press Photography (3)
JOUR 022 – Advanced Press Photography (3)
PHOT 024A – Alternative Processes In Photography (3)
PHOT 024B – Experimental Photography (3)
PHOT 131 – Zone System of Photography (3)

Requirements for the Associate in Science Degree – see page 89.

Portrait Photography – Occupational Skills Certificate

Top Code: 1012.00

This certificate provides students with the skills to work in a freelance capacity or as an assistant to a portrait, wedding, event, or headshot photographer. Skills acquired include digital photography, digital workflow, professional lighting, and working with models/subjects. If students decide to pursue the more in depth Photography Certificate of Achievement, many of the courses from the Portrait Photography Occupational Skills Certificate will apply to the Photography Certificate of Achievement.

An Occupational Skills Certificate is awarded upon successful completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate thorough understanding of film and digital cameras, exposure controls, and photographic principles.
2. Produce a portfolio of images that exhibits knowledge of natural and artificial lighting techniques and portraiture techniques.

Requirements for the Occupational Skills Certificate (9 units):

PHOT 021 – Introduction to Black and White Photography (3)
PHOT 031 – Beginning Digital Photography (3)
PHOT 033 – Portrait Photography (3)
or PHOT 040 – Fashion Photography (3)

PHYSICS

(Natural Sciences Division)

Physics – Associate in Science Degree for Transfer to CSU

Top Code: 1902.00

The Associate in Science in Physics for Transfer provides a foundation in Physics necessary for continued training at the upper division level for Physics majors. It also provides a foundation for majors in physical science, math, engineering, and computer science. It is a starting point for students who are preparing for careers in education, geoscience research, and government, where scientific and technical skills are in great demand.

The Associate in Science in Physics for Transfer degree will be awarded upon completion of coursework totaling 60 California State University (CSU) transferable units including the above major requirements and the Intersegmental General Education Transfer Curriculum (IGETC-CSU) or California State University General Education (CSUGE) requirements with a minimum grade point average of 2.0. All courses in the major must be completed with a grade of “C” or better. (Students completing this degree are not required to fulfill additional PCC graduation requirements)

Associate in Science in Physics for Transfer Degree

REQUIRED COURSES (25 units)

- PHYS 001A – General Physics (5)
- PHYS 001B – General Physics (5)
- PHYS 001C – General Physics (5)
- MATH 005A – Single Variable Calculus I (5)
- MATH 005B – Single Variable Calculus II (5)

REQUIRED SUBTOTAL 25
 CSU General Education or IGETC Pattern 39

DEGREE TOTAL 60

Student Learning Outcomes:

1. Develop theories and solve problems using lower division – level knowledge of mechanics, heat, waves, optics, and electricity.
2. Use common laboratory instruments to make measurements in mechanics, heat, waves, optics, and electricity.
3. Clearly and succinctly report the result of experiments in a clear and technically correct manner.

POLITICAL SCIENCE
(Social Sciences Division)

Political Science – *Associate in Arts Degree for Transfer to CSU*
 Top Code: 2207.00

Knowledge of the past is a prerequisite for understanding the present and preparing for the future. The Associate in Arts in Political Science for Transfer Degree offers an array of courses designed to enable students to comprehend how they, their nation, and the contemporary world have been shaped by historical events and forces. It is only by studying the Political Science of other civilizations and cultures that we hope to gain perspective on our own. In addition to producing teachers and historical researchers, the AA-T in Political Science helps prepare students for other careers. Majoring in Political Science is excellent preparation for students interested in a teaching career, the legal profession, or advanced work in the discipline. Students wishing to become business executives, administrators, and public servants profit immensely by gaining the methodological skills of the historian. Historians learn to gather, synthesize, analyze, and interpret evidence; they become skilled in presenting their conclusions to a general audience in a lucid and logical manner. Political Science is an excellent foundation for a broadly based education in the liberal arts.

The Associate in Arts in Political Science for Transfer Degree will be awarded upon completion of coursework totaling 60 California State University (CSU) transferable units including the above major requirements and the Intersegmental General Education Transfer Curriculum (IGETC-CSU) or California State University General Education (CSUGE) requirements with a minimum grade point average of 2.0. All courses in the major must be completed with a grade of “C” or better. (Students completing this degree are not required to fulfill additional local graduation requirements)

Associate in Arts in Political Science for Transfer Degree

REQUIRED CORE: 3 units

POLS 001 – Introduction to American Government and Politics (3)

LIST A: Select 3 Courses (9–10 units)

POLS 002 – Comparative Government (3)

POLS 006 – The US and World Politics (3)

POLS 007 – Principles of Political Science (3)

POLS 022 – Introduction to Political Theory (3)

STAT 018 – Statistics for Behavioral and Social Sciences (4)

or STAT 050 – Elementary Statistics (4)

LIST B: Select any two Courses from below or any List A course not used above (6 units)

ANTH 002 – Cultural Anthropology (3)

ECON 001A – Principles of Economics (3)

ECON 001B – Principles of Economics (3)

GEOG 002 – Cultural Geography (3)

POLS 021 – Introduction to Political Economy (3)

REQUIRED SUBTOTAL..... 18–19

CSU General Education or IGETC Pattern..... 39–41

Transferable Electives (as needed to reach 60 transferable units)

DEGREE TOTAL 60

Student Learning Outcomes:

1. Demonstrate through original written and/or oral analysis the ability to identify important events in historical eras; evaluate variables of historical phenomena; and analyze the causes and impact of significant change in a global context.
2. Demonstrate awareness and critique the value of varied sources of historical information including professional lectures, secondary texts, primary documents, visual arts, fiction, oral histories, community studies, and/or current journalistic reports.
3. Demonstrate responsibility as self-directed listeners, readers, and researchers.
4. Compare and contrast the experiences and issues of subsets of minorities with that of mainstream in power, including concerns of race, class, and gender.
5. Demonstrate respect for diversity of opinions on historical debates.
6. Apply the analysis of Political Science to create a plan for fulfilling your own civic responsibilities as community and international citizens.

PSYCHOLOGY

(Social Sciences Division)

Psychology – Associate in Arts Degree for Transfer to CSU

Top Code: 2001.00

Psychology is the scientific study of human and animal behavior and mental processes, including cognition, emotion, sensation, perception, and interaction. In pursuing the Associate in Arts in Psychology for Transfer Degree, students acquire skills in research, information gathering, and analytic thinking. Students majoring in psychology develop critical thinking,

problem solving, and written and verbal communication skills. As psychology majors, students have learning opportunities that are relevant to many types of careers, including business, education, government, nonprofit organizations, and within health and human services, etc.

The Associate in Arts in Psychology for Transfer degree will be awarded upon completion of coursework totaling 60 California State University (CSU) transferable units including the major requirements and the Intersegmental General Education Transfer Curriculum (IGETC-CSU) or California State University General Education (CSUGE) requirements with a minimum grade point average of 2.0. All courses in the major must be completed with a grade of "C" or better. (Students completing this degree are not required to fulfill additional local graduation requirements.)

Associate in Arts Degree in Psychology for Transfer

REQUIRED COURSES (11 units)

- PSYC 001 – Introductory Psychology (3)
- PSYC 005 – Research Methods in Psychology (4)
- STAT 018 – Statistics for Behavioral and Social Sciences (4)
or STAT 050 – Elementary Statistics (4)

LIST A: Select one course (3–4 units)

- BIOL 003 – Topics in Human Biology (4)
- BIOL 011 – General Biology (4)
- PSYC 002 – Elementary Physiological Psychology (3)

LIST B: Select one course from below (3–4 units)

- PSYC 021 – Developmental Psychology: The Child (3)
- PSYC 022 – Developmental Psychology: The Adult (3)
- PSYC 024 – Lifespan Developmental Psychology (3)

LIST C: Select one course (3 units)

- PSYC 023 – Social Psychology (3)
- PSYC 025 – Human Sexuality (3)
- PSYC 029 – Psychology of the Afro-American (3)
- PSYC 031 – Studies in Chicano Behavior (3)
- PSYC 033 – Psychology of Personal and Social Adjustment (3)
- PSYC 041 – Psychology of the Asian American (3)

REQUIRED SUBTOTAL..... 20–22
CSU General Education or IGETC Pattern..... 39–41
Transferable Electives (as needed to reach 60 transferable units)

DEGREE TOTAL 60

Student Learning Outcomes

1. Demonstrate an understanding of behavior and cognitive processes.
2. Demonstrate an understanding of cross cultural and contemporary psychological perspectives.
3. Explain psychodynamic principles.
4. Demonstrate an understanding of ethical principles in psychological research.
5. Research and apply psychological concepts and theories to scientific and/or popular media.

RADIOLOGY **(Health Sciences Division)**

Radiologic Technology – Certificate of Achievement, Associate in Science Degree

Top Code: 1225.00

The curriculum prepares students to work as a Radiologic Technologist in the medical field. Employment opportunities are in offices, clinics and hospitals, education, sales, and management.

The program is accredited by the Joint Review Commission on Education in Radiologic Technology (JRCERT), in coordination with the California Department of Public Health, Radiologic Health Branch (CDPH-RHB). Upon successful completion of the program the student is eligible to take the American Registry of Radiologic Technologist Examination (ARRT). Upon successfully passing the examination a student then would need to apply to the State of California for their Radiologic Technology License.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better; an Associate in Science degree is awarded upon attainment of a Certificate of Achievement **and** completion of all general education requirements for the AS degree with a minimum grade point average of 2.0 in these general education courses.

Prerequisite Course Requirements are: All of the General Education courses that lead to an Associate Degree be completed prior to admission to the program.

These are the required prerequisites for the program:

Physics 010 and 010L

Anatomy 025, Physiology 001

Chemistry 002A or higher level of Chemistry,

Intermediate Algebra or higher level of Math

Medical Terminology (3 unit class)

(Physiology 002A and 002B can be substituted for Anatomy 025 and Physiology 001.)

For the selection criteria for admission to the program refer to the Radiologic Technology Brochure or see a PCC Counselor.

Effective January 2015, an applicant must have an Associate or higher degree for eligibility for ARRT Certification.

Program Outcomes:

1. Maintain clinical competency and ability to produce radiographic images of acceptable quality.
2. Demonstrate problem-solving skills and effective communication skills.
3. Demonstrate pursuit of lifelong professional growth and development.
4. Assume leadership roles in the Radiologic Technology professional community.

Requirements for the Certificate of Achievement (68.5 – 71.5 units):

Recommended sequence:

First Summer Session First Year Students

RDTC 100 – Basic Radiologic Technology Practices (2)

RDTC 101 – Medical Procedures for the Technologist (3)

First Fall Semester First Year Students

RDTC 102 – Radiation Protection (3)

RDTC 103A – Radiographic Anatomy and Positioning (3.5)

RDTC 110 – Professional Ethics (2)

RDTC 112A – Radiologic Physics (3)

RDTC 117A – Clinical Experience (2)

First Spring Semester First Year Students

RDTC 103B – Radiographic Anatomy and Positioning (3.5)
RDTC 104 – Principles of Radiographic Exposure (3)
RDTC 112B – Radiologic Physics (3)
RDTC 117B – Clinical Experience (2)

Second Summer Session

RDTC 113A – Clinical Learning Experience (2)
RDTC 119 – Clinical Experience (6.5)

Second Fall Semester Second Year Students

RDTC 103C – Radiographic Anatomy and Positioning (3)
RDTC 105 – Special Radiographic Procedures (3)
RDTC 111 – Computerized Imaging (2)
RDTC 117C – Clinical Experience (4)

Second Spring Semester Second Year Students

RDTC 116 – Perspectives in Radiologic Technology (2)
RDTC 117D – Clinical Experience (4)
RDTC 118 – Fluoroscopy (3)

Second Spring Semester – Choose one or both

RDTC 121 – Mammographic Procedures (3)
or RDTC 123 – Computerized Tomography (3)

Third Summer Session

RDTC 113B – Clinical Learning Experience (6)

Requirements for the Associate in Science Degree – see page 89.

SOCIAL & BEHAVIORAL SCIENCES**(Social Sciences Division)****Social & Behavioral Sciences – Associate in Arts Degree**

Top Code: 4901.00

The degree in social and behavioral sciences is concerned with providing a broad understanding of the social, cultural, and intellectual world in which we live. Social and behavioral science students have a diverse interest in human problems and seek a liberal education in a broad spectrum of understandings, insights, and appreciations. Multidisciplinary in nature, this area of emphasis seeks to provide an understanding of the interrelationships and varied methodologies of its many subject areas. The goal of this area of emphasis is to develop students' intellectual and emotional understanding, appreciation, insights, and flexibility in order for them to succeed in government services, commerce or industry, and teaching. Students who receive an associate degree in the Social and Behavioral Sciences typically continue their studies at a university to receive a bachelor's degree in such disciplines as Anthropology, Economics, Geography, History, Linguistics, Political Science, Psychology, or Sociology.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. *When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Requirements for the area of emphasis (18 units minimum)

Courses must be completed with a grade of C or better. All courses must be numbered 001–099. Students must complete 18 units with at least 3 units in three of the disciplines listed below.

Anthropology

- ANTH 001 – Physical Anthropology (3)
- ANTH 001L – Laboratory in Physical Anthropology (1)
- ANTH 002 – Cultural Anthropology (3)
- ANTH 003 – Introduction to Archaeology (3)
- ANTH 004 – Anthropology of Religion, Magic, Witchcraft (3)
- ANTH 005 – Introduction to Linguistic Anthropology (3)
- ANTH 012 – American Indian Cultures (3)
- ANTH 030A – Anthropological Field Studies – Mesa Verde, Colorado (2)
- ANTH 030B – Anthropological Field Studies: Rio Grande Pueblos–New Mexico (2)
- ANTH 030C – Anthropological Field Studies: California (2)
- ANTH 030D – Anthropological Field Studies: Rocky Mountains (2)
- ANTH 030E – Anthropological Field Studies: England (2)
- ANTH 030F – Anthropological Field Studies: Italy (2)
- ANTH 030G – Anthropological Field Studies: Southern California (2)
- ANTH 030H – Applications of Archaeological Field Work (2)
- ANTH 031 – Mexican and Chicano Culture (3)

Child Development

- CHDV 010 – Principles and Practices of Teaching Young Children (3)
- CHDV 011 – Infant and Toddler Development (3)

Economics ECON 001A – Principles of Economics (3)

- ECON 001B – Principles of Economics (3)

Geography

- GEOG 002 – Cultural Geography (3)
- GEOG 003 – World Regional Geography (3)
- GEOG 005 – Economic Geography (3)

History

- HIST 001A – History of European Civilization to 1715 (3)
- HIST 001B – History of European Civilization from 1715 (3)
- HIST 002A – History of World Civilizations to 1500 (3)
- HIST 002B – History of World Civilizations from 1500 (3)
- HIST 005A – History of Great Britain to 1714 (3)
- HIST 005B – History of Great Britain from 1714 (3)
- HIST 007A – United States History to 1876 (3)
- HIST 007B – United States History from 1876 (3)
- HIST 008 – History of California (3)
- HIST 009A – Latin America: Pre-Colombian to 1825 (3)
- HIST 009B – Latin America: 1825 to the Present (3)
- HIST 012 – The North American Indian (3)
- HIST 016 – History of the Middle East (3)
- HIST 018 – History of South Asia, Southeast Asia and the Pacific (3)
- HIST 019 – History of China, Japan and Korea (3)
- HIST 024A – Special Topics in History – Africa (3)
- HIST 024B – Special Topics in History – Asia (3)
- HIST 024C – Special Topics in History – Europe (3)

HIST 024D – Special Topics in History – Latin America (3)
HIST 024E – Special Topics in History – Middle East (3)
HIST 024F – Special Topics in History – United States (3)
HIST 024G – Special Topics in History – World (3)
HIST 025A – Great Personalities in U.S. History (3)
HIST 025B – Women in American Society (3)
HIST 025C – The American West (3)
HIST 025D – America’s Relations with Other Nations (3)
HIST 025E – Arts and Crafts Movement in the U.S. (3)
HIST 025F – America and the Two World Wars (3)
HIST 025I – Issues of the Vietnam Era (3)
HIST 027A – Traditional Africa (3)
HIST 027B – Modern Africa (3)
HIST 029A – African American History to 1865 (3)
HIST 029B – African American History from 1865 (3)
HIST 030 – History of Mexico (3)
HIST 031 – History of Mexican Americans in the United States (3)
HIST 038 – History of Religion in America (3)
HIST 041 – History of Asian Pacific Americans (3)
HIST 050 – History and Historians (3)

Linguistics

LING 010 – Introduction to Linguistics (3)
 or ENGL – Introduction to Linguistics (3)
LING 011 – History of English Language (3)
 or ENGL 011 – History of English Language (3)
LING 012 – Intercultural Communication (3)
 or ENGL 012 – Intercultural Communication (3)
LING 014 – Language in Society (3)
LING 016 – Psycholinguistics: Language and the Mind (3)
LING 017 – Introduction to Language Acquisition (3)

Political Science

POLS 001 – Introduction to American Government and Politics (3)
POLS 002 – Comparative Government and Politics (3)
POLS 006 – The U.S. and World Politics (3)
POLS 007 – Principles of Political Science (3)
POLS 021 – Introduction to Political Economy (3)
POLS 022 – Introduction to Political Theory (3)

Psychology

PSYC 001 – Introductory Psychology (3)
PSYC 002 – Elementary Physiological Psychology (3)
PSYC 005 – Research Methods in Psychology (4)
PSYC 021 – Developmental Psychology: The Child (3)
PSYC 022 – Developmental Psychology: The Adult (3)
PSYC 023 – Social Psychology (3)
PSYC 024 – Lifespan Developmental Psychology (3)
PSYC 025 – Human Sexuality (3)
PSYC 029 – Psychology of the Afro-American (3)
PSYC 031 – Studies in Chicano Behavior (3)
PSYC 033 – Psychology of Personal and Social Adjustment (3)
PSYC 041 – Psychology of the Asian American (3)

Religious Studies

RELG 001 – Religious Issues, Personalities and Values (3)

RELG 002 – Comparative Religions: Far East (3)

RELG 003 – Comparative Religions: Near East (3)

Sociology

SOC 001 – Introductory Sociology (3)

SOC 002 – Contemporary Social Problems (3)

SOC 014 – Introduction to Ethnic Studies (3)

SOC 015 – Crime, Delinquency and Society (3)

SOC 016 – Urban Sociology (3)

SOC 022 – Sociology of Aging (3)

SOC 024 – Marriage and the Family (3)

SOC 025 – British Life and Culture (3)

SOC 029 – Sociology of the African-American (3)

SOC 031 – Chicano Sociology (3)

SOC 041 – Sociology of the Asian American (3)

Requirements for the Associate in Arts Degree – see page 85.

SOCIOLOGY

(Social Sciences Division)

Sociology – Associate in Arts Degree for Transfer to CSU

Top Code: 2208.00

Sociology is the scientific study of society, social institutions and social relationships. A key contribution of the discipline is that social factors matter. Our lives are not only shaped by personal psychology, but also by our place in the social world. Sociology examines how social structures, such as the workplace, political, economic, educational, and religious institutions affect individuals and how individuals influence these structures. Sociologists also explore how people's socioeconomic status, race, ethnicity, age, gender, sexualities, and marital status affect their attitudes, behavior, and chances in life. Sociologists organize their knowledge in theories which they both create and test through social research. Often such research is aimed at understanding important social issues and problems. Sociologists study the patterns of behavior that characterize human interaction. They seek to discover the main forces that unite and separate social groups and to determine the conditions that transform social life.

The Associate in Arts in Sociology for Transfer degree will be awarded upon completion of coursework totaling 60 California State University (CSU) transferable units including the major requirements and the Intersegmental General Education Transfer Curriculum (IGETC-CSU) or California State University General Education (CSUGE) requirements with a minimum grade point average of 2.0. All courses in the major must be completed with a grade of "C" or better. (Students completing this degree are not required to fulfill additional local graduation requirements.)

Associate in Arts Degree in Sociology for Transfer

REQUIRED COURSES: (3 units)

SOC 001 – Introductory Sociology (3)

LIST A: Select 2 courses (7 units)

SOC 002 – Contemporary Social Problems (3)

STAT 018 – Statistics for Behavioral and Social Sciences (4)

or STAT 050 – Elementary Statistics (4)

LIST B: Select any 2 courses (6 units)

- SOC 014 – Introduction to Ethnic Studies (3)
- SOC 015 – Crime, Delinquency and Society (3)
- SOC 024 – Marriage and the Family (3)
- PSYC 023 – Social Psychology (3)

LIST C: Select any 1 course from below or from any course not used from List B (3 units)

- ANTH 002 – Cultural Anthropology (3)
- PSYC 001 – Introductory Psychology (3)
- SOC 016 – Urban Sociology (3)
- SOC 022 – Sociology of Aging (3)
- SOC 029 – Sociology of the African-American (3)
- SOC 031 – Chicano Sociology (3)
- SOC 041 –Sociology of the Asian American (3)

REQUIRED SUBTOTAL..... 19
 CSU General Education or IGETC Pattern..... 39–41
 Transferable Electives (as needed to reach 60 transferable units)

DEGREE TOTAL 60

Student Learning Outcomes

1. Articulate the role of sociological theories in multiple social contexts.
2. Identify and explain major sociological and theoretical perspectives.
3. Critically analyze important social issues and problems.
4. Identify patterns of behavior that characterize human interaction.

SPEECH-LANGUAGE PATHOLOGY
(Performing and Communication Arts Division)

Speech-Language Pathology Assistant – Associate in Science Degree

Top Code: 1220.00

This curriculum prepares students for employment as Speech-Language Pathology Assistants (SLPAs) in public and private schools, special education sites, community agencies, hospitals and healthcare facilities, and private practices under the supervision of a licensed and ASHA-certified Speech-Language Pathologist (SLP). Students will be trained to assist the SLP in the assessment and treatment of articulation, language, voice, fluency and other communicative disorders in children and adults.

This certificate, when coupled with the A.S. degree, will qualify the student for registration as a SLPA with the Speech-Language Pathology and Audiology and Hearing Aid Dispensers Board of the State of California Department of Consumer Affairs. All courses must be completed with a grade of C or better. Students with a B.A. degree should call the Performing and Communication Arts Division to discuss articulation of course work. The Licensing Board recognizes Pasadena City College as an approved training program.

SLPA courses must be taken in the following order: SLPA 018, 119, 123A, 123B and 126. Eligibility for ENGL 001A is a prerequisite for SLPA 018.

Program Outcomes:

1. Communicate orally and in writing at accepted levels of “best practices” as an assistive service delivery provider in the field of Speech Pathology.
2. Demonstrate the ability to be a valued paraprofessional member of a treatment team in any clinical setting.
3. Accept and respond appropriately to supervisory feedback in all clinical settings.
4. Demonstrate the ability to critically think and problem solve with changing caseload assignments in varying clinical settings and within legal and ethical guidelines.
5. Demonstrate accepted competencies in all areas of clinical service delivery as a paraprofessional and maintain professional conduct and continuing education standards as specified by the Speech Pathology and Audiology Licensing Board for Speech-Language Pathology Assistants in Sacramento, California.

Requirements for the Associate in Science Degree (49 units):

Required sequence:

SLPA 018 – Speech-Language Pathology and Audiology (3)

SLPA 119 – Speech-Language Pathology: Professional Issues (3) SLPA 123A – Communication Disorders: Assessment and Remediation (3)

SLPA 123B – Communication Disorders: Remediation (3)

SLPA 126 – Speech Language Pathology Assistant Field Work (2)

ASL 001 – Elementary American Sign Language (4)

CHDV 015 – Child, Family and Community (3)

CHDV 030 – Introduction to Children with Special Needs (3)

CHDV 105 – Children with Challenging Behaviors (3)

CHDV 122 – Practicum in Early Intervention/Special Education (2)

CHDV 122F– Field Practice in Early Intervention/Special Education (1)

ENGL 001A – Reading and Composition (4)

ENGL 010 – Introduction to Linguistics (3)

ENGL 012 – Intercultural Communication (3)

PSYC 024 – Lifespan Developmental Psychology (3)

SPCH 003 – Voice and Diction (3)

SPCH 010 – Interpersonal Communication (3)

Requirements for the Associate in Science Degree – see page 89.

TELEVISION & RADIO

(Performing and Communication Arts Division)

Broadcast Journalism – *Certificate of Achievement, Associate in Science Degree*

Top Code: 1604.30

The curriculum prepares students in the field of electronic journalism. Students are prepared for positions such as news researcher, assignment editor, news producer, news writer or reporter.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Create effective communication using written, oral and/or audio-visual methods in a media context.
2. Integrate critical thinking in a media context.
3. Integrate professional standards of conduct in a media context.
4. Demonstrate technological proficiency in a media context.

Requirements for the Certificate of Achievement (35–36 units):

Recommended sequence:

Semester I

TVR 001 – Introduction to Electronic Media (3)
TVR 002A – Beginning Audio Production (3)
TVR 007 – Beginning TV Studio Production (3)
TVR 012 – Beginning Announcing and Performing in Electronic Media (3)

Semester II

TVR 018 – Radio and Television Newswriting (3)

Semester III

BIT 025 – Survey of Computer Technology in Business (3)
TVR 014A – Beginning Radio Production (3)
TVR 016A – Video Production (4)

Semester IV

COMM 101 – Communication Field Practice (1)
TVR 004 – Beginning Single Camera Production (3)
TVR 021 – Electronic Media Management (3)
TVR 024 – Electronic News Gathering and Editing (3)
TVR 128C – Broadcast News/Administration Internship (1)
or TVR 129C – Broadcast News/Administration Internship (2)

Recommended Electives

COMM 001 – Survey of Mass Communication (3)
JOUR 004A – Reporting and Newswriting (3)
SPCH 004 – Oral Interpretation (3)
TVR 014B – Advanced Radio Production (3)
TVR 019 – Introduction to Media Aesthetics and Cinematic Arts (3)

Requirements for the Associate in Science Degree – see page 89.

Broadcast Journalism – Occupational Skills Certificate

Top Code: 0604.30

This curriculum prepares students in the field of electronic journalism. Students are prepared for positions such as news researcher, assignment editor, news producer, news writer, reporter, newscaster, field producer, news videographer, and news video editor.

An Occupational Skills Certificate is awarded upon the completion of all required courses with a grade of C or better.

Program Outcomes:

1. Apply production techniques to aural and visual media.
2. Demonstrate professional conduct, including collaborative skills and abilities.
3. Demonstrate technological proficiency.

Requirements for the Occupational Skills Certificate (15–16 units):

TVR 001 – Introduction to Electronic Media (3)
TVR 007 – Beginning TV Studio Production (3)
TVR 018 – Radio and Television Newswriting (3)
TVR 024 – Electronic News Gathering and Editing (3)

Required Electives (3–4 units – any ONE of the following electives):

JOUR 002 – Beginning Journalism (3)
TVR 002A – Beginning Audio Production (3)
TVR 012 – Beginning Announcing and Performing in Electronic Media (3)
TVR 014A – Beginning Radio Production (3)
TVR 015 – Introduction to Media Writing (3)
TVR 016A – Television Production (4)
TVR 019 – Introduction to Media Aesthetics and Cinematic Arts (3)
TVR 021 – Electronic Media Management (3)

Media Programming & Management – Occupational Skills Certificate

Top Code: 0604.00

This curriculum prepares students for entry-level positions in the managerial areas of commercial, corporate, and public media. With ever expanding media outlets, professional opportunities will continue to grow. Account executives, account executive assistants, program directors, assistant program directors, station managers, audience researchers and other administrative staff will find increased demand.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade C or better.

Requirements for the Occupational Skills Certificate (15–16 units):

TVR 001 – Introduction to Electronic Media (3)
TVR 019 – Introduction to Media Aesthetics and Cinematic Arts (3)
TVR 021 – Electronic Media Management (3)

Required electives (6–7 units – any TWO of the following electives):

BUS 010 – Introduction to Management (3)
TVR 002A – Beginning Audio Production (3)
TVR 007 – Beginning TV Studio Production (3)
TVR 012 – Beginning Announcing and Performing in Electronic Media (3)
TVR 014A – Beginning Radio Production (3)
TVR 015 – Introduction to Media Writing (3)
TVR 016A – Television Production (4)
TVR 017A – Television and Film Script Writing (3)
TVR 018 – Radio and Television Newswriting (3)

Radio Production – Certificate of Achievement, Associate in Science Degree

Top Code: 0604.10

Radio Production curriculum prepares students to work in various areas of broadcasting and electronic media. Course work covers basic aspects of radio production, audio production, post-production sound, and announcing and writing for broadcast, cable and digital media. Practical internships are offered in professional facilities, including commercial and public broadcast companies, cable television, production and post-production companies. Students selecting the “Radio” track of this program will produce a weekly show for the college radio station. Radio Production students are prepared for such positions as radio hosts/announcers, news reporters, production assistants, program producers, and audio editors for radio.

Some occupations within the industry of radio production and operations are inherently competitive. Students are encouraged to utilize college audio/radio facilities above and beyond coursework to better insure their marketability.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Create effective communication using written, oral and/or audio-visual methods in a media context.
2. Integrate critical thinking in a media context.
3. Integrate professional standards of conduct in a media context. Develop technological proficiency in a media context.
4. Develop technological proficiency in a media context.

Requirements for the Certificate of Achievement (32–35 units):

Recommended sequence:

Semester I

- TVR 002A – Beginning Audio Production (3)
- TVR 012 – Beginning Announcing and Performing In Electronic Media (3)
- TVR 014A – Beginning Radio Production (3)

Semester II

- TVR 002B – Radio Broadcast Master Control Operations (3)
- TVR 014B – Advanced Radio Production (3)
- TVR 015 – Introduction to Media Writing (3)

Semester III

- TVR 001 – Introduction to Electronic Media (3)
- TVR 004 – Beginning Single Camera Production (3)
or TVR 007 – Beginning TV Studio Production (3)
- COMM 101 – Communication Field Practice (1)

Winter Intersession

- TVR 117 – Telecommunications Workshop (1)
or TVR 119 – Radio Workshop (3)

Summer

- TVR 120 – Radio Workshop (2)

Summer

- TVR 128B – Radio Operations Internship (1)
or TVR 128F – Radio Production Internship (1)
or TVR 129B – Radio Operations Internship (2)
or TVR 129F – Radio Production Internship (2)

Required Electives (3 units – any ONE of the following electives)

- MUSC 129A – Music in Multimedia (3)
- TVR 104 – Live Sound Reinforcement (3)
- TVR 143 – Digital Audio Workstation Skills (3)

Recommended Electives

- ELTN 130 – Introduction to Electronics (3)

Requirements for the Associate in Science Degree – see page 89.

Television Operations – Certificate of Achievement, Associate in Science Degree

Top Code: 0604.20

The curriculum prepares students for employment as commercial, corporate, and cable television operators. With the growth of cable and satellite distribution and the continuing development of new communication technologies (high definition television, fiber optics and digital media), expanding opportunities will be available for well-trained individuals.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Create effective communication using written, oral and/or audio-visual methods in a media context.
2. Integrate critical thinking in a media context.
3. Integrate professional standards of conduct in a media context.
4. Develop technological proficiency in a media context.

Requirements for the Certificate of Achievement (28–30 units):

Recommended sequence:

Semester I

TVR 001 – Introduction to Electronic Media (3)

TVR 002A – Beginning Audio Production (3)

TVR 007 – Beginning TV Studio Production (3)

Semester II CIS 030 – Networks and Telecommunications (3)

TVR 107 – Video Studio Controls (5)

Semester III

TVR 024 – Electronic News Gathering and Editing (3)

TVR 041 – Beginning Digital Non-Linear Video Editing (3)

TVR 108 – Television Operations (4)

Required elective (1–3 units – any ONE of the following):

TVR 117 – Telecommunications Workshop (1)

TVR 119 – Radio Workshop (3)

TVR 120 – Radio Workshop (2)

TVR 124 – Television Field Production (3)

TVR 128A – TV Operations Internship (1)

Requirements for the Associate in Science Degree – see page 89.

Television Post Production – Occupational Skills Certificate

Top Code: 0604.30

The program will prepare students for employment as video editors and assistant editors.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Requirements for the Occupational Skills Certificate (15 units):

TVR 007 – Beginning TV Studio Production (3)
TVR 024 – Electronic News Gathering and Editing (3)
TVR 041 – Beginning Digital Non-Linear Video Editing (3)
TVR 141B – Intermediate Digital Non-Linear Video Editing (3)
TVR 142 – Advanced Non-Linear Effects Editing (3)

Television Production – Occupational Skills Certificate

Top Code: 0604.20

This curriculum prepares students for entry-level positions in the commercial, corporate, and public television industries. It also prepares students for entry level positions in related media jobs. The need for broadcast TV, cable, and Internet program content continues to grow. Career opportunities in content creation, development, production, and programming will also expand. Well-trained production assistants, camera grips, associate directors, assistants to producers, production coordinators, programming assistants, assistants to cast and talent agents, non-union directors and studio staff will find increased demand.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Apply production techniques to aural and visual media.
2. Demonstrate professional conduct, including collaborative skills and abilities.
3. Demonstrate technological proficiency.

Requirements for the Occupational Skills Certificate (17 units):

TVR 007 – Beginning TV Studio Production (3)
TVR 016A – Television Production (4)
TVR 016B – Television Production (4)

Required Electives (6 units – any TWO of the following electives):

TVR 015 – Introduction to Media Writing (3)
TVR 017A – Television and Film Script Writing (3)
TVR 018 – Radio and Television Newswriting (3)
TVR 019 – Introduction to Media Aesthetics and Cinematic Arts (3)
TVR 021 – Electronic Media Management (3)
TVR 024 – Electronic News Gathering and Editing (3)

Video Operations – Occupational Skills Certificate

Top Code: 0604.20

This curriculum prepares students for entry-level positions in the commercial and corporate television industries. Cable and satellite TV distribution continues to expand. Qualified master control operators, tape operators, duplication technicians and ingestion operators will be required for both new and traditional forms of television distribution.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Apply production techniques to aural and visual media.
2. Demonstrate professional conduct, including collaborative skills and abilities.
3. Demonstrate technological proficiency.

Requirements for the Occupational Skills Certificate (12 units):

TVR 007 – Beginning TV Studio Production (3)
TVR 107 – Video Studio Controls (5)
TVR 108 – Television Operations (4)

Video Post-Production – Certificate of Achievement

Top Code: 0604.20

The Post-Production certificate provides formal training for individuals who seek entry into the rapidly growing field of film and television post-production, including professions such as assistant editors, editors, post-production supervisors, visual effects artists and title designers. Students will utilize industry standard hardware, software and operating systems to acquire, manage and edit digital video and audio. Large projects are assigned to allow students to build their portfolios.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Apply production techniques to aural and visual media.
2. Demonstrate professional conduct, including collaborative skills and abilities.
3. Demonstrate technological proficiency.

Requirements for the Certificate of Achievement (25–27 units):

Recommended sequence:

TVR 002A – Beginning Audio Production (3)
TVR 007 – Beginning TV Studio Production (3)
TVR 024 – Electronic News Gathering and Editing (3)
TVR 041 – Beginning Digital Non-Linear Video Editing (3)
TVR 141B – Intermediate Digital Non-Linear Video Editing (3)
TVR 142 – Advanced Non-Linear Effects Editing (3)
TVR 143 – Digital Audio Workstation Skills (3)
TVR 144 – Digital Non-Linear Assistant Editing (3)

Required elective – (1–3 units any ONE of the following electives):

TVR 117 – Telecommunications Workshop (1)
TVR 119 – Radio Workshop (3)
TVR 120 – Radio Workshop (2)
TVR 124 – Television Field Production (3)
TVR 128A – TV Operations Internship (1)
TVR 131 – Advanced Television Operations/Production (2)

Recommended electives

CIS 030 – Networks and Telecommunications (3)

Video Production – Certificate of Achievement, Associate in Science Degree

Top Code: 0604.20

The curriculum prepares students to work in various areas of broadcasting and electronic media. Coursework covers basic aspects of audio and video production, post-production principles, and writing for commercial, educational and cable companies. Practical internships are offered in professional facilities, including commercial and public broadcast companies, cable

television, post-production and production companies. Students are prepared for such positions as production assistants, production coordinators, associate directors, stage managers, researchers, programmers, camera operators, technical directors, and editors.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Create effective communication using written, oral and/or audio-visual methods in a media context.
2. Integrate critical thinking in a media context.
3. Integrate professional standards of conduct in a media context.
4. Demonstrate technological proficiency in a media context.

Requirements for the Certificate of Achievement (36–37 units):

Recommended sequence:

Semester I

- TVR 001 – Introduction to Electronic Media (3)
- TVR 002A – Beginning Audio Production (3)
- TVR 004 – Beginning Single Camera Production (3)
- TVR 007 – Beginning TV Studio Production (3)

Semester II

- BIT 025 – Survey of Computer Technology in Business (3)
- TVR 015 – Introduction to Media Writing (3)
- TVR 016A – Television Production (4)
- TVR 041 – Beginning Digital Non-Linear Video Editing (3)

Semester III

- TVR 016B – Television Production (4)
- TVR 021 – Electronic Media Management (3)
- TVR 024 – Electronic News Gathering and Editing (3)
- TVR 128E – Television Production Internship (1)
or TVR 129E – Television Production Internship (2)

Recommended electives

- BUS 009 – Introduction to Business (3)
- COMM 001 – Survey of Mass Communication (3)
- SPCH 003 – Voice and Diction (3)
- SPCH 004 – Oral Interpretation (3)
- TVR 012 – Beginning Announcing and Performing in Electronic Media (3)
- TVR 014A – Beginning Radio Production (3)
- TVR 017A – Television and Film Script Writing (3)
- TVR 017B – Television and Film Script Writing (3)
- TVR 018 – Radio and Television Newswriting (3)
- TVR 019 – Introduction to Media Aesthetics and Cinematic Arts (3)
- TVR 124 – Television Field Production (3)

Requirements for the Associate in Science Degree – see page 89.

Writing for Film, Television & Radio – Occupational Skills Certificate

Top Code: 0604.30

This curriculum prepares students for entry-level positions in the commercial, independent, public and corporate film, television and radio industries. Such positions include editorial assistant, assistant copy editor, script reader, script supervisor, researcher, promotions, casting assistant, and assistant to a literary agent.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Research, structure, and write dramatic and non-dramatic content for radio, television, and multimedia.

Requirements for the Occupational Skills Certificate (15–16 units):

TVR 015 – Introduction to Media Writing (3)

TVR 017A – Television and Film Script Writing (3)

TVR 017B – Television and Film Script Writing (3)

TVR 018 – Radio and Television Newswriting (3)

Required electives (3–4 units – any ONE of the following electives):

TVR 001 – Introduction to Electronic Media (3)

TVR 016A – Television production (4)

TVR 019 – Introduction to Media Aesthetics and Cinematic Arts (3)

TVR 021 – Electronic Media Management (3)

THEATER ARTS

(Performing and Communication Arts Division)

Theatre Arts – Associate in Arts Degree for Transfer to CSU

Top Code: 1007.00

The Associate in Arts in Theatre Arts for Transfer is designed to build students' performance skills in the area of theatrical production—including acting, stagecraft, and technical theatre; to enrich students' aesthetic and intellectual proficiency in theatre, theatre history, and literature; and to provide pre-professional training. The AA-T in Theatre Arts emphasizes production and experience in the creation of theatrical performances. At the same time, the degree offers courses in all aspects of the theatre, both artistic and academic. Faculty, staff, and students work closely together to build a solid foundation in the practical, artistic, and historical aspects of theatre.

The Associate in Arts in Theatre Arts for Transfer will prepare students for transfer to a CSU system. The AA-T in Theatre Arts will be awarded upon completion of coursework totaling 60 California State University (CSU) transferable units including the major requirements and the Intersegmental General Education Transfer Curriculum (IGETC-CSU) or California State University General Education (CSUGE) requirements with a minimum grade point average of 2.0. All courses in the major must be completed with a grade of "C" or better. (Students completing this degree are not required to fulfill additional local graduation requirements.)

Associate in Arts in Theatre Arts for Transfer Degree

REQUIRED CORE: 9 units

THRT 001 – Introduction to Theatre (3)

or THRT 005 – History of Theatre Arts (3)

THRT 002A – Acting Fundamentals (3)

Three units in either

THRT 028 – Studio Production (1)

or THRT 029 – Rehearsal and Performance (3)

or THRT 030 – Stage Techniques (1)

LIST A: Select 9 units

- THRT 002B – Intermediate Acting (3)
- THRT 009 – Script Analysis (3)
- THRT 010A – Makeup for Stage and Screen (3)
- THRT 012A – Technical Theatre (4)
- THRT 013 – Introduction to Scenic Design (3)
- THRT 015 – Costume Crafts (3)
- THRT 028 – Studio Production (1)
 - or THRT 029 – Rehearsal and Performance (3)
 - or THRT 030 – Stage Techniques (1)
- THRT 041 – Fundamentals of Stage Lighting (3)

REQUIRED SUBTOTAL..... 18
 CSU General Education or IGETC Pattern..... 39–41
 Transferable Electives (as needed to reach 60 transferable units)

DEGREE TOTAL 60

Student Learning Outcomes:

1. Demonstrate an understanding of theatre concepts, elements, and terminology.
2. Collaborate with others in the production of theatrical works.
3. Research, analyze, and interpret dramatic literature and theatre arts.

Theater Technology – Certificate of Achievement, Associate in Science Degree

Top Code: 1006.00

The curriculum prepares students for technical careers in professional and educational theater, stage lighting, scenic arts, stage management and related vocations. There are two courses of study offered.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Collaborate with others in the production of theatrical works.
2. Research, analyze, interpret and evaluate dramatic literature and theatre arts.

Requirements for the Certificate of Achievement (35 units):

Recommended sequence:

Semester I

- THRT 005A – Theatre History I (3)
- THRT 005B – Theatre History II (3)
- THRT 012A – Technical Theater (4)
- THRT 030 – Stage Techniques (1)

Semester II

- TVR 002A – Beginning Audio Production (3)
- THRT 012B – Advanced Technical Theater (4)
- THRT 030 – Stage Techniques (1)

Semester III

TVR 007 – Beginning TV Studio Production (3)
THRT 013 – Introduction to Scenic Design (3)
THRT 015 – Costume Crafts (3)

Semester IV

THRT 010A – Makeup for Stage and Screen (3)
THRT 030 – Stage Techniques (1)
THRT 041 – Fundamentals of Stage Lighting (3)

Recommended electives

TVR 104 – Live Sound Reinforcement (3)
THRT 002A – Acting I (3)
THRT 110 – Television/Motion Picture Acting (3)
THRT 131 – Intersession Production Workshop (2)

Requirements for the Associate in Science Degree – see page 89.

WELDING

(Engineering & Technology Division)

Basic Welding – Occupational Skills Certificate

Top Code: 0956.50

The basic welding skills developed in this certificate program will help an individual stand out when applying for employment in fields such as building construction, automotive technology, truck repair, plumbing, air conditioning, sheet metal, plant maintenance, and other manufacturing trades.

This program includes practice with oxy-acetylene welding, brazing and cutting, Shielded Metal Arc Welding (SMAW) in all positions and Gas Tungsten Arc Welding – also known as Tungsten Inert Gas Welding (TIG).

An Occupational Skills Certificate is awarded upon the completion of all courses with a grade of C or better.

Program Outcomes:

1. Demonstrate the skills required by industry to perform oxy-acetylene welding and cutting.
2. Demonstrate the skills required by industry to perform shielded metal arc welding and gas tungsten arc welding.
3. Interpretation and performance of welding projects from verbal and or drawings provided.
4. Demonstrate safe set-up and operations of welding equipment.
5. Demonstrate the skills required by industry to perform welds on special materials.

Requirements for the Occupational Skills Certificate (4 units):

WELD 044A – Introduction to Gas Welding (1)
WELD 044B – Introduction to Electric Arc Welding (1)
WELD 044C – Advanced Arc Welding, FCAW & SMAW (1)
WELD 145 – Introduction to TIG Welding (1)

Recommended electives

DT 008A – Introduction to Digital Design & Fabrication (3)
MACH 220A – Introduction to Manufacturing Technology (3)
TECH 107A – Technical Calculations (3)

Construction Welding – Certificate of Achievement, Associate in Science Degree

Top Code: 0956.50

The curriculum prepares students to seek employment in the welding/metal working trades as welders, welder's helpers, cutting torch operators, or apprentice fitters. The focus of instruction and practical welding experience is on the Shielded Metal Arc Welding (SMAW), semi-automatic Flux Cored Arc Welding (FCAW) and oxy-acetylene welding, brazing and cutting processes. These processes are used in the construction and manufacturing industries. Welding practice prepares the student for the Structural Steel Groove and Light Gauge Structural Certifications. Certification is now considered a mandatory requirement for successful employment in the construction and manufacturing industries.

Metal fabrication skills including blueprint reading, shop math, metal fit-up and production welding techniques. Instruction includes structural steel welding codes and welding theory. Students are required to purchase welding materials and protective clothing.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Perform shielded metal arc (SMAW), flux cored arc welding (FCAW) and oxy-acetylene welding and cutting.
2. Select appropriate equipment and processes for metal/welding operations and demonstrate safe set-up and operations of welding equipment.
3. Evaluate welds to industry standards and prepare inspections reports including welding defects and solutions.
4. Fabricate a part from a blueprint including the layout, assembly, cutting of material guided by welding symbols.
5. Prepare to successfully pass the practical and written L.A. City Structural Steel Certification exam for shielded metal arc (SMAW) and flux cored arc welding (FCAW).

Requirements for the Certificate of Achievement (26 units):

Recommended sequence:

Semester I

WELD 200A – Introduction to Welding (10)

TECH 107A – Technical Calculations (3)

Semester II

WELD 200B – Construction Trade Welding (10)

DT 008A – Introduction to Digital Design & Fabrication (3)

Recommended electives

BIT 010 – Basic Computer Keyboarding (1)

BIT 011A – Computer Keyboarding and Document Processing (2)

DT 017 – Building Construction Technical Graphics (3)

DT 118 – A/E/C Modeling (3)

KINA 032A – Beginning Fitness Activities (1)

MACH 220A – Introduction to Manufacturing Technology (3)

MACH 220B – Intermediate Machine Technology I (3)

MACH 220C – Intermediate Machine Technology II (3)

MACH 220D – Advanced Milling Operations I (3)

MACH 220E – Advanced Milling Operations II (3)

MACH 220F – Advanced Lathe Operations (3)

MACH 220G – Production Technology I (3)

MACH 220H – Production Technology II (3)

MACH 220I – Production Technology III (3)

MACH 220J – Tool Making I (3)

MACH 220K – Tool Making II (3)

MACH 220L – Advanced Prototype Machining (3)
WELD 044A – Introduction to Gas Welding (1)
WELD 044B – Introduction to Electric Arc Welding (1)
WELD 044C – Advanced Arc Welding, FCAW & SMAW (1)
WELD 145 – Introduction to TIG Welding (1)
WELD 150A – Oxy-Acetylene and Arc Welding (5)
WELD 150B – Arc Welding (5)
WELD 150C – Structural Arc Welding (5)
WELD 150D – Tungsten Inert Gas (TIG) Welding (5)

Requirements for the Associate in Science Degree – see page 89.

Gas Tungsten & Gas Metal Welding – Certificate of Achievement, Associate in Science Degree

Top Code: 0956.50

The curriculum prepares students to seek employment in the welding/metal working trades as welders, welder's helpers, cutting torch operators, or apprentice fitters. The focus of instruction and practical welding experience is on the Shielded Metal Arc Welding (SMAW), semi-automatic Gas Metal Arc Welding (GMAW), Gas Tungsten Arc Welding (GTAW) and oxy-acetylene welding, brazing and cutting processes. These processes are used in the aero-space and manufacturing industries. Welding practice prepares the student for the Structural Steel Groove and Light Gauge Structural Certification. Gas Tungsten Arc Welding (GTAW) will include the welding of steel, aluminum and stainless steel as used in the aero-space industry.

Metal fabrication skills including blueprint reading, shop math, metal fit-up and production welding techniques. Instruction includes structural steel welding codes and welding theory. Students are required to purchase welding materials and protective clothing.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate the necessary skills to enter the job market as welders, metal workers or transfer to a four-year school.
2. Demonstrate knowledge of the ethical and social responsibilities, understand and apply safe working procedures to a career in Welding Technology.
3. Demonstrate the value of teamwork in the field of Welding Technology.
4. Demonstrate appropriate mastery of the knowledge, techniques, skills and modern tools used in Welding Technology.
5. Demonstrate skills in Gas Welding, Tungsten Inert Gas, Gas Metal Welding, Electric Arc Welding, Shielded Metal Arc Welding and Flux Cored Arc Welding.
6. Demonstrate the skills required to obtain the American Welding Societies "Structural Steel Welding Certification" and the "Los Angeles City Structural Steel Welding" Licenses.
7. Demonstrate the proper use of related reference tables, diagrams, symbols, abbreviation graphics and charts for analysis for the interpretation of blueprints and specifications.

Requirements for the Certificate of Achievement (29 units):

Recommended sequence:

Semester I

TECH 107A – Technical Calculations (3)
WELD 200A – Introduction to Welding (10)

Semester II

DT 008A – Introduction to Digital Design & Fabrication (3)
MACH 220A – Introduction to Manufacturing Technology (3)
WELD 200C – Semi-Automatic and Gas Tungsten Welding (10)

Recommended electives

BIT 010 – Basic Computer Keyboarding (1)
BIT 011A – Computer Keyboarding and Document Processing (2)
DT 017 – Building Construction Technical Graphics (3)
DT 118 – A/E/C Modeling (3)
KINA 032A – Beginning Fitness Activities (1)
MACH 220B – Intermediate Machine Technology I (3)
MACH 220C – Intermediate Machine Technology II (3)
MACH 220D – Advanced Milling Operations I (3)
MACH 220E – Advanced Milling Operations II (3)
MACH 220F – Advanced Lathe Operations (3)
MACH 220G – Production Technology I (3)
MACH 220H – Production Technology II (3)
MACH 220I – Production Technology III (3)
MACH 220J – Tool Making I (3)
MACH 220K – Tool Making II (3)
MACH 220L – Advanced Prototype Machining (3)
WELD 044A – Introduction to Gas Welding (1)
WELD 044B – Introduction to Electric Arc Welding (1)
WELD 044C – Advanced Arc Welding, FCAW & SMAW (1)
WELD 145 – Introduction to TIG Welding (1)
WELD 150A – Oxy-Acetylene and Arc Welding (5)
WELD 150B – Arc Welding (5)
WELD 150C – Structural Arc Welding (5)
WELD 150D – Tungsten Inert Gas (TIG) Welding (5)

Requirements for the Associate in Science Degree – see page 89.

High School Articulation With Occupational Curricula

Articulation is a collaborative process with PCC faculty/administration and secondary instructors/administration which aligns courses and programs in a manner that creates seamless transition to college into a career education path of study.

Pasadena City College has established course articulation with the following high schools:

Alhambra High School (Alhambra, CA)

<i>PCC Course</i>	<i>High School Course</i>
AUTO 032	Auto 1/2, Auto 3/6, Auto ROP
BIT 011A	Computer Keyboarding
BIT 025	Computer Literacy/Computer Applications
CHDV 013C	Childcare
DA 100	Dental Assisting ROP
DT 008A	Drafting 1–2 or CAD
GRFX 134A	Printing 1 & 2
PHOT 031	Digital Photography

Arcadia High School (Arcadia, CA)

<i>PCC Course</i>	<i>High School Course</i>
CIS 016	AP Computer Science
CIS 161	Computer Hardware/Network Engineering
DT 008A	Introduction to Engineering Design A & B (PLTW)
GRFX 220	Graphic Design 1 & 2
PHOT 031	Digital Photography
TVR 007	Beginning, Intermediate, and Advanced Video Production

Baldwin Park High School (Baldwin Park, CA)

<i>PCC Course</i>	<i>High School Course</i>
CIS 010	G6004: Career Education and Computer Applications & 315-02: Microcomputer Repair and Maintenance
CIS 016	Java Programming
CIS 180	Oracle Database Programming w/ SQL (ESGVROP)

Blair High School (Pasadena, CA)

<i>PCC Course</i>	<i>High School Course</i>
BIOL 102A	Biotechnology

Eagle Rock High School (Los Angeles, CA)

<i>PCC Course</i>	<i>High School Course</i>
GRFX 010	Graphic Communications 1 & 2
GRFX 134A	Graphic Arts 1A & 1B

Franklin High School (Los Angeles, CA)

<i>PCC Course</i>	<i>High School Course</i>
GRFX 010	Graphic Communications 1 & 2
GRFX 134A	Graphic Communications A & B
GRFX 220	Graphic Communications Introduction A & B

Gabrielino High School (San Gabriel, CA)

<i>PCC Course</i>	<i>High School Course</i>
DT 008A	Engineering Design Technology

Garfield High School (Los Angeles, CA)

<i>PCC Course</i>	<i>High School Course</i>
GRFX 010	Graphic Communications 1 & 2
GRFX 134A	Graphic Communications A & B
GRFX 220	Graphic Design Fundamentals A & B

John Marshall High School (Pasadena, CA)

<i>PCC Course</i>	<i>High School Course</i>
GRFX 220	Graphic Communication 1 & 2

John Muir High School (Pasadena, CA)

<i>PCC Course</i>	<i>High School Course</i>
BIT 025	Business Computing
GRFX 220	Graphic Design 1 & 2

Mark Keppel High School (Alhambra, CA)

<i>PCC Course</i>	<i>High School Course</i>
ACCT 010	Computerized Accounting
AUTO 032	Auto 1/2, Auto 3/6, Auto ROP
BIT 011A	Computer Keyboarding
BIT 025	Computer Literacy/Computer Applications
CHDV 013C	Childcare
DT 008A	Drafting 1 & 2 Computer Aided Design

GRFX 134A Printing 1 & 2
GRFX 220 Graphic Design 1 & 2
PHOT 031 Photo 2

DT 008A Architectural Design I & II
DT 008A Engineering Design I & II

Lincoln High School (Los Angeles, CA)

<i>PCC Course</i>	<i>High School Course</i>
GRFX 010	Graphic Communications 1 & 2
GRFX 134A	Graphic Communications A & B
GRFX 220	Graphic Design Fundamentals A & B
GRFX 220	Graphic Communications Introduction A & B

Temple City High School (Temple City, CA)

<i>PCC Course</i>	<i>High School Course</i>
BIT 025	Computer Literacy/ Computer Applications
BIT 121	Life Design in the 21 st Century
BUS 116	Small Business Management
DT 008A	Engineering Design Technology
DT 008B	Advanced Computer Aided Design

Pasadena High School (Pasadena, CA)

<i>PCC Course</i>	<i>High School Course</i>
GRFX 010 & GRFX 134A	Graphic Design 1 & Printmaking Occupations 1 & 2
GRFX 220	Graphic Occupations 1 & 2; & Graphic Design 2
PHOT 031	Commercial Photography

Rose City High School (Pasadena, CA)

<i>PCC Course</i>	<i>High School Course</i>
GRFX 220	Graphic Design 1 & 2

San Gabriel High School (San Gabriel, CA)

<i>PCC Course</i>	<i>High School Course</i>
ACCT 010	Computerized Accounting
AUTO 032	Auto 1/2, Auto 3/6, Auto ROP
BIT 011A	Computer Keyboarding
BIT 025	Computer Literacy/ Computer Applications
CHDV 013C	Childcare
GRFX 134A	Printing 1 & 2
GRFX 220	Graphic Design 1 & 2

San Marino High School (San Marino, CA)

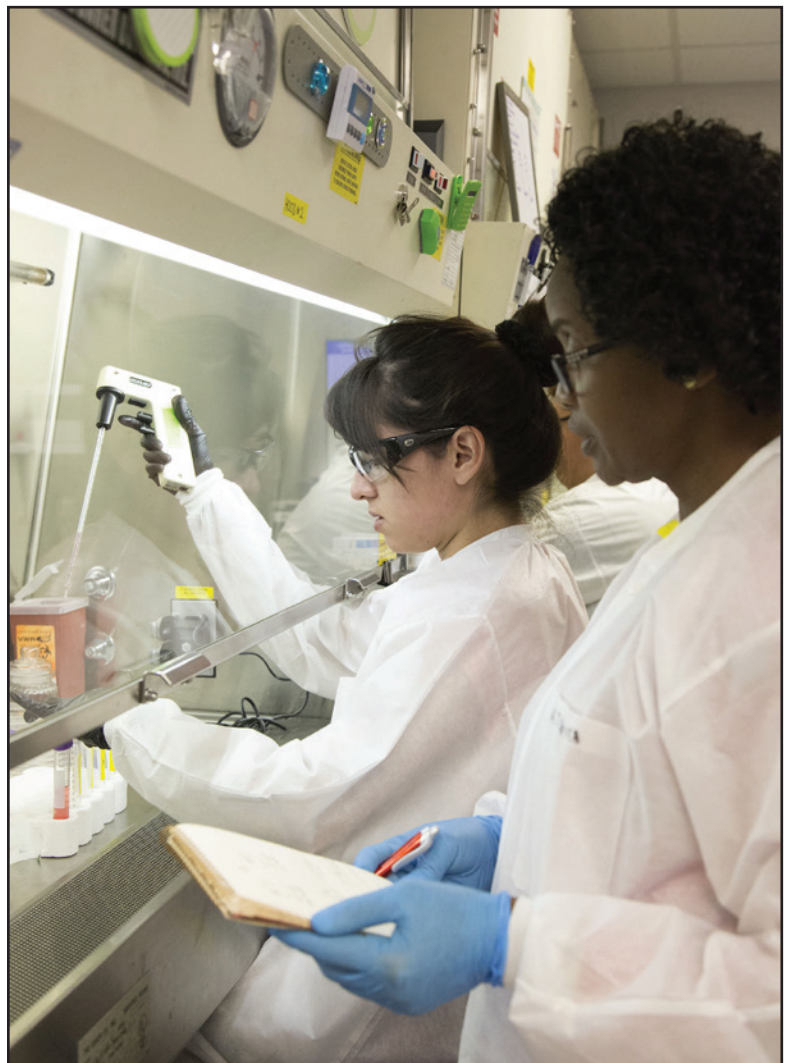
<i>PCC Course</i>	<i>High School Course</i>
GRFX 134A	Computer Graphics C1 & C2
GRFX 199	Computer Graphics A & B
GRFX 220	Computer Graphics A & B

South El Monte High School (South El Monte, CA)

<i>PCC Course</i>	<i>High School Course</i>
BIT 025	Computer Literacy/ Computer Applications
BIT 121	Life Design in the 21 st Century

PASADENA CITY COLLEGE
CATALOG
2017-2018

Instructional Divisions of the College



SECTION VI

INSTRUCTIONAL DIVISIONS OF THE COLLEGE

Division of Business (Room R201)

Additional information: (626) 585-7341

A variety of programs is offered in the Business Division. Each specialization provides students with the knowledge and background necessary to progress in a business (vocational) career or toward an educational degree. Courses may be taken individually or as part of a planned program leading to a Certificate of Achievement, Occupational Skills Certificate, and/or an Associate degree. In addition, many of the courses are transferable to the California State and University of California systems. We also offer an Associate in Science Degree for Transfer (AS-T) in Business Administration (see Section IV). The following occupational curricula are offered in the Business and Computer Technology Division and are appropriate for those individuals who are interested in increasing their job skills and obtaining both stable and gainful employment in the business community: Accounting and Bookkeeping, Business Information Technology, Business Administration, Computer Information Systems, Hospitality Management, and Paralegal Studies.

Division of Engineering and Technology (Room IT200)

Additional information: (626) 585-7267

The Engineering and Technology Division offers students programs of study which prepare them for lifelong careers in high tech professions. Both incoming students and current professionals are served through our certificate structure, which lead to professional and vocational careers. Interested students are encouraged to transfer into four and five year universities and colleges. Through our articulation process. Transfer programs into private, CSU and UC university programs include: Administration of Justice, Engineering, Engineering Design, Electrical Technology, and Electronics. Technical certificates in careers include the following disciplines: Administration of Justice, Automotive Technology, Building Construction, Construction Inspection, Design Tech, Engineering Design, Technology, Electrical Technology, Solar Energy, Electronics, Engineering, Fire Technology, Culinary Arts, Graphic Communications Technology, Manufacturing Technology

and Welding Technology. Specific certificate program outcomes can be found in the Career and Technical Education section of this *Catalog*.

Division of Health Sciences (CEC Campus Bungalow B6 and Main Campus W204)

Additional information: (626) 585-3378

The School of Health Sciences offers an array of programs for students interested in entering the health care provider workforce. Programs lead to a certificate and/or degree as an Anesthesia Technologist, Certified Nursing Assistant, Personal Health Care Aide, Dental Assistant, Dental Hygienist, Dental Laboratory Technologist, Emergency Medical Technician, Licensed Vocational Nurse, Medical Assistant, Radiologic Technologist, and Registered Nurse. There is also a Career Ladder option from the Licensed Vocational Nurse program to the Registered Nurse program. Program offerings range from six weeks to one and two years and are fully accredited. Students may have clinical experiences on as well as off campus in professional hospital and educational settings. Specific certificate program outcomes can be found in the Degrees and Certificates section of this *Catalog*.

Division of Visual Arts and Media Studies (Room CA102)

Additional information: (626) 585-7238

Housed in Pasadena City College's **Center for the Arts**, the Division of Visual Arts and Media Studies offers a variety of courses and programs in the Studio Arts, Design and Media disciplines. The facility includes state-of-the-art classrooms, labs, and studios. The Center for the Arts moreover features stellar exhibition venues:

- **The Boone Family Art Gallery** is an integral part of instruction for courses in many visual art disciplines, and features a juried student show, an annual exhibition of the work of our faculty, and a major exhibition associated with the College's Visual Artist-in-Residence program.

- Situated adjacent to the Center for the Arts, the **George and MaryLou Boone Sculpture Garden** features major pieces, including works by Deborah Butterfield, Jack Zajac, Stephan Balkenhol, and Yutaka Sone.

Studies in studio art include art history, drawing and figure drawing, painting, printmaking, sculpture, illustration, ceramics, jewelry and crafts. The program's annual Visual Artist-in-Residence features a notable professional who interacts closely with students, faculty, and the community; the artist produces works, lectures and conducts workshops.

Studies in Design include illustration, jewelry, crafts, graphic design, advertising graphic design, fashion, product design, interior design, product design-technology, product design-graphics and digital media-graphic design.

Media studies includes courses in Communications, Journalism and Digital Media Arts. The Cinema Program includes courses in filmmaking, film art and the history of film. These programs offer transfer courses and a variety of certificates. Students are prepared for transfer to four-year institutions and for entry-level positions in the media fields.

Studies in Photography include both wet and digital photography in the areas of portraiture, fashion, product and architectural photography, experimental, black and white, and digital imaging.

Division of Performing and Communication Arts (Room CA119)

Additional information: (626) 585-7216

Housed in the **Center for the Arts**, the Performing and Communication Arts Division offers a variety of courses and programs in the disciplines of Performing Arts, Television and Radio, and Speech Communication. The facility includes state-of-the-art classrooms, rehearsal spaces, studios, and practice rooms. In addition, the Center for the Arts features three stellar performance and exhibition venues:

- **The Robert and Adrienne Westerbeck Recital Hall** is home for over 80 student and professional performances per year, including master classes, workshops and activities part of the Pamela L. Girard Guest Artist Series.
- **The Center for the Arts Theater** is a professional quality theatre space hosting a variety of stage productions and student workshops.

- **The Boone Family Gallery** is a modern exhibition space which presents professional and student works year-round.

Performing Arts

The Performing and Communication Arts Division provides comprehensive and challenging courses in the performing arts, including transfer programs for majors in Music, Theater Arts, and Dance; performance opportunities in a wide variety of musical ensembles, theater productions and dance ensembles; and a certificate program in commercial music.

Speech Communication

Speech Communication offers important core courses required for transfer including Public Speaking, Argumentation and Debate and Interpersonal Communication, while the Forensics program provides opportunities for students to excel in intercollegiate speech and debate competitions. The **Speech-Language Pathology Assistant Program** prepares students for work as assistants to qualified Speech-Language Pathologists.

Television and Radio

The Television and Radio department offers certificates in five areas, including Radio Production, Television Production, Television Operations, Broadcast Journalism and Post-Production.

Division of English (Room C245)

Additional information: (626) 585-7371

The English Department provides the core reading, writing, and literature courses for all certificate, degree, and transfer students at PCC. Courses range from basic reading and writing skills to advanced composition and critical thinking, from literature courses for the non-major to British and American literature survey courses for the English major, from how to read a poem to how to write a poem. The English Department also offers study/travel programs including an annual summer trip to the Oregon Shakespeare Festival and regular theatre trips in the spring to London. The English Department also publishes *Inscape*, an annual literary magazine featuring student work. The Department's longstanding commitment to student excellence and success and diversity is exemplified in its major areas: Composition, Reading, Literature, and Creative Writing. Students wishing to major in English have two options: the Associate of Arts English Literature Major and the Associate of Arts in English-Transfer Major.

Division of Languages

(Room C247)

Additional information: (626) 585-3187

The Languages Department brings together 13 foreign languages, English as a Second Language (ESL), American Sign Language (ASL), and Linguistics. The Department envisions equipping each student with the resources necessary to recognize the value of different cultures and approaches and to appreciate diversity. The foreign languages program has a broad spectrum of classes ranging from language courses to courses in civilization, cinema and literature. The intermediate level courses cater to practical use of language from films to business. The program in English as a Second Language builds the communicative foundation for all students who need to master the language in order to successfully perform at the College. It encompasses both a transfer curriculum and learning activities designed to improve the economic condition and quality of life of the diverse communities within the College service area.

Division of Social Sciences

(Room C321)

Additional information: (626) 585-7248

The Social Sciences Department is made up of three primary areas: the Social Sciences consisting of American Institutions, anthropology, economics, political sciences, psychology, and sociology; the Humanities: history, philosophy and religious studies; Education consisting of education, child development, special education technology and the Child Development Center. In addition there are cross discipline programs such as ethnic studies and statistics for the behavioral sciences. The Department offers introductory courses to students that satisfy the general education requirements for the College's associate degrees, and for both the Cal State College and University system and the University of California through the IGETC program. In addition more specialized courses are offered for students to satisfy the major requirement in the various certificate and transfer programs. The Child Development Program in conjunction with the Child Development Center offers eight certificates of completion or achievement in vocational programs.

Division of Natural Sciences

(Room SV6)

Additional information: (626) 585-7140

The Division of Natural Science at Pasadena City College offers students opportunities to learn and grow as individuals, scientists, scholars, and well-informed citizens. Several Departments exist within the division to serve students in the disciplines of Anatomy, Astronomy, Biology, Chemistry, Computer Science, Environmental Studies, Geography, Geology, Microbiology, Physical Science, Physics, and Physiology.

Division of Mathematics and Computer Science

(Room R322)

Additional information: (626) 585-7331

The Mathematics and Computer Science Division has a threefold mission: 1) To rigorously educate students majoring in Science-Technology-Engineering-Mathematics (STEM) fields providing them the mathematical knowledge and skill necessary for tomorrow's STEM careers; 2) To provide a useful, well-rounded, versatile mathematical background for students pursuing a Liberal Arts degree with our Statistics & Liberal Arts Mathematics (SLAM) sequence, and 3) To build a mathematically and computer literate population by providing courses for students at all levels. A broad range of mathematics courses are offered beginning with numerical foundations up through calculus and statistics. The Computer Science Department offers courses including introduction to computers, programming in a variety of languages and computer data structures, and focuses on preparing students to transfer to 4-year universities.

Courses are offered in a variety of learning modalities including traditional methods of instruction, courses with compressed or schedules through our Math Path program, and hybrid-online courses in college algebra and statistics.

Division of Kinesiology, Health and Athletics

(Room GM201)

Additional information: (626) 585-7225

Kinesiology is the scientific study of human movement and physical activity. Kinesiology draws upon anatomy, physiology, physics, psychology, and sociology to understand how humans move, what motivates human movement, and the physiological and psychological benefits of physical movement. Kinesiology provides opportunities

for students to gain current knowledge of physical fitness facts, healthful living practices, leisure time pursuits, stress management techniques, and to receive instruction in the skills necessary for successful participation in activities necessary for optimum health and physical efficiency. The field of Kinesiology includes a variety of subfields including exercise physiology, biomechanics, motor control and motor learning, exercise psychology, and the socio-cultural study of movement. A lack of adequate physical activity negatively impacts the physiological and psychological state of humans. Pasadena City College therefore offers a variety of physical activity classes to complement students' academic pursuits. The kinesiology profession is based on the philosophy that physical education is an academic discipline, an essential portion of the General Education process. Further, the physical education curriculum is centered on the concept that movement skills, intellectual development, physical fitness and healthful living practices are elements of life that must be taught and reinforced.

HEALTH

The Health program consists of courses in personal health. These courses are intended to help students live healthfully now and for the rest of their lives. They also serve as foundations for students intending to focus their studies in the health and nutritional sciences, kinesiology or athletics.

NUTRITION

Nutrition offers a variety of courses that align with multiple degree pathways. The courses are specifically designed to meet the needs of students who are currently pursuing degrees in Nursing, Health Science, or Kinesiology. Courses also provide students with an introduction to the science of nutrition, which is particularly important for those planning to transfer to baccalaureate programs in Nutrition, Health Education, Public Health, or pre-medicine.

ATHLETICS

Pasadena City College offers 16 Intercollegiate Athletics programs dedicated to assisting each student in achieving the highest possible academic and athletic success. Our faculty and coaches subscribe to the philosophy that athletics plays an integral role in the total educational process and that athletics helps to promote the growth of values in leadership, character, sportsmanship, and teamwork. Pasadena City College. Athletics at Pasadena City College, as with all California community colleges is governed by the general regulations of the State Community College Athletic Code, as well as specific regulations of the Coast Conference in which Pasadena City College

holds membership. Students who participate in athletics must meet the requirements of the California Community College Athletic Association (CCCAA). Academic standing, enrollment within an intercollegiate class, completed and approved eligibility forms, and a physical exam are required to compete in both the intercollegiate class and intercollegiate sport.

Noncredit Division

Additional information: (626) 585-3000

The Noncredit Division is located at 3035 East Foothill Boulevard, Pasadena, CA, 91107 and is a satellite center to the main campus, with shuttle services to and from the main campus every 20 minutes. The Noncredit Division provides education, training, and services designed to continuously improve California's workforce such as Small Business Development and Entrepreneur programs. The Center offers vocational, technical, and academic courses including High School Diploma Program, GED, Business Office Systems, Printing Technology, Apparel Skills, Fashion Retail, ESL, Adult Basic Education, Parent Education, enrichment classes for Seniors and disabled students, and a wealth of support programs.

PASADENA CITY COLLEGE
CATALOG
2017-2018

Course Descriptions



SECTION VII

COURSE DESCRIPTIONS

All credit courses are listed in the *Catalog*. Following the course number and title are the units of credit that may be earned. The course descriptions describe the total number of lecture and/or laboratory hours that are required for that course per semester.

The following section presents a description of every course offered in the College. Each description is self-contained, i.e., each contains important information on prerequisites, units and hours, limitations on enrollment, recommendations, scheduling by semesters and other data which may be required in making a decision to include the course in the student's program of studies.

Prerequisites/Corequisites/Recommended Preparation

A prerequisite is a condition of enrollment, such as successful completion of another course (with a grade of A, B, C, or P), that must be met BEFORE a student can register for a course or an educational program. Successful completion of a prerequisite demonstrates readiness for the subsequent course or program. By meeting the prerequisite, the student shows that he or she knows certain skills, concepts, and/or information without which the College considers success in the subsequent course or program highly unlikely.

A corequisite is a course in which a student is required to enroll AT THE SAME TIME that he or she is enrolled in another course. In the corequisite course, the student acquires certain skills, concepts, and/or information without which the College considers success in the concurrent course highly unlikely.

A recommended preparation statement in a course description means that a student is advised, but not required, to complete the identified course(s) prior to enrollment in another course or educational program. The skills, concepts, and/or information gained in the recommended preparation in another course or educational program will prepare students for success in the subsequent course or program.

All prerequisites, corequisites, and recommendation preparation statements listed in the course descriptions are periodically reviewed. Students – especially those new to Pasadena City College – should consult the Schedule of Classes and the Counseling Department for the most current information.

Students are expected to meet valid and necessary course prerequisites and corequisites. For information on challenging prerequisites, corequisites, and enrollment limitations, see pages 27-28.

Course Numbering System

Classification I – Courses Numbered 001-099

These Freshman and Sophomore courses generally correspond to university or senior college lower division courses.

Pasadena City College recommends that universities and senior colleges grant subject or elective credit toward Junior standing for courses in this classification. Specific course credit, however, depends upon articulation with the senior institution. Students should consult the catalog of the institution to which they plan to transfer.

Some courses numbered 001-099 can be accepted only as meeting elective requirements at four-year colleges or universities. For further clarification, students should consult counseling services.

Classification II – Courses Numbered 100-399

These courses are technical, semiprofessional or occupationally oriented or they meet community college general education needs.

Classification III – Courses Numbered 400-499

These courses are non-degree applicable and are review and foundation-building courses which are used primarily to qualify students for courses in the transfer classification by satisfying subject or grade deficiencies. Except for certain sequential arrangements, courses in this group are open to all students. Basic skills coursework provides opportunities for students to improve their skills in the areas of mathematics, reading, and writing. These foundation level courses are designed to prepare students for success in further academic work.

Classification IV – Courses Numbered 900-950

These courses are non-degree applicable corequisite courses for specific skills development.

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 indicates that the course is comparable in content and scope to courses offered at other California

community colleges or participating universities (primarily CSU campuses), regardless of the course title or local course number. If a schedule of classes or catalog lists a course that includes a C-ID number, students can be assured that it will be accepted as an equivalent to a course identified with the same C-ID number at another community college. In other words, the C-ID number can be used to identify comparable courses at different community colleges.

The C-ID numbering system is useful for students attending more than one community college and can be used to avoid repeating a class that has been successfully passed at another community college. 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. 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.

The C-ID number can be found in the catalog description.

DIVISIONS

Courses are listed alphabetically by sub-department. Divisions of the College, with their sub-departments, are:

BUSINESS

- Accounting
- Administration of Justice
- Business (General)
- Business Information Technology
- Computer Information Systems
- Fire Technology
- Hospitality
- Paralegal
- Marketing
- Statistics

COMMUNITY EDUCATION CENTER

- Cosmetology (Noncredit Division)

COUNSELING

- Counseling

ENGINEERING and TECHNOLOGY

- Automotive Technology
- Building Construction
- Culinary Arts
- Electricity
- Electronics
- Engineering
- Engineering Design Technology
- Machine Shop
- Manufacturing and Industrial Technology

- Plumbing
- Surveying
- Technical Education (General)
- Welding

ENGLISH

- English

HEALTH SCIENCES

- Anesthesia Technology
- Dental Assisting
- Dental Hygiene
- Dental Laboratory Technology
- Emergency Medical Technology
- Gerontology
- Medical Assisting
- Nutrition
- Nursing
- Personal Care Assistant
- Radiologic Technology

KINESIOLOGY, HEALTH and ATHLETICS

- Health Education
- Kinesiology – Activity
- Kinesiology – Theory
- Kinesiology – Intercollegiate Athletics

LANGUAGES

- American Sign Language
- Arabic
- Armenian
- Chinese
- English as a Second Language
- Foreign Language Study
- French
- German
- Italian
- Japanese
- Latin
- Linguistics
- Portuguese
- Russian
- Spanish

LIBRARY

- Library

MATHEMATICS and COMPUTER SCIENCE

- Computer Science
- Mathematics
- Statistics

NATURAL SCIENCES

- Anatomy
- Astronomy
- Biology
- Chemistry

Geography
Geology
Microbiology
Physical Science
Physics
Physiology

PERFORMING and COMMUNICATION ARTS

Communication
Dance
Music
Speech Communication
Speech Language Pathology Assistant
Television and Radio
Theater Arts

SOCIAL SCIENCES

American Institutions
Anthropology
Child Development
Economics
Education
History
Humanities
Philosophy
Political Science
Psychology
Religious Studies
Social Sciences
Sociology
Special Education Technology
Statistics

SPECIAL SERVICES

Special Services

VISUAL ARTS and MEDIA STUDIES

Architecture
Art
Cinema
Communication
Fashion
Graphic Communications Technology
Journalism
Photography
Theater Arts

ACCOUNTING

(Business Division)

ACCT 001A FINANCIAL ACCOUNTING

5 units

Prerequisite: *Eligibility for MATH 131.*

Recommended Preparation: *ACCT 010 or BUS 014A.*

Study of the concepts and techniques for measurement and communication of financial information and interpretation of financial statements. Total of 90 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ACCT 110*

ACCT 001B MANAGERIAL ACCOUNTING

4 units

Prerequisite: *ACCT 001A.*

Principles of managerial accounting. The use of accounting information in decision-making, planning, directing operations and controlling. Focuses on cost terms and concepts, cost behavior, cost structure and cost-volume-profit analysis. Includes issues relating to cost systems, cost control, profit planning, and performance analysis in manufacturing and service environments. Total of 90 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ACCT 120*

ACCT 010 BOOKKEEPING — ACCOUNTING

4 units

Basic accounting principles and methods of recording business transactions, maintaining a general ledger system, and preparing financial statements. Emphasis on service and merchandising systems for sole proprietorships. **No credit** if taken after ACCT 001A or ACCT 101. **For** preparation for ACCT 001A and office support, marketing-merchandising majors and those who want a knowledge of bookkeeping for personal use, but open to all qualified students. Total of 72 hours lecture.

Transfer credit: CSU.

ACCT 104A COMPUTERIZED ACCOUNTING - QUICKBOOKS

3 units

Prerequisite: *ACCT 001A or 010.*

Introduction to accounting systems concepts and software with PC packages such as Quickbooks. Topics include general ledger, accounts payable, accounts receivable, inventory, and basic payroll. Total of 54 hours lecture and 18 hours laboratory.

ACCT 104B PAYROLL ACCOUNTING

3 units

Prerequisite: *Enrollment in or completion of ACCT 104A.*

Concepts of payroll accounting, including microcomputer application. The course is based on the curriculum for the Fundamental Payroll Certification provided by the American Payroll Association. Total of 54 hours lecture and 18 hours laboratory.

**Course Identification Numbering System (C-ID)*

ACCT 104C INCOME TAX PREPARATION

3 units

Introduction to federal and California individual tax preparation. The curriculum follows the guidelines developed by the California Tax Education Council. Total of 54 hours lecture and 18 hours laboratory.

ADMINISTRATION OF JUSTICE

(Business Division)

AJ 010 INTRODUCTION TO THE ADMINISTRATION OF JUSTICE

3 units

History and philosophy of administration of justice in America from its inception to its role in a culturally diverse society. Identification and explanation of the various components of the criminal justice system; theories of crime, punishment and rehabilitation; examination of the contemporaneous hiring processes of law enforcement agencies, including but not limited to preparation of the application, oral board analysis and overall examination of the system requirements. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: AJ 110*

AJ 012 CONCEPTS OF CRIMINAL LAW

3 units

Prerequisite: *Enrollment in or completion of AJ 010.*

Historical development of criminal law; legal research methods; classification of crime through critical thinking analysis as seen through the eyes of the investigator and the trier of fact; in-depth analysis of homicide and related crimes against persons; survey of property crimes and drug and alcohol related offenses; thorough exposure to legal concepts for those considering careers in law enforcement and related legal professions. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: AJ 120*

AJ 014 LEGAL ASPECTS OF EVIDENCE

3 units

Prerequisites: *AJ 010 and 012.*

Origin, development, philosophy and constitutional basis of evidence; constitutional and procedural considerations affecting arrest, search and seizure; kinds and degrees of evidence and rules governing admissibility; judicial decisions interpreting individual rights and case studies; evidentiary requirements justifying the use of force or deadly weapons by peace officers. Total of 54 hours lecture.

*Transfer Credit: CSU. *C-ID: AJ 124*

AJ 016 PRINCIPLES AND PROCEDURES OF THE JUSTICE SYSTEM

3 units

Prerequisites: *AJ 010 and 012.*

Structure, jurisdiction and procedures of different courts; functions of various administrative agencies; criminal procedures from apprehension to conviction, including bail, extradition, search and seizure, examination, modes of accusation, appeals and writs. Total of 54 hours lecture.

*Transfer Credit: CSU. *C-ID: AJ 122*

AJ 018 COMMUNITY RELATIONS

3 units

Prerequisite: *AJ 010.*

Survey of the relationships of the criminal justice system and the community; symptomatic aspects of community mistrust, lack of cooperation and misunderstanding. The process of interaction between the criminal justice practitioner and the citizen. Analysis of how relationships are developed, maintained and changed. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: AJ 160*

AJ 019 PRINCIPLES OF INVESTIGATION

3 units

Prerequisites: *AJ 010 and 012.*

Basic principles of all types of investigations utilized in the justice system. Includes human aspects in dealing with the public, specific knowledge necessary for handling crime scenes; interviews, evidence, surveillance, follow-up, technical resources and case preparation. Total of 54 hours lecture.

*Transfer Credit: CSU. *C-ID: AJ 140*

AJ 022 CONCEPTS OF ENFORCEMENT SERVICES

3 units

Prerequisite: *AJ 012.*

Theories, philosophies and concepts related to the role expectations of the enforcement officer. Emphasis on patrol, and public service responsibilities and their relationship to the administration of justice system. Total of 54 hours lecture.

Transfer Credit: CSU

AJ 122 FIELD PRACTICE IN ADMINISTRATION OF JUSTICE

2 units

Prerequisite: *AJ 012 and maintain enrollment in 7 units or more including field practice.*

Supervised field experience or employment in Administration of Justice, on-the-job training with local criminal justice agency. Student must meet all requirements of participating agency. **Pass/no pass** grading. Total of 180 hours laboratory.

**Course Identification Numbering System (C-ID)*

AJ 128 USE OF FORCE

1 unit

Prerequisite: AJ 010.

Methods required for the use-of-force in the law enforcement field. Preparation for taking law enforcement self-defense test. Protection against persons armed with dangerous and deadly weapons. Demonstration and drill in limited number of "holds" and "come alongs". Restraint of prisoners and mentally ill persons. Use of baton and application of self-defense kicks and handcuffing techniques. Total of 27 hours lecture and 27 hours laboratory.

AJ 130 FIREARMS

1 unit

Prerequisite: AJ 014.

Moral aspects, legal provisions, safety precautions and restrictions covering use of firearms; firing of sidearms and shotguns; related first aid. Total of 9 hours lecture and 27 hours laboratory.

AJ 185 HOMELAND SECURITY

3 units

Prerequisites: AJ 010 and AJ 012.

History, ideology and tactics used by foreign and domestic terrorist organizations. The United States' response to the terrorist threat, countermeasures to prevent or mitigate and recover from acts of terrorism. Case studies of previous terrorist attacks; a working knowledge of weapons of mass destruction; a study of the religious, social and political paradigms which motivate global terrorism and the impact on American law enforcement. Total of 54 hours lecture.

AJ 190 INTRODUCTION TO FORENSICS

3 units

Prerequisites: AJ 010 and AJ 012.

Basic concepts and overview of the Forensic Science field. Topics include terminology, crime scene processing protocols and techniques, types of evidence, lab techniques available for the recovery of fingerprints, fingerprint identification, an overview of criminalistics, and of specializations within the discipline. **Required** instructional trips. Total of 54 hours lecture.

AMERICAN INSTITUTIONS

(Social Sciences Division)

AMER 125 AMERICAN INSTITUTIONS

3 units

Constitution of United States; American history, including American institutions and ideals; principles of state and local government established under California constitution; present-day applications and interpretation. **No credit** if taken after Amer 005 or Pols 001. Total of 54 hours lecture.

AMERICAN SIGN LANGUAGE

(Languages Division)

ASL 001 ELEMENTARY AMERICAN SIGN LANGUAGE

4 units

Basic study of American Sign Language as used by Deaf individuals; development of receptive and expressive skills. Introduction to Deaf culture. **Maximum credit** for ASL 010A and ASL 001 is 4 units. Total of 72 hours lecture. *Transfer Credit: CSU; UC*

ASL 002 ELEMENTARY AMERICAN SIGN LANGUAGE

4 units

Prerequisite: ASL 001.

Continuation of American Sign Language with an emphasis on receptive and expressive skills, signing parameters, spatial locations, classifiers, and lexicalized fingerspelling; vocabulary acquisition with practice; Deaf culture and customs. **Maximum credit** for ASL 010B and ASL 002 is 4 units. Total of 72 hours lecture. *Transfer Credit: CSU; UC*

ASL 010A-D AMERICAN SIGN LANGUAGE

12 units

Prerequisite: ASL 010B-D each requires the preceding course in this sequence.

A basic study of American Sign Language as used by deaf individuals; development of receptive and expressive skills. Each course 3 units, and a total of 72 hours lecture. *Transfer Credit: CSU; UC*

ASL 109 FINGERSPELLING

1 unit

Principles of fingerspelling. Emphasis on receptive and expressive skills, including the proper handshape, clarity, speed, smoothness and correct English spelling. Total of 18 hours lecture.

ASL 110 METHODS OF COMMUNICATION — HEARING IMPAIRED

3 units

Methods of communication with the K-12 hearing impaired student and the application of these methods for the paraprofessional working in the classroom setting. Total of 54 hours lecture.

ANATOMY

(Natural Sciences Division)

ANAT 025 HUMAN ANATOMY

4 units

Recommended Preparation: Completion of any college-level (1-99) course in the Natural Sciences.

Study of structural organization of the human body from cellular to organ system level of organization. Gross and microscopic anatomy of the integumentary, skeletal, muscular, nervous, sensory, endocrine, cardiovascular, lymphatic, respiratory, digestive, excretory, and reproductive systems of the human body. Total of 36 hours lecture and 108 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: BIOL 110B.*

ANAT 110 DISSECTION ANATOMY

2 units

Prerequisite: ANAT 025.

Study of gross anatomy by dissection of a human cadaver with emphasis on musculature and neurovascular supply of extremities and organs of the thoracic and abdominal cavities. Total of 18 hours lecture and 54 hours laboratory.

ANAT 115 HEAD AND NECK ANATOMY, HISTOLOGY AND EMBRYOLOGY

3 units

Prerequisites: ANAT 025 *and* PYSO 001 *or* PYSO 002A *and* PYSO 002B *and* enrollment in Dental Hygiene program.

Anatomy, histology and embryology of the head and neck with emphasis on the structures of the oral cavity. Total of 36 hours lecture and 54 hours laboratory.

ANESTHESIA TECHNOLOGY

(Health Sciences Division)

AT 110 PROFESSIONAL ASPECTS OF ANESTHESIA TECHNOLOGY

2 units

Corequisite: AT 111.

Enrollment Limitation: Enrollment in the Anesthesia Technology Program.

Introduction to Anesthesiology's contribution to quality patient care and the relationship of the Anesthesia Technologist to other Healthcare professionals. Focus is on patient safety, universal precautions, and student safety in the Healthcare environment. Total of 36 hours lecture.

AT 111 BASIC PRINCIPLES OF ANESTHESIA TECHNOLOGY

3 units

Corequisite: AT 110.

Enrollment Limitation: Enrollment in the Anesthesia Technology Program.

Introduction to the theory and concepts of functioning in a surgical environment including a fundamental under-

standing of a variety of anesthesia equipment and basic case set-up utilizing anesthesia supplies and equipment. Total of 54 hours lecture.

AT 112 ADVANCED PRINCIPLES OF ANESTHESIA TECHNOLOGY

3 units

Prerequisite: AT 111.

Corequisites: AT 113, 114, 116.

Enrollment Limitation: Enrollment in the Anesthesia Technology Program.

Introduction to the theory and concepts of the use and function of anesthesia supplies and equipment used for various surgical procedures to include cases in: General, regional, and conscious sedation. Total of 54 hours lecture.

AT 113 ANESTHESIA PHARMACOLOGY

3 units

Prerequisites: AT 110 *and* 111.

Corequisites: AT 112, 114, 116.

Enrollment Limitation: Enrollment in the Anesthesia Technology Program.

Introduction to the theory and concepts in the proper use and safe practice of delivery and storage of anesthesia medications which includes: Stocking of the drug cart and assisting anesthesia care provider in the preparation of medications. Total of 54 hours lecture.

AT 114 BASIC ANESTHESIA EQUIPMENT-THEORY AND LAB

3 units

Prerequisite: AT 111.

Corequisites: AT 112, 113, 116.

Enrollment Limitation: Enrollment in the Anesthesia Technology Program.

Introduction to the theories and concepts in the adequate function of anesthesia equipment to include, maintaining equipment, repairing defects and trouble-shooting complications. Total of 54 hours lecture.

AT 115 ADVANCED ANESTHESIA EQUIPMENT-THEORY AND LAB

3 units

Prerequisite: AT 114.

Corequisites: AT 117, 118.

Enrollment Limitation: Enrollment in the Anesthesia Technology Program.

Introduction to the theory and concepts of advanced anesthesia equipment used in cardiac, neurological, and trauma anesthesia. Total of 54 hours lecture.

*Course Identification Numbering System (C-ID)

AT 116 ANESTHESIA TECHNOLOGY CLINICAL EXPERIENCE I

5 units

Prerequisite: AT 111.

Corequisites: AT 112, 113, 114.

Enrollment Limitation: *Enrollment in the Anesthesia Technology Program.*

Introduction to the theory and concepts of clinical practice in Obstetrical, Pediatric, and Outpatient anesthesia to include: General, regional and conscious sedation techniques. Total of 270 hours laboratory.

AT 117 ANESTHESIA TECHNOLOGY CLINICAL EXPERIENCE II

5 units

Prerequisite: AT 116.

Corequisites: AT 115, 118.

Enrollment Limitation: *Enrollment in the Anesthesia Technology Program.*

Introduction to the theory and concepts of advanced clinical practice skills. Students operate independently as anesthesia technologists in all aspects of patient care including: preoperative, intraoperative, and postoperative surgical phases. Total of 270 hours laboratory.

AT 118 ANESTHESIA TECHNOLOGY CASE STUDY AND PROGRAM REVIEW

3 units

Prerequisite: AT 116.

Corequisites: AT 115 and, 117.

Enrollment Limitation: *Enrollment in the Anesthesia Technology Program.*

Capstone course utilizing theory and concepts of the clinical practicum for demonstrating safe and effective anesthesia care for all surgical patients to include: preoperative, intraoperative, and postoperative management. Total of 54 hours lecture.

ANTHROPOLOGY

(Social Sciences Division)

ANTH 001 PHYSICAL ANTHROPOLOGY

3 units

Explore the field of physical anthropology, emphasizing the evolution of the human species. Topics include human heredity, mechanisms of human change, human variation, and the reconstruction of human evolutionary history through examination of the fossil record and

comparative studies of our closest biological relatives, the living apes. **No credit** if taken after Anth 001H. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ANTH 110*

ANTH 001H HONORS PHYSICAL ANTHROPOLOGY

3 units

Enrollment Limitation: *Acceptance into the Honors program.*

Explore the field of physical anthropology, emphasizing the evolution of the human species. Topics include human heredity, mechanisms of human change, human variation, and the reconstruction of human evolutionary history through examination of the fossil record and comparative studies of our closest biological relatives, the living apes. This enriched course is designed for the Honors Program allowing more student-directed discussions and more extensive writing assignments. **No credit** if taken after Anth 001. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ANTH 110*

ANTH 001L LABORATORY IN PHYSICAL ANTHROPOLOGY

1 unit

Prerequisite: *Enrollment in or completion of ANTH 001.*

Laboratory to explore selected topics in physical anthropology including genetics human variation, the living primates, and human paleontology. Total of 54 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: ANTH 115L*

ANTH 002 CULTURAL ANTHROPOLOGY

3 units

Origin, development and extensiveness of socio-economic groups such as tribe, clan and family; religious phenomena such as ritual, belief and worship; language phenomena and thought processes. **No credit** if taken after ANTH 002H. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ANTH 120*

ANTH 002H HONORS CULTURAL ANTHROPOLOGY

3 units

Enrollment Limitation: *Acceptance into the Honors program.*

Origin, development and extensiveness of socio-economic groups such as tribe, clan and family; religious phenomena such as ritual, belief and worship; language phenomena and thought processes. This enriched course is designed for the Honors Program allowing more student-directed discussions and more extensive writing assignments. **No credit** if taken after ANTH 002. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ANTH 120*

*Course Identification Numbering System (C-ID)

ANTH 003 INTRODUCTION TO ARCHAEOLOGY

3 units

Methods, theories and practices of archaeology. An exploratory survey of how archaeologists discover, describe, interpret, and explain the past through the analysis of material remains left by ancient peoples. Topics include the history and interdisciplinary nature of archaeology; field methods, analytical practices, and dating techniques; categories of archaeological evidence; professional ethics; and selected cultural sequences and archaeology site examples. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ANTH 150*

ANTH 004 ANTHROPOLOGY OF RELIGION, MAGIC, WITCHCRAFT

3 units

An introduction to anthropology through analysis of the origins and development of supernatural beliefs from pre-historic people to contemporary societies using archaeological examples, cross-cultural ethnographic studies. Total of 54 hours lecture.

Transfer Credit: CSU; UC

ANTH 005 INTRODUCTION TO LINGUISTIC ANTHROPOLOGY

3 units

Overview of human languages, their unique nature, characteristics, the varied social and cultural uses of language, the ways culture and communication mutually influence each other, including language socialization, social variation in language use and cross cultural communication. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ANTH 130*

ANTH 006 ORIGINS OF CIVILIZATION

3 units

Introduction to the origins and development of human culture, from the beginning of tool use to the rise of civilization and the origins of the modern state. An archaeological exploration of some of the most prominent ancient sites and civilizations from both the Old and New Worlds. Topics include early tool use, the domestication of plants and animals, the emergence of metallurgy, advent of writing, early village life, and rise of complex social and political systems (civilizations). Total of 54 hours lecture.

Transfer Credit: CSU; UC

ANTH 007 ARCHAEOLOGICAL ARTIFACT ANALYSIS

3 units

Recommended Preparation: Enrollment in or completion of ANTH 003.

An introduction to the concepts and techniques used by archaeologists to examine varied types of archaeological

materials. Basic instruction in artifact handling, identification, classification, cataloging, analysis, and curation. Total of 45 hours lecture and 27 hours laboratory.

Transfer Credit: CSU; UC credit under review.

ANTH 009 GENDER, SEX AND CULTURE

3 units

Explores the anthropology of sex and gender including the relationship between biology and culture in human evolution, archaeological evidence of gender distinctions in pre-history, cross-cultural constructions of masculinity, femininity, and sexuality, variations in sexual division of labor and economic stratification, gender differences in religion and family, and the impact of gender issues in the contemporary global culture. Total of 54 hours lecture.

Transfer Credit: CSU; UC credit under review.

ANTH 012 AMERICAN INDIAN CULTURES

3 units

Introduction to the societies and cultures of Native North America, their beliefs and behaviors. Topics include social organization, marriage and kinship, subsistence strategies, political organization and cultural change. Total of 54 hours lecture.

Transfer Credit: CSU; UC

ANTH 020 INDEPENDENT STUDY

1 unit

Prerequisite: ANTH 001 or ANTH 002.

Individual research project; emphasis on field work or on library research techniques; written reports. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

ANTH 030A-I ANTHROPOLOGICAL FIELD STUDIES

2 units

Prerequisite: Enrollment in or completion of ANTH 001, 002, 003 or 004.

Field investigation of the regional cultures and cultural artifacts in selected areas of the world. **Required** instructional trips (an average of two hours each week). **Each** course 2 units; total of 18 hours lecture, 54 hours laboratory.

Transfer Credit: CSU

- ANTH 030A MESA VERDE, COLORADO
- ANTH 030B RIO GRANDE PUEBLOS, NEW MEXICO
- ANTH 030C CALIFORNIA
- ANTH 030D ROCKY MOUNTAINS
- ANTH 030E ENGLAND
- ANTH 030F ITALY
- ANTH 030G SOUTHERN CALIFORNIA
- ANTH 030H APPLICATIONS OF ARCHEOLOGICAL
FIELD WORK
- ANTH 030I BAJA CALIFORNIA

*Course Identification Numbering System (C-ID)

ANTH 031 MEXICAN AND CHICANO CULTURE

3 units

Analysis of Mexican-American culture and society; religion, political interests, economy, customs, institutions; cultural adaptation of the Mexican-American to the dominant culture. Total of 54 hours lecture.

Transfer Credit: CSU; UC

ANTH 110 SKILLS FOR COLLEGE SUCCESS IN ANTHROPOLOGY

1 unit

Development of essential study techniques for success in anthropology courses; orientation to applications of computer-based technology in anthropology; time management; textbook mastery, lecture outlining, test taking, and critical analysis. Total of 18 hours lecture.

ARABIC

(Languages Division)

ARBC 001 ELEMENTARY ARABIC

5 units

Pronunciation and grammar, practical vocabulary, useful phrases; reading, writing and speaking. Introduction to geography, customs and culture of Arabic-speaking people. Corresponds to first year of high school Arabic. Total of 90 hours lecture.

Transfer Credit: CSU; UC

ARBC 002 ELEMENTARY ARABIC

5 units

Prerequisite: ARBC 001, or the first year of high school Arabic, or placement based on the foreign language assessment process.

Grammar, oral training, written composition and reading of elementary Arabic texts; customs and culture. Total of 90 hours lecture.

Transfer Credit: CSU; UC

ARCHITECTURE

(Visual Arts and Media Studies Division)

ARCH 010A ARCHITECTURAL DESIGN FUNDAMENTALS

3 units

Corequisite: ARCH 012A.

Recommended preparation: Enrollment in or completion of ARCH 011.

Introduction to formal visual principles through design exercises. Emphasis on developing creativity and effectiveness in communicating a comprehensive design concept.

Analysis of the built environment focusing on the interaction between art and architecture and their environment. Application of investigation techniques and ideas to the analysis of built form focusing on the connection between built form and its meaning. Execution of projects using a variety of communication skills including: traditional drawing, model making, computer illustration and digital imaging. **Required** field trips. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

ARCH 010B DESIGN FUNDAMENTALS

3 units

Prerequisites: All of the following: ARCH 010A, ARCH 011, ARCH 012A.

Corequisite: ARCH 012B.

Application of three-dimensional design principles to the execution of simple architectural projects. Emphasis on developing a structured architectural design process that will lead to solutions that are firmly based on concepts. Field trips for active research and exploration of project sites. Study and application of abstract architectural theories of three-dimensional form, space, order, program and site in design projects. **Required** field trips. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

ARCH 011 INTRODUCTION TO ARCHITECTURE

2 units

An exploration of architectural education and the design professions through topics such as design, drawing, contemporary philosophies of design, and theory. A study of the past, present, and future of the architectural profession and an examination of various related design professions including landscape architecture, interior design, industrial design, city planning, and urban design. Survey of the various roles these designers play in effecting the built environment as individuals and how they interrelate as a design team. Observation of significant architectural examples will present architecture as a unified expression of an architect's dream. **Required** field trips. Total of 36 hours lecture.

Transfer Credit: CSU; UC

ARCH 012A VISUAL COMMUNICATIONS I

3 units

Corequisite: ARCH 010A.

Recommended Preparation: Enrollment in or completion of ARCH 011.

Development of two- and three-dimensional drawing concepts, principles and techniques using mechanical and digital methods. Critically examine an iconic work of architecture through hand drawn orthographic parallel and perspective drawings as well as state of the art two-dimensional CAD drawing and three-dimensional digital modeling

and rendering. Study of presentation types and how they can be utilized to communicate architectural ideas using state of the art digital imaging/illustration/composition software. Development of skill sets required in corresponding design studio courses. **Required** field trips. Total of 18 hours lecture and 108 hours laboratory.

Transfer Credit: CSU; UC

ARCH 012B VISUAL COMMUNICATIONS II

3 units

Prerequisite: ARCH 010A and 012A.

Corequisite: ARCH 010B.

Development of advanced digital communications representation techniques using state of the art computer software including: two-dimensional drawing, three-dimensional digital model building, digital rendering and digital imaging/illustration/composition. A critical examination of iconic architecture using conceptual and analytical three-dimensional diagramming of architectural systems, concepts and theory. Development of skill sets required in design studio courses. **Required** field trips. Total of 18 hours lecture and 108 hours laboratory.

Transfer Credit: CSU; UC

ARCH 013 ARCHITECTURAL PORTFOLIO PREPARATION

3 units

Prerequisites: ARCH 010B and 012B.

A study of advanced individual student architectural design projects for portfolio preparation. Development of individual student portfolios which emphasize student accomplishments, instructional objectives and unique portfolio content required by different accredited schools of architecture. Subsequent portfolio development for interviews in industry. Exploration and analysis of portfolio presentation principles and techniques. Development of digital portfolios using computer illustration, photo imaging and page layout programs. Evaluation of printing and binding techniques. **Maximum credit** for ARCH 013 and ARCH 100 is 3 units. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

ARCH 014 MATERIALS AND PROCESSES OF CONSTRUCTION

2 units

Recommended preparation: Enrollment in or completion of ARCH 020A.

Hands on exploration of materials and methods of construction, properties, assembly and fabrication of basic construction materials as they relate to building design. Examination of historic and contemporary architecture focusing on building materials and structural systems as they relate to design concepts. Review of the basic types

of governmental regulatory constraints that architects must understand to design a building. Analysis of the basic structural forces that operate on buildings. In depth examination of the sequential processes of construction of a building. **Required** field trips. Total of 18 hours lecture and 54 hours laboratory.

Transfer Credit: CSU

ARCH 020A ARCHITECTURAL DESIGN

6 units

Prerequisites: ARCH 010B and ARCH 012B.

Recommended Preparation: Enrollment in or completion of ARCH 014.

Exploration and development of concepts through architectural issues such as site, circulation, program, building structure and enclosure. Critical examination of architectural issues and ideas discussed in the context of student projects in the design studio. Application of critical structural and building material knowledge to architectural design projects. **Required** field trips. Total of 54 hours lecture and 162 hours laboratory.

Transfer Credit: CSU; UC

ARCH 020B ARCHITECTURAL DESIGN

6 units

Prerequisites: ARCH 014 and ARCH 020A.

Development of principles and processes of architecture through more complex architectural design projects. Exploration of complex programmatic relationships through concepts. Comparative analysis of a broad range of architectural building types as they relate to student design projects. Examination of sustainability and environmental issues of climate and lighting and how these issues can be addressed as integral components of an architectural design solution. Field trips for active exploration of project sites. **Required** field trips. Total of 54 hours lecture and 162 hours laboratory.

Transfer Credit: CSU; UC

ARCH 022A ARCHITECTURAL PRACTICE

5 units

Architectural drafting conventions. Relationship of drawings and their functions, schedules and related detail drawings. Preparation of working drawings for a wood frame building involving light framing and heavy timber construction. Total of 54 hours lecture and 108 hours laboratory.

Transfer Credit: CSU

ARCH 022B ARCHITECTURAL PRACTICE

5 units

Prerequisite: ARCH 022A.

Continuation of architectural drafting involving more complex structural systems and materials. Preparation of

working drawings for a structure involving steel reinforced concrete and unit masonry materials. Emphasis is on detailing. Total of 54 hours lecture and 108 hours laboratory.
Transfer Credit: CSU

ARCH 024A HISTORY OF ARCHITECTURE

3 units

Development of architecture from Prehistory, through ancient Egypt, ancient Greece and ancient Rome to the end of the Medieval period. Development of ancient, traditional or indigenous architecture of India, Islam, China, Japan, Africa, and the Americas. Influence of geography, religion and socio-economic factors on architecture. Total of 54 hours lecture.

Transfer Credit: CSU; UC

ARCH 024B HISTORY OF ARCHITECTURE

3 units

Basis and development of modern architecture from the Renaissance to the present day. Influence of technological, ecological, environmental, and socio-economic factors on architecture. Trends in contemporary architecture and environmental design. Total of 54 hours lecture.

Transfer Credit: CSU; UC

ARMENIAN

(Languages Division)

ARMN 001 ELEMENTARY ARMENIAN

5 units

Pronunciation, reading, speaking and writing; customs and culture. Corresponds to first year of high school Armenian. Total of 90 hours lecture.

Transfer Credit: CSU; UC

ARMN 002 ELEMENTARY ARMENIAN

5 units

Prerequisite: ARMN 001, or the first year of high school Armenian, or placement based on the foreign language assessment process.

Continuation of grammar essentials; practice in reading, speaking and writing Armenian; customs and culture. Total of 90 hours lecture.

Transfer Credit: CSU; UC

ART

(Visual Arts and Media Studies Division)

Art courses are frequently required, regardless of transferability, in order to develop an acceptable portfolio neces-

sary for admission to selective four-year college art programs.

ART 001A HISTORY OF WESTERN ART - PREHISTORIC THROUGH MEDIEVAL

3 units

Survey of the history of architecture, sculpture, painting and the minor arts representative of prehistoric, ancient, classical and medieval periods of Western civilizations. Total of 54 hours lecture.

Transfer Credit: CSU; UC

ART 001B HISTORY OF WESTERN ART

3 units

Survey of the history of architecture, sculpture, painting and the minor arts from Renaissance to present day in Western civilizations. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ARTH 120*

ART 001C ARTS OF AFRICA, OCEANIA, AND INDIGENOUS NORTH AMERICA

3 units

Survey of art, architecture, and visual culture within select regions in Africa, Oceania, and indigenous North America. Total of 54 hours lecture.

Transfer Credit: CSU; UC credit under review.

ART 003A HISTORY OF ASIAN ART

3 units

Architecture, sculpture, painting and minor arts of India and Southeast Asia; includes religious and philosophical influences on art forms. Total of 54 hours lecture.

Transfer Credit: CSU; UC

ART 003B HISTORY OF ASIAN ART

3 units

Architecture, sculpture, painting and the minor arts of China, Korea and Japan; includes religious and philosophical influences on art forms. Total of 54 hours lecture.

Transfer Credit: CSU; UC

ART 004A HISTORY OF ANCIENT ART IN THE WEST

3 units

A survey of the history of Western and Ancient Near Eastern architecture, sculpture, painting and the minor arts from prehistoric times through the fifth century A.D. Includes prehistoric, Mesopotamian, Egyptian, Aegean, Greek, Hellenistic and Roman art. Total of 54 hours lecture.

Transfer Credit: CSU; UC

ART 004B HISTORY OF EUROPEAN MEDIEVAL ART

3 units

A survey of the history of architecture, sculpture, painting and the minor arts from the fifth century A.D. through the

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13th century A.D. Includes Early Christian, Byzantine, Islamic, Carolingian, Ottonian, Romanesque and Gothic art. Total of 54 hours lecture.
Transfer Credit: CSU; UC

ART 004C HISTORY OF EUROPEAN RENAISSANCE AND BAROQUE ART

3 units

A survey of the history of architecture, sculpture, painting and the minor arts in Western Europe from the 13th century through the early 18th century. Total of 54 hours lecture.

Transfer Credit: CSU; UC

ART 004D HISTORY OF MODERN ART

3 units

Recommended Preparation: *Enrollment in or completion of ENGL 001A.*

A survey of the history of modern art that provides an overview of art and architecture from the late 18th century through the 19th and 20th centuries. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ARTH 150*

ART 005 ART FUNDAMENTALS

3 units

A general art appreciation survey that offers a broad introduction to works of art through the study of theory, terminology, themes, design principles, media and the history of the visual arts across time and diverse cultures. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ARTH 100*

ART 006 ART MEDIA FOR EARLY CHILDHOOD EDUCATION

3 units

Art media techniques and theory for the creative development of the young child; applicable to the preschool and elementary school settings. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

ART 007 PRE-COLUMBIAN ART

3 units

A survey of the major monuments of sculpture, architecture, painting and the minor arts of Mesoamerica and the Andean region of western South America from ca. 2000 B.C. until the Conquest. Total of 54 hours lecture.

Transfer Credit: CSU; UC

ART 008 HISTORY OF MEXICAN AND CHICANO ART

3 units

A survey of Mexican art from its beginning to the present. Includes pre-Columbian, colonial and modern art in Mexico as well as contemporary Mexican-American expression. Total of 54 hours lecture.

Transfer Credit: CSU; UC

ART 009 HISTORY OF ISLAMIC ART

3 units

A survey of the history of art and architecture of the Islamic world from its beginnings in the seventh century through the eighteenth century. Total of 54 hours lecture.

Transfer Credit: CSU; UC

ART 011A FOUNDATION DRAWING

3 units

Introduction to principles, elements, and practices of drawing, employing a wide range of subject matter and drawing media. Focus on perceptually based drawing, observational skills, technical abilities, and creative responses to materials and subject matter. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: ARTS 110*

ART 011B INTERMEDIATE DRAWING

3 units

Prerequisite: *ART 011A.*

Exploration of artistic concepts, styles, and creative expression related to intermediate level drawing, focusing on complex subject matter and concepts using a variety of drawing mediums, techniques, and methodologies. Students will build on fundamental drawing skills to develop personalized approaches to content and materials in exercises covering multiple historical and contemporary approaches to drawing. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: ARTS 205*

ART 011C PORTFOLIO DEVELOPMENT OF DRAWING

3 units

Prerequisite: *ART 011B.*

To develop an advanced portfolio of drawings using techniques and concepts learned for previous art experiences. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU. *C-ID: ARTS 205*

ART 012A BEGINNING LIFE DRAWING

3 units

Prerequisite: *ART 011A or placement based on the art assessment process.*

Drawing the human figure from observation using a wide variety of drawing media and techniques. Descriptive and interpretative approaches to drawing the figure. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: ARTS 200*

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ART 012B LIFE DRAWING**3 units****Prerequisite:** ART 012A.

Continued study in drawing from the human figure from direct observation. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

ART 013 FOUNDATION PRINTMAKING**3 units**

Introduction to the various methods of making two-dimensional art works in multiple printed forms. Making of printing elements for the production of original works on paper or other substrates for the purpose of visual communication and dialogue. Screen-print, monotype, lithograph, intaglio and relief process. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

ART 015 SKETCHING FOR DESIGN**3 units**

Introduction to quick sketching techniques for beginning design and illustration students utilizing a variety of media including pencil, pen, markers and a variety of papers. Emphasis on developing visual communication skills for advertising, graphics, illustration, jewelry, product and interior design. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

ART 016 PERSPECTIVE**3 units**

Beginning elements of one-and/or two-point perspective utilizing the grid and freehand methods. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

ART 018 RENDERING**3 units****Recommended preparation:** ART 015.

Graphic visualization for convincing representation emphasizing contemporary presentation techniques with markers, chalk and pencil. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

ART 020 INDEPENDENT STUDY**2 units**

Prerequisites: Completion of art specialty sequence or enrollment in last course of sequence and permission of department chairperson.

Individual projects in art. Total of 108 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

ART 020A BEGINNING PAINTING**3 units****Prerequisite:** Enrollment in or completion of ART 011A.

Introduction to principles, elements, and practices of painting. Focus on exploration of painting materials, perceptual skills and color theory, paint mixing and technique, as well as creative responses to materials and subject matter. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

ART 020B PAINTING**3 units****Prerequisite:** ART 020A.

Development of experimental and intuitive approaches to still life, landscape, figurative subject matter. Emphasis on abstract theories. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

ART 020C PAINTING**3 units****Prerequisite:** ART 020B.

Exploration of advanced concepts and ideas. Emphasis on composition and color and a variety of materials and techniques. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

ART 021 PAINTING**3 units****Prerequisite:** ART 020C or placement based on the art assessment process.

Experimentation with traditional and contemporary methods of painting. Composition, interpretation and expression using figure, still life and landscape. See department chairperson. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

ART 022A WATERCOLOR PAINTING**3 units****Prerequisite:** Enrollment in or completion of ART 011A or placement based on the art assessment process.

Introduction to the fundamentals of watercolor painting. Emphasis on the basic techniques and principles of painting. See department chairperson. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

ART 022B WATERCOLOR PAINTING**3 units****Prerequisite:** ART 022A.

Advanced techniques and experimental uses of watercolor painting. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

ART 022C WATERCOLOR PAINTING**3 units****Prerequisite:** ART 022B.

Individualized, project-based continued exploration of technical and aesthetic aspects of watercolor painting. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU; UC***ART 023A PRINTMAKING — INTAGLIO AND RELIEF****3 units**

Basic intaglio and relief fine art printing processes. Introduction to wood and linoleum cut, drypoint, etching, and color printing techniques. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU; UC***ART 023B PRINTMAKING — LITHOGRAPHY****3 units**

Basic black and white and color hand lithographic printing from plate and stone. Introduction to direct drawing with dry and liquid materials, transfer, and photo-lithographic techniques. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU; UC***ART 023C PRINTMAKING — MONOTYPE****3 units**

Exploration of printing unique images using a variety of painterly and direct drawing techniques on plexiglass and metal plates. Introduction to stencil, viscosity, texture, and transfer methods. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU; UC***ART 024 PRINTMAKING — SILK SCREEN****3 units**

Basic fine art screen printing incorporating paper stencils, screen filler, drawing fluid, and photographic emulsion. Introduction to edition and monoprinting techniques with an emphasis on color printing. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU; UC***ART 025 BEGINNING SCULPTURE****3 units**

An introduction to materials, methods and techniques with an emphasis on the development of ideas and personal expression. Materials include clay, plaster, cement, wood utilized for both carving and construction, metal, plastics and mixed media including video and other digital technologies. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU; UC***ART 026 SCULPTURE****3 units****Prerequisite:** ART 025.

Expansion of Art 025 with emphasis on discovering the medium that best relates to the student's individual expression. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU; UC***ART 027 SCULPTURE TECHNOLOGY — METAL CASTING AND MOLD MAKING****3 units****Prerequisite:** ART 025.

Sculpture methods and techniques in bronze, aluminum casting and mold making. Work in wax, mixed media for direct casting and drop casting. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU***ART 028 FIGURE SCULPTURE****3 units**

A study and exploration of the basic principles, materials and techniques in dealing with expressive contemporary solutions to figure sculpture. **Recommended** ART 025. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU; UC***ART 031A COLOR AND COMPOSITION — TWO DIMENSIONAL DESIGN****3 units**

Introduction to the concepts, applications, and historical references related to two-dimensional art and composition, including the study of the basic principles and elements of line, shape, texture, value, color and spatial illusion. Development of a visual vocabulary for creative expression through lecture presentations, studio projects, problem solving, and written assignments. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: ARTS 100***ART 031B COLOR THEORY****3 units****Prerequisite:** ART 031A.

A study of the principles, theories, and applications of additive and subtractive color in two dimensions. Topics will include major historical and contemporary color systems, cultural usage, and the perception of color. Explore and apply color theories in the development and application of design elements and principles in two-dimensional compositions. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: ARTS 270***ART 032A DESIGN — THREE DIMENSIONAL****3 units**

Introduction to the concepts, applications, and historical references related to three-dimensional design and

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spatial composition, including the study of the elements and organizing principles of design as they apply to three-dimensional space and form. Development of a visual vocabulary for creative expression through lecture presentations and use of appropriate materials for non-representational three-dimensional studio projects. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: ARTS 101*

ART 033A PRODUCT DESIGN — APPLICATION

3 units

Introduction to the product design profession. Students create hands-on projects with emphasis on innovation, design methodologies, social and environmental issues, consumer trends, sketching and presentation techniques. Completion of the course results in portfolio projects. Overview of the industrial design professions which include product, transportation, environmental and entertainment design. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

ART 033B PRODUCT DESIGN — APPLICATION

3 units

Prerequisite: ART 033A.

Continued study in application of three-dimensional design to industry with emphasis on product development. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

ART 033C PRODUCT DESIGN — APPLICATION

3 units

Prerequisite: ART 033B.

Emphasis on corporate product and graphic planning; development of student portfolio. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

ART 034A CRAFTS - MATERIALS AND PROCESSES

3 units

Introduction to traditional and contemporary concepts and processes in a variety of craft media such as glass, wood, metal, and/or enameling. Emphasis is on design principles in the development of aesthetic forms based on function.

Recommended completion of ART 031A. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU. *C-ID: ARTS 280*

ART 034B CRAFTS - MATERIALS AND PROCESSES

3 units

Prerequisite: ART 034A.

Advanced experiences and research in wood, glass, and metal. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

ART 036A JEWELRY/METAL FABRICATION

3 units

Introduction to a wide range of methods, techniques, and material to create jewelry and small scale artwork and objects. Includes the study of historical and contemporary practices of jewelry-making, small metal casting, and fabrication with a global cultural perspective. Work with aluminum, titanium, copper, brass and silver; creative combination of materials and basic stone setting. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

ART 036B JEWELRY/METAL FABRICATION

3 units

Prerequisite: ART 036A.

Expressive use of metal techniques. Study of hollow jewelry construction using nonferrous metals. Simple faceted stone setting. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

ART 036C JEWELRY CASTING

3 units

Prerequisite: ART 036B.

Creative use of mold casting techniques. Basic and exploratory techniques in jewelry casting using non-ferrous metals and lost wax casting techniques. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

ART 038A CERAMICS

3 units

Introduction to ceramic materials, and processes including basic design principles, creative development, hand-building, throwing, glaze techniques, firing and ceramic terminology. The course covers aesthetics and creative development of clay objects examining historical, contemporary, and personal modes of expression across cultures. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

ART 038B CERAMICS

3 units

Prerequisite: ART 038A.

Expressive use of ceramic techniques. Individual experimentation in clay forms; experience in firing. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

ART 038C CERAMICS

3 units

Prerequisite: ART 038B.

Individual projects integrating the aesthetics of materials and ideas as may be considered in utilitarian and sculptur-

*Course Identification Numbering System (C-ID)

al ware. Total of 36 hours lecture and 72 hours laboratory.
Transfer Credit: CSU; UC

ART 038D CERAMICS

3 units

Prerequisite: ART 038C.

Advanced projects in ceramics, integrating multiple techniques used to produce a cohesive body of work. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

ART 039A HANDBUILT CERAMICS

3 units

Introduction to ceramic materials, and processes including basic design principles, creative development, hand-building, throwing, glaze techniques, firing and ceramic terminology. The course covers aesthetics and creative development of clay objects examining historical, contemporary, and personal modes of expression across cultures. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

ART 039B HANDBUILT CERAMICS

3 units

Prerequisite: ART 039A.

Experimental approaches in the development of handbuilt ceramic forms. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

ART 039C HANDBUILT CERAMICS

3 units

Prerequisite: ART 039B.

Individual projects in handbuilt ceramics focusing on the development of personal aesthetics. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

ART 039D HANDBUILT CERAMICS

3 units

Prerequisite: ART 039C.

Advanced projects in ceramics, integrating multiple hand-building techniques used to produce a cohesive body of work. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

ART 040 INTRODUCTION TO DIGITAL ARTS

3 units

Introduction to the computer as an effective visual communication design, production and presentation tool. Familiarity with current design software, hardware, input, and output devices will be established. Design assignments integrate digital tools, techniques, concept development, and creative design and composition using text and im-

age. Survey of the application options of digital skills to contemporary media, art, and design in visual communications industries. Foundational digital design class for Art, Design, Media Journalism, Photography, and classes requiring presentations. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

ART 041A INTERIOR DESIGN: SPACE PLANNING AND MATERIALS I

3 units

Recommended Preparation: Enrollment in or completion of ART 032A.

An introduction to the design of interior spaces through study of space planning, and an understanding of historical interior styles, materials and furnishings. Emphasis placed on application of principles and elements of design in three-dimensional space, ranging from domestic to small commercial projects. Design communication and visualization skills are developed using hand drawings and model building. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

ART 041B INTERIOR DESIGN: SPACE PLANNING AND MATERIALS II

3 units

Prerequisite: ART 041A.

Recommended Preparation: Enrollment in or completion of DT 008A.

Intermediate course in Interior Design. Emphasis on space planning, and selection, use, and detailing of materials. Design communication and visualization skills are developed using hand drawings and model building. Total of 36 hours lecture and 72 hours of laboratory.

Transfer Credit: CSU

ART 041C INTERIOR DESIGN: SPACE PLANNING AND MATERIALS III

3 units

Prerequisite: ART 041B.

Recommended Preparation: DT 008A.

Emphasis on space planning for commercial and institutional interiors, and the selection, use, and detailing of materials and furniture. Design communication and visualization skills are developed using hand drawings and model building. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

ART 050A INTRODUCTION TO ADVERTISING GRAPHIC DESIGN

3 units

Prerequisite: ART 031A.

Recommended preparation: ART 015, ART 040.

Introduction to the fields of graphic design & advertising. Concept development, the creative design process,

production, and presentation techniques through the development of design projects on various media. Design and production skills including beginning computer software skills. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

ART 050B INTERMEDIATE ADVERTISING/GRAPHIC DESIGN

3 units

Prerequisite: ART 050A.

Recommended preparation: ART 040.

Intermediate studies of the theories and techniques in the fields of graphic design & advertising. Principles of concept and design development are combined with the use of computer design and production tools. Projects are produced for various media like: brochures, magazines, ePubs, posters, corporate ID, branding, advertising, and packaging design. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

ART 050C ADVANCED ADVERTISING/GRAPHIC DESIGN

3 units

Prerequisite: ART 050B.

Advanced studies in the fields of graphic design & advertising and portfolio development. Projects, including a portfolio, are developed for use in seeking employment or application to a university or professional school. Emphasis is on advanced concepts and presentation techniques and the application of visual communication concepts to print and digital media. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

ART 051A TYPOGRAPHY – LETTERING

3 units

Recommended preparation: ART 031A.

Introduction to the fundamentals of typographic lettering through the study of historic and contemporary fonts, calligraphic, and hand-drawn typographic forms and systems. Emphasis is on developing conceptual, design, compositional, and hand drawing skills, in order to gain skill in producing logotypes, fonts and custom typographic lettering to for the needs of graphic design and advertising industries. Students will learn a variety of traditional analogue and contemporary digital techniques and materials. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

ART 051B TYPOGRAPHY – APPLICATION

3 units

Recommended Preparation: ART 031A, ART 051A, ART 050A.

Intermediate studies in the application of typography, and the creation and application of custom logotypes, fonts, and typographic lettering to creative visual communications design projects in the graphic design and advertising industries. Emphasis is on concept development, design, production, and presentation of artwork using both traditional and contemporary digital methods. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

ART 052A INTRODUCTION TO ILLUSTRATION

3 units

Prerequisites: ART 011A.

A study of the common techniques and media used in various illustration fields. Emphasis on problem solving by creating illustrations from specific themes. Projects will apply to the areas of print, entertainment, and galleries.

Recommended ART 031A. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

ART 052B ADVANCED ILLUSTRATION

3 units

Prerequisite: ART 052A.

Recommended Preparation: ART 031A.

Refinement of media and techniques with an emphasis towards developing experimental uses. Emphasis on advanced problem solving by creating illustrations from abstract and personal themes. Projects will serve as portfolio pieces for specific illustration areas. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

ART 056 INTRODUCTION TO DIGITAL PAINTING & DRAWING

3 units

Introduction to fundamental concepts, practices, and theories of digital art production. Topics include integration of traditional design, and compositional principles with contemporary digital tools. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: ARTS 250*

ART 057 MOTION GRAPHICS

3 units

Exploration of experimental and new technological approaches to creating original visual imagery for use in design, fine arts, animation, and interactive media. Introduction to the integration of sound, graphics, video, and text. Exploration of motion design and dynamic storytelling to create movies, animation, and professional

*Course Identification Numbering System (C-ID)

special effects for digital output. Overview of career opportunities. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

ART 060 CREATIVE CODING

3 units

Prerequisite: *ART 056 or ART 040 or PHOT 030 or portfolio of intermediate computer skills with experience in computer graphics or digital video or music.*

Provides a point of departure in the creative potential of computer programming, its use, and cultural implications in the context of art and design. Fundamentals of APIs programming operations (variables, conditionals, iteration, functions, and objects). Exploration of topics such as generative drawing, image processing, 3D graphics, data parsing, computer vision in a variety of design projects and media outputs and fabrications. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

ART 061 CREATIVE CODING FOR MOBILE DEVICES

3 units

Prerequisites: *ART 056 or ART 040 or PHOT 030 or portfolio of intermediate computer skills with experience in computer graphics or digital video or music.*

Provides a point of departure in the creative potential of computer programming for mobile devices. Explores the use, and cultural implications of code in the context of art and design. Fundamentals of APIs programming operations (variables, conditionals, iteration, functions, and objects). Exploration of topics such as generative drawing, image processing, 3D graphics, data parsing, computer vision in a variety of design projects and media outputs and fabrications. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC credit under review.

ART 062 PHYSICAL COMPUTING FOR ART & DESIGN

3 units

Prerequisites: *ART 056 or ART 040 or PHOT 030 or portfolio of intermediate computer skills with experience in computer graphics or digital video or music.*

Explores the creative potentials in the field of physical computing for artists and designers. Explores innovative ways to create installations, interactive products, designs and sculptures that combine electronics, sensors and motors to generate unique experiences. Students will work individually and in teams to wireframe, prototype and produce interactive objects while learning the basic principles of electronics as they apply to art-making. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC credit under review.

ART 063 USER EXPERIENCE DESIGN (UX)

3.5 units

Focuses on the quality of experience a person has when interacting with a specific design. A UX Designer focuses

on the needs and wants of the user, as well as ease-of-use, and designs for the best possible user experience. Covers the design process, documentation, and tools used within the UX field. Topics include user research, information architecture, interaction design, prototyping, and usability testing. Following a design process, students will collaborate to research, critique, and design a project that includes prototyping and user-testing. Total of 54 hours lecture and 36 hours laboratory.

Transfer Credit: CSU; UC credit under review.

ART 064 INTRODUCTION TO INTERACTION DESIGN

3 units

Introduction to human-computer interaction, interface design, and interactive and time-based media for designers. Overview of foundational interaction design concepts such as human factors, perception, cognition, research techniques, and design methods for the design of user experiences & interaction. A survey of interactive products, systems, interfaces and technology (software and hardware), constraints and trajectories for future developments and how these frame Interaction Design and production. Workflow, planning and organization of prototyping in Interaction Design. Recommended knowledge of digital imaging. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

ART 070 PRINCIPLES OF ANIMATION

3 units

Prerequisite: *ART 056 or portfolio of intermediate computer skills with experience in computer graphics or digital video or music.*

Fundamental principles of animation. Study of the basic theory and mechanics of the discipline. Development of simple animation using principles such as squash and stretch, overlap and anticipation. Fundamentals of character design, storyboarding, visual storytelling, and layout. Techniques such as stop-motion, onionskin, follow-through and rotoscoping using industry-standard computer animation applications. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

ART 075 EXHIBITION AND PRESENTATION OF VISUAL ART

3 units

Recommended Preparation: *Previous art-related coursework and demonstrated ability to produce art independently are strongly recommended. Also, satisfactory completion of (or simultaneous enrollment in) English 001A or an equivalent English composition course is recommended.*

Development of individual art practices and preparation for transfer or professional applications through public exhibitions of art. Presentations of exhibitions in the campus art gallery or another site, in consultation with the instructor. Includes writing about art, visual documentation,

professional installation practices and in-class critique. Class meetings may also include field trips or meetings with artists, gallery directors and other art professionals. This course is best suited to students who have already created a body of work that they wish to exhibit. Work in any medium is accepted. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

ART 080 FOUNDATIONS OF INTERACTIVE GAME DESIGN

3 units

Surveys history, technology, narrative, ethics, and design of interactive computer games. Work in teams to develop novel game-design story boards. Exploration of the interplay of narrative, graphics, rule systems, and artificial intelligence in the creation of interactive games. Total of 54 hours lecture and 36 hours laboratory.

Transfer Credit: CSU

ART 081 GAME DESIGN WITH GAME ENGINES

3 units

Prerequisites: *ART 080 or portfolio of intermediate computer skills with experience in computer graphics or digital video or music.*

Provides students with intermediate skills in video game design and development using a 2D and 3D game engine. Students create projects for 2D, 3D and in virtual reality. Utilizing a design sequence that involves brainstorming techniques, team work, game design documents, prototyping and playtesting, students develop a knowledge of project management for an efficient and effective game design workflow. Topics include game rules, balance, complexity, randomness, narrative, player interaction, aesthetics and world building. Course includes basic scripting skills for game development. Course instruction utilizes workshops, lectures, class presentations and readings. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC credit under review.

ART 098 WEB DESIGN AND DEVELOPMENT

3 units

Introduction to the design and creation of websites. Exploration of usability, interface, navigation, and information design as well as creation of dynamic content in websites. Use of HTML, CSS, CMS, and PHP/MySQL to explore simple to complex interactive projects for the Web. Creation of a "real world" website designed in an interdisciplinary team environment. Emphasis on project management and conceptual skills that comprise well-designed websites; an interdisciplinary course. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

ART 106 ART SINCE 1945

3 units

A survey of major developments in 20th century European and American art since the Second World War. Total of 54 hours lecture.

ART 118 ADVANCED RENDERING

3 units

Prerequisite: *ART 018.*

Advanced graphic visualization for convincing representation emphasizing advanced presentation techniques and styles by use of marker, pencil, chalk and gouache. Total of 36 hours lecture and 72 hours laboratory.

ART 135 PORTFOLIO DEVELOPMENT OF JEWELRY AND METAL FABRICATION

3 units

Prerequisite: *ART 036C.*

To develop and advanced portfolio of metalwork and jewelry utilizing metal fabrication, lost wax cast, and setting techniques. Exploring advanced project techniques such as conceptual and design research and planning, safe studio practices, and execution of jewelry. Total of 36 hours lecture and 72 hours laboratory.

ART 145 PORTFOLIO DEVELOPMENT AND CRITIQUE

3 units

Development of individual art practice through production of new original work (in any medium), a written artist's statement, and group discussion of art, texts, professional practices and preparation for transfer. May also include field trips or meetings with visiting art professionals. Students are expected to initiate self-defined projects, to execute them outside of class and to present this work for in-class critique. Previous art-related coursework and demonstrated ability to produce art independently are highly recommended. Total of 36 hours lecture and 72 hours laboratory.

ART 155A SCULPTING

3 units

Prerequisite: *ART 050B or portfolio of intermediate computer skills with experience in computer graphics or digital video or music.*

Recommended Preparation: *ART 032A.*

Introduction to three-dimensional modeling, sculpting, rendering and printing. Using industry-standard tools and methods students will learn to create 3D models and environments. Topics include modeling with polygons, modeling with NURBs surfaces, materials, textures, lighting and rendering. Students will also learn principles of digital sculpting as well as methods to optimizing projects for 2-D and 3-D printing. Total of 36 hours lecture and 72 hours laboratory.

ART 155B 3-D ANIMATION AND SIMULATIONS

3 units

Prerequisite: ART 056 or portfolio of intermediate computer skills with experience in computer graphics or digital video or music.

Recommended Preparation: ART 155A, ART 070, or ART 057.

Introduction to time-based three-dimensional design and dynamic simulations. Animation, motion graphics, and dynamic effects using industry-standard tools and methods. Topics include basic rigging, animation, camera motions, paint effects, procedural animation, and dynamic simulations. Methods for post-production and output to video. Total of 36 hours lecture and 72 hours laboratory.

ART 158 INTERACTIVITY FOR THE INTERNET

3 units

Introduction to the design and creation of interactive multimedia web sites that incorporate animation, graphics, text, and sound using JavaScript and the jQuery Framework. Exploration of interface, navigation, and information design as well as creation of customized interactivity and behaviors in web development and user experience design. Exploration of simple to complex interactive environments for output to the Web. Overview of career opportunities. Total of 36 hours lecture and 72 hours laboratory.

ART 180 DIGITAL MEDIA INCUBATOR

3 units

Prerequisite: Portfolio of intermediate to advanced computer skills with experience in computer graphics and/or digital video, music, computer programming, animation, gaming and media arts.

Identifying, pitching, developing and producing a student-lead, team-based, interdisciplinary digital media project. Exploring strategies for self-production and project promotion. Exposure to mentorship and professional feedback through invited guest critics. Collaborative and professional creative-studio setting. Total of 54 hours lecture and 18 hours laboratory.

ASTRONOMY

(Natural Sciences Division)

ASTR 001 ELEMENTARY ASTRONOMY

4 units

Prerequisites: MATH 131.

Methods of investigation used by astronomers. Positional and practical astronomy, dynamical astronomy and modern astro-physics. Use of instruments, techniques of observation. **Night lab** occasionally substitutes for a lecture period. Total of 54 hours lecture and 36 hours laboratory.
Transfer Credit: CSU; UC credit limitations. See counselor.

ASTR 012 DESCRIPTIVE INTRODUCTION TO ASTRONOMY

3 units

Recommended preparation: MATH 125 or MATH 127B or MATH 128B.

Origin, characteristics and evolution of the solar system, the stars, the galaxies and the universe. **No credit** if taken after GEOL 016 or ASTR 001. Total of 54 hours lecture.
Transfer Credit: CSU; UC credit limitations. See counselor.

ASTR 020 INDEPENDENT STUDY

1 unit

Recommended Preparation: Enrollment in or completion of any college-level (1-99) course in the Natural Sciences.

Enrollment Limitation: Permission of Dean.

Faculty-guided independent study of a topic in Astronomy. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

AUTOMOTIVE TECHNOLOGY

(Engineering and Technology Division)

AUTO 032 AUTOMOTIVE FUNDAMENTALS

4 units

Theories and fundamentals of the automobile's major operating systems including: four-cycle internal combustion engine, ignition, fuel, transmission, driveline, chassis, suspension, brakes, heating and air conditioning. Techniques of measurement, terminology, tools and safety issues related to the automotive trade are discussed and practices. Total of 54 hours lecture and 54 hours laboratory.

Transfer Credit: CSU

AUTO 050 AUTOMOTIVE ELECTRICAL SYSTEMS

3 units

Prerequisite: AUTO 200 and ELTN 130.

Theory, maintenance and operations of basic automotive electrical systems; circuits and lights, electronic devices, starting motors, charging systems, batteries and indicating devices. Preparation for the Automotive Service Excellence (ASE) certification program. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

AUTO 140A VEHICLE MAINTENANCE

4 units

Prerequisites: Enrollment in or completion of ENGL 400 and MATH 402.

This course is intended for the incumbent worker, re-entry personal, and/or persons seeking a career change into the automotive service industry. It is the foundation course in the Maintenance and Light Repair (MLR) Program. Course focuses on developing workplace skills (detailed multi-

point inspection and fluid maintenance) on select vehicle subsystems. Appropriate lab activities are included. Total of 54 hours lecture and 54 hours laboratory.

AUTO 141 ENGINE MECHANICAL MAINTENANCE AND LIGHT REPAIR

2 units

Prerequisite: *AUTO 140A or one year industry experience.*
Intended for the incumbent worker, re-entry personal, and/or persons seeking a career change into the automotive service industry. Part of the Maintenance and Light Repair (MLR) program. Essential engine theory, inspection, diagnosis, service and repair. Engine inspection and measurements with an emphasis on in-vehicle repairs. Total of 27 hours lecture and 27 hours laboratory.

AUTO 144 AUTOMOTIVE CHASSIS MAINTENANCE AND LIGHT REPAIR

4 units

Prerequisite: *AUTO 140A.*
Intended for the incumbent worker, re-entry personal, and/or persons seeking a career change into the automotive service industry. Part of the Maintenance and Light Repair (MLR) program. Essential chassis system theory, inspection, diagnosis, service and repair of the following undercar systems: steering, suspension, alignment, wheels and tires. Total of 54 hours lecture and 54 hours laboratory.

AUTO 145 AUTOMOTIVE BRAKES MAINTENANCE AND LIGHT REPAIR

3 units

Prerequisite: *AUTO 140A.*
Intended for the incumbent worker, re-entry person or person seeking a career change into the automotive service industry. This course is part of the Maintenance and Light Repair (MLR) curriculum. This course is focused on developing workplace skills that will allow a student to competently perform detailed brake inspections and repairs on disc, drum and parking brake systems. Appropriate lab activities are included. Total of 36 hours lecture and 54 hours laboratory.

AUTO 146 AUTOMOTIVE ELECTRICAL SYSTEMS MAINTENANCE AND LIGHT REPAIR

4 units

Prerequisite: *AUTO 140A.*
Intended for the incumbent worker, re-entry personal, and/or persons seeking a career change into the automotive service industry. Part of the Maintenance and Light Repair (MLR) program. Essential electrical and electronic systems theory, including inspection, diagnosis, service and repair of specific electrical systems (battery, starting systems, charging systems, lighting systems, gauges, instrument-panel warning lights and power accessories). Total of 54 hours lecture and 54 hours laboratory.

AUTO 147 AUTOMOTIVE HEATING, VENTILATION AND AIR CONDITIONING MAINTENANCE AND LIGHT REPAIR

2 units

Prerequisite: *AUTO 140A.*
Intended for the incumbent worker, re-entry personal, and/or persons seeking a career change into the automotive service industry. Part of the Maintenance and Light Repair (MLR) program. Essential heating, ventilation, and air conditioning (HVAC) system theory, inspection, maintenance and light repair. Total of 18 hours lecture and 54 hours laboratory.

AUTO 148 ENGINE PERFORMANCE MAINTENANCE AND LIGHT REPAIR

4 units

Prerequisite: *AUTO 140A.*
Intended for the incumbent worker, re-entry person or person seeking a career change into the automotive service industry. Part of the Maintenance and Light Repair (MLR) curriculum. Essential engine management system theory, along with inspection, diagnosis, service and repair of the following systems: Ignition, air and fuel delivery, electronic engine controls, and auxiliary emission controls. Total of 54 hours of lecture and 54 hours laboratory.

AUTO 151 AUTOMOTIVE ELECTRONICS

4 units

Prerequisite: *AUTO 050.*
Theory, operation, and maintenance of microprocessor-based automotive control systems. Electronic fuel injection ignition and carburetion systems. Body computer modules and on-board diagnostic systems. Sensors, instruments, voice-alert systems. Use of digital and analog test equipment and trouble-shooting procedures. Total of 54 hours lecture and 54 hours laboratory.

AUTO 170 WORK EXPERIENCE INTERNSHIP

4 units

Enrollment Limitation: *40 or more units in AUTO courses. DMV license in good standing (no points).*
Supervised unpaid work experience in an established professional Dealership or Independent repair facility. Designed for students accomplishing the All Automotive Systems Certificate to assist in employment transition. Analysis of professional and technical style and performance outcomes. Occupational Work Experience Education: This work experience course of supervised employment is designed to assist students to acquire career awareness, work habits, attitudes and skills related to the student's college major. Credit may be accrued at the rate of 1 to 8 units per semester for a total of 16 units. Additionally, students must work 60 non-paid hours per unit earned. Total of 240 hours field practice.

AUTO 200 AUTOMOTIVE FUNDAMENTALS FOR TECHNICIANS

4 units

Recommended Preparation: *AUTO 032 if no previous experience with vehicles.*

Enrollment Limitation: *Valid DMV license (print out)*

Introductory course intended for automotive majors and individuals with some automotive knowledge or experience. Automobiles will be covered from the service technician's view covering all roles and responsibilities as recommended by BAR, NATEF, and all Federal and State agencies. Theories and fundamentals of the automobile's major operating systems including: internal combustion engine, ignition, fuel, driveline, chassis, suspension, brakes, heating and air conditioning. Lab activities in automotive inspection and maintenance service are included. 36 lecture hours and 108 laboratory hours.

AUTO 215 AUTOMOTIVE AIR CONDITIONING

4 units

Prerequisite: *AUTO 050.*

Air conditioning theory, methods of testing, diagnosing and servicing automotive air conditioners. Introduction to new technologies, safe handling, reclaiming and recycling of refrigerants. Students will have the opportunity to take the United States Clean Air Act MACS Section 609 Refrigerant Recycling and Recovery Certification Program to obtain a refrigerant handler's license. Proof of valid DMV license required if working on vehicles in the Auto Facility. Total of 54 hours lecture and 54 hours laboratory.

AUTO 220 ENGINE OPERATION AND TESTING

5 units

Prerequisite: *AUTO 200.*

Technical lectures and hands on experience related to automobile engine theory of operation and methods of testing. Practice in disassembly measurement and reassembly of various four cycle engines. Testing of running engine assemblies required to evaluate internal operating conditions. Total of 72 hours lecture and 54 hours laboratory.

AUTO 221 ENGINE MACHINING AND REBUILDING

6 units

Prerequisite: *Enrollment in or completion of AUTO 220.*

Technical lectures and hands-on experience related to automobile engine machining and rebuilding. Practice in disassembly, cleaning, inspection, measurement, machining, reassembly and adjustment of automobile engines. Total of 54 hours lecture and 162 hours laboratory.

AUTO 222 MANUAL TRANSMISSION, TRANSAXLE AND DRIVETRAIN

5 units

Prerequisite: *AUTO 200.*

Theory of operation and diagnosis of manual transmissions, transaxles, clutches, differentials, driveshafts, constant velocity joints and drive axles. Laboratory procedures

includes removal, disassembly, inspection, rebuilding, installation and adjustment of manual transmissions and related assemblies. Total of 54 hours lecture and 108 hours laboratory.

AUTO 223 AUTOMATIC TRANSMISSIONS AND TRANSAXLES

5 units

Prerequisite: *AUTO 200 and ELTN 130.*

Theory of operation and service of hydraulic and electronic controlled automatic transmissions/transaxles available in automobiles and light trucks. Laboratory procedures include disassembly, inspection, reassembly of a common hydraulic controlled automatic transmission. Safe and correct use of special service and diagnostic tools is emphasized. Electronic controlled transmission operation, diagnosis, testing of sensors with scan tools and oscilloscope is included. Total of 54 hours lecture and 108 hours laboratory.

AUTO 224 AUTOMOTIVE BRAKE SYSTEMS

5 units

Prerequisite: *AUTO 200 and ELTN 130.*

Enrollment Limitation: *Student must possess a valid driver's license. Student must be able to stand for long periods of time, and also work on cutting equipment at a height of 3 ft. or more while standing. They must lift and manipulate 50 lbs. or more in a safe manner.*

Theory of operation, diagnosis, and repair of ABS systems using ABS scanners. Emphasis is placed on complete brake services including related machine operations. Prepares students for the ASE A5 exam, ASE Student Certification testing is completed in this class. DMV print out showing valid driver's license is required. Total of 54 hours lecture and 108 hours laboratory.

AUTO 225 SUSPENSION AND STEERING

5 units

Prerequisite: *Enrollment in or completion of AUTO 224.*

Theory of operation, diagnosis, service and repair of suspension and steering systems. Wheel alignments including electronic 4-wheel alignments. Tire service, repair and wear diagnosis including wheel balancing. NATEF Tasks are the basis of all lab work and ASE Student Certification Exam is required in course. Total of 54 hours lecture and 108 hours laboratory.

AUTO 226 ENGINE PERFORMANCE

5 units

Prerequisite: *AUTO 220 and AUTO 151.*

Theory and operation of basic automotive fuel and ignition systems. Emission control system theory, operation, diagnosis and testing. Laboratory practice presents engine service and maintenance utilizing primary engine diagnostic tools. Total of 54 hours lecture and 108 hours laboratory.

AUTO 227 ADVANCED ENGINE PERFORMANCE**5 units****Prerequisite:** *Enrollment in or completion of AUTO 226.*

Theory and operation of electronic engine controls and includes: electronic fuel injection, electronic ignitions, on-board diagnostics and current emission systems. Laboratory practice includes proper set up and use of digital storage oscilloscopes, scan tools, engine analyzer, four and five-gas emission analyzers, and dynamometer. Total of 54 hours lecture and 108 hours laboratory.

AUTO 228 HYBRID AND ELECTRIC VEHICLE THEORY, OPERATION AND BASIC SERVICE**4 units****Prerequisite:** *AUTO 227.*

Hybrid and electric vehicles. Theory of operation of high voltage systems, batteries, internal combustion engine, powertrain, and supporting systems. Testing of hybrid and electric vehicle systems utilizing industry standard diagnostic tools. Safety when working with high voltage assemblies, along with proper set-up and operation of diagnostic tools is emphasized. Total of 54 hours lecture and 54 hours laboratory.

BIOLOGY**(Natural Sciences Division)****BIOL 002 ANIMAL BIOLOGY****4 units**

Major zoological principles, both invertebrate and vertebrate. Animal development, form and function, natural history and economic relationship to human society. Total of 54 hours lecture and 54 hours laboratory.

*Transfer Credit: CSU; UC***BIOL 003 HUMAN BIOLOGY****4 units**

Introduction to structures, functions and processes of the human body systems and diseases of those systems; human genetics and human evolution. Includes microscope work, and the study of models, computer applications and case studies. Total of 54 hours lecture and 54 hours laboratory.

*Transfer Credit: CSU; UC credit limitations. See counselor.***BIOL 004 PLANT BIOLOGY****4 units**

Basic botanical principles; plant evolution and diversity, the cell, photosynthesis, respiration, reproduction, heredity, ecology, and importance of plants to humans. Total of 54 hours lecture and 54 hours laboratory.

*Transfer Credit: CSU; UC credit limitations. See counselor.***BIOL 005A TOPICS IN APPLIED BOTANY/URBAN TREE IDENTIFICATION & BIOLOGY****1 unit**

Lecture, laboratory and field investigations focusing on topics of current and general interest in applied botany. Total of 9 hours lecture and 27 hours laboratory.

*Transfer Credit: CSU***BIOL 005B BOTANY FOR SCHOOL GARDENS****1 unit**

Lecture, laboratory and field investigations focusing on topics of current and general interest in applied botany. Total of 9 hours lecture and 27 hours laboratory.

*Transfer Credit: CSU***BIOL 005C TOPICS IN APPLIED BIOLOGY - MEDICINAL PLANTS****1 unit**

Lecture, laboratory and field investigations focusing on topics of current and general interest in applied botany. Total of 9 hours of lecture and 27 hours of laboratory.

*Transfer Credit: CSU***BIOL 010A CELLULAR BIOLOGY, GENETICS AND EVOLUTION****5 units****Prerequisite:** *CHEM 001A.*

Investigates the principles governing cell biology, metabolism, genetics, evolution and history of life on earth. The first course in a 3-course sequence for Biology majors (BIOL 010ABC). **For** majors in biological sciences but open to all qualified students. Total of 54 hours lecture and 108 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: BIOL 190; BIOL SEQ 130S (WITH BIOL 010B)***BIOL 010B THE DIVERSITY OF LIFE ON EARTH: STRUCTURE, FUNCTION AND ECOLOGY****5 units****Prerequisites:** *CHEM 001A and BIOL 010A.*

Explores the diversity of living organisms, the structure and function governing their form and function, and the ecological principles that guide their interactions. Second in a 3-course series for Biology majors (BIOL 010ABC). Total of 54 hours lecture and 108 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: BIOL SEQ 130S (WITH BIOL 010A)***BIOL 010C GENETICS****3 units****Prerequisites:** *CHEM 001A and BIOL 010A.*

Explores the details of genetics, genomic analysis, DNA technology, bioinformatics, stem cell biology, and cancer. The third course in the sequence for Biology majors (BIOL 10ABC). Total of 54 hours lecture.

*Transfer Credit: CSU; UC credit limitations. See counselor.***C-ID: BIOL 130S*

**Course Identification Numbering System (C-ID)*

BIOL 010F BIOLOGICAL RESEARCH METHODS

1 unit

Prerequisite: *Permission of Division Dean.*

This course provides training in discipline specific research methods within the biological sciences. It is intended to prepare students for work on independent projects which will be mentored by a faculty member. Students will learn how to develop a project, collect and record data, conduct and analyze experiments, and communicate their findings.

Recommended successful completion of any Natural Sciences course 001-099. Total of 54 hours laboratory.

Transfer Credit: CSU; UC

BIOL 010L LEADERSHIP IN THE BIOLOGICAL SCIENCES

1 unit

Prerequisite: *Permission of Division Dean.*

Leadership skills and abilities, including communication, collaboration, critical thinking, and resourcefulness. Students will provide supplemental instruction to peers in the biological sciences. **Recommended** successful completion of specific Natural Sciences course (001-099) student will tutor. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

BIOL 010S BIOLOGY SEMINAR

1 unit

Prerequisite: *Permission of Division Dean.*

Readings, discussions, and papers focusing on topics of current and general interest in the sciences. Each special topics course will emphasize critical thinking skill and is intended for the advanced student. This course will give students an opportunity to explore a current intellectual topic in biology with a professor in a seminar setting. **Recommended** successful completion of any Natural Sciences course 001-099. Total of 18 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

BIOL 011 GENERAL BIOLOGY

4 units

Basic concepts of biology; the cell, nutrition, a survey of physiological systems, reproduction, heredity, development, diversity of organisms, evolution and environmental biology. **No credit** if taken after BIOL 001A, 002, 003, 004, 005, 010ABC, or 011H. **For** non-biology majors, but open to all qualified students. Total of 54 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

BIOL 011H HONORS GENERAL BIOLOGY

4 units

Basic concepts of biology, the cell, nutrition, a survey of physiological systems, reproduction, heredity, development, diversity of organisms, evolution and

environmental biology. **No credit** if taken after BIOL 001A, 002, 003, 004, 005, 011 or 010ABC. **For** non-biology majors, but open to all qualified students. Total of 54 hours lecture and 54 hours laboratory.
Transfer Credit: CSU; UC credit limitations. See counselor.

BIOL 014 FIELD BIOLOGY

4 units

Birds, mammals, amphibians, reptiles, trees and shrubs of Southern California. Identification, ecology methods of observing and recording. **Required** instructional trips. Total of 54 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC

BIOL 016 MARINE BIOLOGY

4 units

Marine organisms and their relationship to such environmental factors as temperature, salinity, oxygen, minerals, ocean currents and depth; introduction to measurement of some of these factors. Collection and identification of marine organisms. Laboratory study of preserved specimens. **Required** instructional trips. Total of 54 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

BIOL 020 INDEPENDENT STUDY

1 unit

Recommended Preparation: *Enrollment in or completion of any college level (1-99) course in the Natural Sciences.*

Enrollment Limitation: *Permission of the Dean.*

Independent, faculty-guided student inquiry, project, research, laboratory experiment and/or field investigation. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

BIOL 025 FIELD STUDIES

1 unit

Investigations of biological organisms in their natural habitats with an emphasis on ecological relationships.

Required instructional trips. Total of 54 hours by arrangement. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

Transfer Credit: CSU

BIOL 026 BIOLOGY FIELD STUDIES

2 units

Investigations of animals and plants in their natural habitats with an emphasis on ecological relationships. **Required** instructional trips. Total of 18 hours lecture and 54 hours by arrangement. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

Transfer Credit: CSU

BIOL 028 INTRODUCTION TO BIOINFORMATICS**3 units**

Introduction to the structure and function of proteins and nucleic acids including molecular modeling, sequence alignment, database management. Computer programming with Perl or comparable programming language. Designing and managing biological database using relational database applications. Data gathering and analysis using spreadsheet applications. **Recommended** basic computer skills. Total of 54 hours lecture and 36 hours laboratory.

Transfer Credit: CSU

BIOL 030 FIELD BOTANY**4 units**

Collection, identification and classification of native California flowering plants. Field identification of trees, shrubs and wildflowers common in California plant communities.

Required instructional trips. Total of 54 hours lecture and 54 hours by arrangement. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

Transfer Credit: CSU

BIOL 038 CELL AND MOLECULAR BIOLOGY**4 units**

Prerequisites: CHEM 001A and BIOL 102C and one of the following: BIOL 002, 003, 004, 011 or MICR 002.

Theory of cell structure, types, chemistry and function. Lab procedures for the isolation, purification and analysis of cells, cell fractions and cell molecules, Particular attention given to the methods used in research, commercial and forensic labs. Total of 54 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

BIOL 039 MODERN HUMAN GENETICS**4 units**

An introductory course exploring the theoretical and practical applications of human heredity, genetics and biotechnology. Introduction to cellular and molecular biology, Mendelian and molecular genetics, evolution, human genetics, applications of genetic engineering including biotechnology, forensics and molecular medicine. Total of 54 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC credit limitation. See counselor.

BIOL 071A EXPLORING TOPICS IN BIOLOGY**3 units**

Exploratory course: *Specific topic identified in Schedule of Classes.*

Lecture focusing on topics of current and general interest. Total 54 hours lecture.

Transfer Credit: CSU

BIOL 071B EXPLORING TOPICS IN BIOLOGY**1 unit**

Exploratory course: *Specific topic identified in Schedule of Classes.*

Lecture focusing on topics of current and general interest. Total of 18 hours lecture.

Transfer Credit: CSU

BIOL 071C EXPLORING TOPICS IN BIOLOGY**1 unit**

Exploratory course: *Specific topic identified in Schedule of Classes.*

Lecture focusing on topics of current and general interest. Total of 18 hours lecture and 18 hours laboratory.

Transfer Credit: CSU

BIOL 102A BIOLOGICAL TECHNOLOGY - BASIC TECHNIQUES**3 units**

Prerequisite: BIOL 110.

Introduction to the fundamental skills and competencies necessary for working in a biotechnology laboratory. Basic skills include use and maintenance of standard laboratory equipment, solution and reagent preparation, sterile technique, quality control protocols, basic cloning procedures, production of an industry standard notebook, and laboratory safety. Course is taught in a laboratory setting allowing students to develop workplace competencies. Total of 36 hours lecture and 72 hours laboratory.

BIOL 102B BIOLOGICAL TECHNOLOGY**3 units**

Prerequisite: BIOL 102A.

Advanced skills in applied biological technology. Skills include PAGE electrophoresis techniques, column chromatography, PCR, ELISA, lyophilization, DNA sequencing, and the production of an industry standard laboratory notebook. Internet databases will be used for instruction in bioinformatics. Total of 36 hours lecture and 72 hours laboratory.

BIOL 102C BIOLOGICAL TECHNOLOGY**3 units**

Prerequisite: BIOL 102A.

Advanced skills in applied biological technology. Skills include cell culture techniques for both plant and mammalian cell cultures and the production of an industry standard laboratory notebook. Total of 36 hours lecture and 72 hours laboratory.

BIOL 102D BIOLOGICAL TECHNOLOGY - LABORATORY INTERNSHIP**3 units**

Prerequisite: BIOL 102B or BIOL 102C.

Advanced skills in applied biological technology. Internship in a biochemistry laboratory. **Maximum credit** 12 units, 3 units each semester. Total of 234 hours laboratory.

BIOL 103 BIOETHICS**3 units**

Introduction to basic ethical principles through investigation of ethical issues resulting from scientific research and the development of emerging biotechnologies. Total of 54 hours lecture.

BIOL 104A APPLICATIONS OF FLUORESCENCE MICROSCOPY**2 units****Prerequisite:** *BIOL 102C*.

Introduction to the fundamental principles of fluorescence microscopy. Exploration of specialized methods and practical biological applications of fluorescence detection and imaging using microscopy techniques currently being performed in research laboratories. Total of 18 hours lecture and 54 hours of laboratory.

BIOL 104B MICROBIOLOGICAL APPLICATIONS USED IN BIOTECHNOLOGY**4 units****Prerequisite:** *BIOL 102B and BIOL 102C*.

Overview of the development of the field of molecular biotechnology. Instruction on how utilization of microorganisms and their biological products led to the advent of recombinant DNA technology, molecular cloning, and genetic engineering. Demonstration of various applied molecular microbiological techniques routinely performed in biotechnology laboratories. Total of 54 hours lecture and 72 hours laboratory.

BIOL 104C RESEARCH METHODOLOGY**3 units****Prerequisites:** *BIOL 102B and BIOL 102C and BIOL 038*.

Capstone course integrates the use of a variety of research methodologies taught in existing biotechnology core courses to illustrate the interdisciplinary nature of scientific research. Coursework includes participation in hypothesis-driven research projects focused on the use of various gene regulatory mechanisms, including RNA interference and genome editing, to study the biology and function of mouse embryonic stem cells. Total of 36 hours lecture and 72 hours laboratory.

BIOL 104D COLLABORATIVE RESEARCH EXPERIENCE**3 units****Prerequisites:** *BIOL 102B and BIOL 102C and BIOL 038*.

Opportunity to participate in scientific research projects in collaboration with a local research institute. Practical experience provided with basic research methodologies and strategies used in academic research, specifically in the field of stem cell biology. Total of 36 hours lecture and 72 hours laboratory.

BIOL 110 INTRODUCTION TO BIOTECHNOLOGY**3 units**

Research in the biotechnology industry and in academic research laboratories. Includes lectures on fundamentals of biotechnology combined with laboratory experiences to demonstrate research techniques, allowing an opportunity to explore various career pathways in the field of modern biotechnology. Total of 36 hours lecture and 72 hours laboratory.

BIOL 171A EXPLORING TOPICS IN BIOLOGY**3 units****Exploratory course:** *Specific topic identified in Schedule of Classes.*

Lecture focusing on topics of current and general interest. Total 54 hours lecture.

BIOL 171B EXPLORING TOPICS IN BIOLOGY**1 unit****Exploratory course:** *Specific topic identified in Schedule of Classes.*

Course focuses on topics of current and general interest. Total of 18 hours lecture.

BIOL 171C EXPLORING TOPICS IN BIOLOGY**1 unit****Exploratory course:** *Specific topic identified in Schedule of Classes.*

Lecture focusing on topics of current and general interest. Total of 18 hours lecture and 18 hours laboratory.

BUILDING CONSTRUCTION**(Engineering and Technology Division)****BLDG 122 CONTRACTOR'S LICENSING****3 units**

Rules and regulations of State Contractor's License Board; legal aspects of business. Total of 54 hours lecture.

BLDG 151 CABINET AND MILLWORK FOR MODEL HOME CONSTRUCTION**4 units**

Fabrication and installation of cabinets and millwork (door jambs, doors and moldings) for Model Home Construction projects. Safety instruction with hand and power tools in wood shop and at building site. Tools, processes and materials used in cabinetmaking and millwork. Basic blueprint reading, drawing, estimating and preparation of materials take-off list. Use of measurement, layout tools, laminates and lumber substitutes. Installation of cabinet and door hardware. Trade technical calculations. Related local and Uniform Building Codes and standards. Total of 36 hours lecture and 108 hours laboratory.

**BLDG 152A CABINETMAKING FOR THE STUDENT
BUILT HOME CONSTRUCTION**

4 units

Recommended Preparation: *BLDG 212, BLDG 220.*

Fabrication of cabinets (kitchen, bath and laundry, etc.) for student built home construction project. Safety instruction with hand pneumatic and power tools in shop and at building site. Tools, processes and materials used in cabinet-making. Reading and understanding of working drawings for estimating and preparation of materials take-off. Use of measurement and layout tools, laminates and lumber substitutes. Trade technical calculations and related local and International Building Codes and standards and Title 24. Total of 36 hours lecture and 108 hours laboratory.

**BLDG 152B CABINET INSTALLATION & MILLWORK
FOR HOME CONSTRUCTION**

4 units

Prerequisite: *BLDG 152A.*

Recommended Preparation: *BLDG 212, BLDG 220.*

Installation of cabinets, hardware, interior door jambs, interior doors and mouldings for student built home construction projects. Safety instruction with hand, pneumatic and power tools in shop and at building site. Tools, processes and materials used in cabinet installation and millwork. Reading and understanding of working drawings for estimating and preparation of materials take-off. Use of measurement, layout tools, laminates and lumber substitutes. Trade technical calculations. Related local and International Building Codes and Standards and Title 24. Total of 36 hours lecture and 108 hours laboratory.

**BLDG 210A-B BUILDING CONSTRUCTION
10 units**

Prerequisite: *BLDG 210B requires BLDG 210A.*

Design and building of structures. Safety problems; blueprint reading, laying of foundations, building forms; concrete mixes and estimates of quantities; setting mud sills, girders, floor joists and plates; roughing in complete buildings, laying of bracing and bridging, laying of all rafters from blueprints. **Each course** 5 units, 10 hours. Total of 54 hours lecture and 126 hours laboratory.

**BLDG 212 PRINT READING FOR CONSTRUCTION
3 units**

Review of basic drafting symbols as they appear on prints, analysis of multi-view and isometric drawings. Interpretation of working drawings, specifications and symbols on typical construction documents. Total of 54 hours lecture.

**BLDG 213 BUILDING CONSTRUCTION CODES
AND STANDARDS**

3 units

Codes and standards for building construction and design; fire protection features; shear paneling, steel hard-

ware connections and design for earthquake mitigation; disabled accessibility design; reporting and clearance of asbestos containing materials (ACM); energy conservation. Total of 54 hours lecture.

**BLDG 214 MATERIALS AND PROCESSES OF
CONSTRUCTION: SUB GRADE TO FLOOR
FRAMING**

3 units

Principles of engineering, structural plan reading, site layout, site grading, foundations, concrete construction, pre-stressed concrete, gunite. Disabled access design; earthquake mitigation design, reporting and clearance of asbestos containing materials (ACM) and other hazardous waste; energy conservation design. Total of 54 hours lecture.

**BLDG 215 MATERIALS AND METHODS OF
CONSTRUCTION: FLOOR THROUGH ROOF
FRAMING**

3 units

Properties and erection of structural materials; lumber framing, structural metals, masonry and use of other materials. Insulation and glazing for energy conservation. Hardware and shear paneling for seismic reinforcement. Construction inspector's duties. Total of 54 hours lecture.

**BLDG 218 INSPECTION OF ARCHITECTURAL DETAILS
3 units**

Properties of architectural materials, lumber, roofing, wall finishes, flooring and covering, glass and glazing, finishes. Engineering principles pertaining to heat, acoustics, humidity, roof construction, interior and exterior materials, finish carpentry, hardware and trim. Final inspection procedures. Total of 54 hours lecture.

**BLDG 220 ESTIMATING FOR BUILDING
CONSTRUCTION**

3 units

Prerequisites: *BLDG 212 or BLDG 230A, or BLDG 210A & BLDG 210B.*

Theory of estimating; structure of plans and specifications estimates; quantity surveying; unit cost synthesis and analysis; bid organization and preparation; competitive simulations and exercises; the estimator's qualifications, responsibilities and ethics. Total of 54 hours lecture.

**BLDG 221 ELEMENTS OF GRADING INSPECTION
3 units**

Earth moving operations: Site investigations, soil analysis and soil mechanics. Plan reading; review of soils, engineer's foundation inspection reports. Foundation and steel reinforcement inspection requirements. Hillside construction and inspection requirements. Total of 54 hours lecture.

BLDG 222 PRINCIPLES OF HOUSING AND ZONING REQUIREMENTS

3 units

Purpose and intent of Zoning and Housing regulations. Land use, buildable areas, yards and allowable projections. History of parking requirements. Reading and interpretation of plans. Non-conforming rights, Code enforcement, Criminal Complaint Applications, Administrative Abatement of dangerous building and the appeal process. Total of 54 hours lecture.

BLDG 223 PRINCIPLES OF PLUMBING INSPECTION

3 units

Plan reading and inspection for underground plumbing (water, gas, drains and vents); above-ground plumbing and venting; finished plumbing systems. The Uniform Plumbing Code enforcement process. Total of 54 hours lecture.

BLDG 224 PRINCIPLES OF HEATING AND REFRIGERATION INSPECTIONS

3 units

Plan reading and inspection of heating, air conditioning, refrigeration and ventilation systems. Ducts, conductors, fuel supply, controls, insulation and refrigeration. The Uniform Mechanical Code enforcement process. Total of 54 hours lecture.

BLDG 230A BUILDING CONSTRUCTION

10 units

Introduction of apprentice carpentry and the building construction trade. Safety orientation in the shop and on the job site including safety practices in demolition. Grading, site development and use of builder's level. Orientation to and application of building layout, materials used in construction, estimation of materials, concrete form work, placing of concrete under floor framing, girder and floor joist layout. Trade technical calculations. Introduction of local and Uniform Building Codes, standards and Title 24. **Required** instructional trips. **No credit** if taken after BLDG 210A-B. Total of 90 hours lecture and 270 hours laboratory.

BLDG 230B BUILDING CONSTRUCTION

10 units

Prerequisite: BLDG 230A.

Introduction of residential blueprint reading; construction site work; builder's level and transit application. Construction of foundation and floors. Related safety practices in shop and construction site; material take-off, rough plumbing. Under floor insulation and sub-floor installation. Lay out of exterior and interior walls. Trade technical calculations. Related local and Uniform Building Codes, standards, and Title 24. **Required** instructional trips. Total of 90 hours lecture and 270 hours laboratory.

BLDG 230C BUILDING CONSTRUCTION

10 units

Prerequisite: BLDG 230B.

Introduction to rough framing, roof framing, and stair building. Related safety practices in shop and on construction site. Importance of the measuring tools and their use. Stud, joist, and rafter layout. Roof rafters of equal, unequal or odd sloped roofs; roof sheathing and coverings. Framing to allow for plumbing, electrical, heating, ventilation, and air conditioning (HVAC). Drywall construction. Interior and exterior stair building. Trade technical calculations. Related local and Uniform Building codes, standards and Title 24. **Required** instructional trips. Total of 90 hours lecture and 270 hours laboratory.

BLDG 230D BUILDING CONSTRUCTION

10 units

Prerequisite: BLDG 230C.

Application of interior and exterior finish. Related safety in shop and construction site. Taping and finishing dry wall application. Completion of exterior finish, plumbing fixtures, painting, and ceramic tile. Application of floor covering, cabinet and mill work. Form and place concrete drive. Completion of heating, ventilation, and air conditioning (HVAC). Trade technical calculations. Related local and Uniform Building Codes, standards, and Title 24. **Required** instructional trips. Total of 90 hours lecture and 270 hours laboratory.

BLDG 232A-D ADDITIONS AND REMODELING

40 units

Prerequisite: BLDG 232B-D each requires the satisfactory completion of preceding course in this sequence.

Remodeling carpentry and related mechanical and electrical work. Blueprint reading, permits and codes, materials take-off, carpentry mathematics, foundation work, rough framing, heavy timber, exterior and interior finish, hardware, hand and power tools, safety and security. **Each course** 10 units, 20 hours. Total of 90 hours lecture and 270 hours laboratory.

BUSINESS (GENERAL)

(Business Division)

BUS 002 PERSONAL FINANCE

3 units

Consumer and family money management: maintaining financial records and budgets; purchasing housing, automobiles and other consumer goods; managing credit; buying insurance; planning and managing investments. Total of 54 hours lecture.

Transfer Credit: CSU

BUS 003 PERSONAL LAW**3 units**

Introduction to the principles that relate to rights and responsibilities under the law. Covers law dealing with crimes, torts, contracts, motor vehicles, employment, sales, insurance and family matters. Total of 54 hours lecture.

Transfer Credit: CSU

BUS 009 INTRODUCTION TO BUSINESS**3 units**

Survey of U.S. business stressing fundamental concepts in the areas of entrepreneurship, marketing, advertising, decision making, ethics, finance, human resources, global business, legal and regulatory issues, technology, and business policies and practice. Total of 54 hours lecture.

Transfer Credit: CSU; UC

BUS 010 INTRODUCTION TO MANAGEMENT**3 units**

Concepts and theories of management with a focus on the managerial functions: planning, organizing, directing and controlling. Total of 54 hours lecture.

Transfer Credit: CSU

BUS 011A BUSINESS COMMUNICATIONS**3 units**

Prerequisite: ENGL 001A.

Principles of effective business writing and oral communication skills. Develop writing skills for goodwill, negative news, persuasive, and employment messages, report writing and creating documents using Web sources. Prepare business presentations and practice professionalism at work. Total of 54 hours lecture.

*Transfer Credit: CSU. *C-ID: BUS 115*

BUS 012A BUSINESS LAW**3 units**

Development and functions of common law. Definitions and classification of law, court systems and procedures. Law of torts: intentional torts, negligence, defenses, strict liability. Law of intellectual property and cyberlaw. Criminal law and procedures. Law of Contracts: requirement for enforceable agreements, defenses, third parties, performance and remedies. Law of sales and lease contracts: formation, title, risk, insurable interest, performance, remedies and warranties. Constitutional Law and Business. Business ethics. Business entities and agency. Total of 54 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

**C-ID: BUS 125*

BUS 012B BUSINESS LAW**3 unit**

Prerequisite: BUS 012A.

Ethics, principles and application of rules of law relating to business organizations. Negotiable instruments; creditor's rights and bankruptcy; agency and labor relations; partnerships and LLP's; corporations; government regulations; personal property, bailments, real property, and landlord-tenant; insurance; wills, trusts and estates. Total of 54 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

BUS 014A MATHEMATICAL ANALYSIS FOR BUSINESS — FINITE**4 units**

Prerequisites: MATH 131, 133B, 134B, or placement based on the Business Mathematics assessment process.

Algebraic and geometric concepts applied to finding solutions of problems in business, economics, and social sciences. Special emphasis on mathematics of finance, linear and quadratic functions, break-even analysis, supply/demand curves, systems of linear equations and inequalities, matrices, linear programming, sets and Venn diagrams, combinatorial techniques, and probability. Total of 72 hours lecture.

Transfer Credit: CSU

BUS 014B MATHEMATICAL ANALYSIS FOR BUSINESS — CALCULUS**4 units**

Prerequisite: BUS 014A.

Techniques of calculus with emphasis placed on the application of these concepts to business and management related problems. Applications of derivatives and integrals of functions including polynomials, rational, exponential and logarithmic functions are studied with special emphasis on system optimization, cost and revenue analysis, marginal analysis, elasticity, consumer and producers' surplus, and continuous flow of money problems. Total of 72 hours lecture

Transfer Credit: CSU; UC credit limitations. See counselor.

**C-ID: MATH 140*

BUS 016 BUSINESS COMPUTATIONS UTILIZING TECHNOLOGY**3 units**

A comprehensive study of business computations and a review of decimals, fractions, and percentages. Bank services, payroll, the calculations associated with buying and selling, interest and loans, taxes, cash and trade discounts, depreciation and other business computations. **For** students interested in pursuing careers in business. Problems are solved utilizing contemporary technology. Total of 54 hours lecture.

Transfer Credit: CSU

**Course Identification Numbering System (C-ID)*

BUS 020 INDEPENDENT STUDY**1 unit**

Prerequisite: *Completion of two courses in the Business Education Division.*

Individual business-related projects; research techniques; written reports. **Pass/no pass** grading. Total of 54 hours laboratory.

Transfer Credit: CSU

BUS 112 BUSINESS ENGLISH**3 units**

Recommended preparation: *ENGL 400 or ESL 033B.*

Review of grammar mechanics; writing effective business communications through study of word usage, punctuation, sentence pattern and structure, and paragraphing.

Total of 54 hours lecture.

BUS 114 BUSINESS MATHEMATICS**3 units**

Mathematical processes and techniques currently used in the fields of business and finance. Emphasis on solving business problems related to financial decision-making and the management of cash flow. Calculate percentages, trade and cash discounts, markups and markdowns, simple and compound interest, bank discounts, present and future value of annuities and sinking funds. Total of 54 hours of lecture.

BUS 116 SMALL BUSINESS MANAGEMENT**3 units**

Introduction of management principles applied to starting and operating a small business. Includes franchising; market research; site selection; sales and advertising; pricing and credit policies; managing human resources; financial planning, accounting and budgeting. Total of 54 hours lecture.

BUS 117 HUMAN RELATIONS/ORGANIZATIONAL BEHAVIOR**3 units**

Study of the interpersonal skills needed to succeed in the business environment. How people work and relate at the individual, group and organizational level. Special attention is given to appropriate communication skills in the workplace, team work, motivation, leadership skill and how to handle organizational change. Total of 54 hours lecture.

BUS 118 INVESTMENTS**3 units**

Principles of investments; types of investment programs and securities. Analysis of financial statements. Total of 54 hours lecture.

BUS 128 HUMAN RESOURCES MANAGEMENT**3 units**

Human resource administration of public and private organizations including personnel administration, supervision and training. Emphasis on actual personnel problems; principles and methods involved in recruitment, selection and placement of employees with regard to affirmative action programs, training, experience and aptitudes. Total of 54 hours lecture.

BUS 150 SURVEY OF INTERNATIONAL BUSINESS**3 units**

An introduction to international business management principles with an overview of multinational and global organizations, international law, international human resource problems, operational issues, marketing, decisions, strategic planning and competitiveness, and cross-cultural problems. Total of 54 hours lecture.

BUS 151 INTERNATIONAL MARKETING**3 units**

An introduction to concepts and principles of international marketing through the use of realistic examples and actual case studies of international marketing organizations, both U.S. and foreign. Studies include international marketing position of the U.S., market entry strategies, analysis of foreign markets, culture and marketing, product design, pricing, distribution, promotion and sales. Total of 54 hours lecture.

BUS 152 PRINCIPLES OF IMPORTING AND EXPORTING**3 units**

An introduction to various aspects of importing and exporting, including essential terms and techniques. Studies include marketing, organization, regulation, terms of access, documentation, shipment, duty rate structure and determination, currency exchange, and financing involved with international movement of merchandise. Total of 54 hours lecture.

BUS 160 SALES AND CUSTOMER SERVICE**3 units**

Analysis of the steps involved in the selling process and the delivery of effective customer service in order to enhance goodwill and improve company performance. Theory and skills include building customer rapport, handling problems and complaints, communicating, dealing with difficult customers and projecting a professional image. Development of the relationship between the company and the competition. Total of 54 hours lecture.

BUS 161 APPLIED BUSINESS PRINCIPLES AND PRACTICES

2 units

A study of appropriate business policies, practices and procedures; business etiquette/protocol; cultural diversity in the global workplace; and conflict resolution. Total of 36 hours lecture.

BUS 170 WORK EXPERIENCE INTERNSHIP

3 units

Supervised work experience in a business organization. Total of 270 hours laboratory.

BUSINESS INFORMATION TECHNOLOGY

(Business Division)

BIT 010 BASIC COMPUTER KEYBOARDING

1 unit

Touch control of the microcomputer keyboard, basic keyboarding skills and numeric keypad operations. Total of 9 hours lecture and 27 hours laboratory.

Transfer Credit: CSU

BIT 011 BUSINESS DOCUMENT PROCESSING

2 units

Production of business documents using word processing software including proofreading and proper grammar and punctuation. Development of computer keyboarding technique, speed, and accuracy. **No credit** if taken after BIT 011B. Total of 36 hours lecture.

Transfer Credit: CSU

BIT 025 SURVEY OF COMPUTER TECHNOLOGY IN BUSINESS

3 units

Survey of Business information systems and technology, networking, e-commerce, ethics and security, systems hardware and software components, and commonly used business software applications, including word processing, spreadsheets, graphics, and database management. Applications of these concepts and methods through hands-on projects developing computer-based solutions to business problems. Total of 54 hours lecture.

*Transfer Credit: CSU. *C-ID; BUS 140*

BIT 100 WORD PROCESSING BASICS

1 unit

Recommended preparation: *Enrollment in or completion of BIT 107.*

Introduction to basic concepts and software to create, edit, store, retrieve and print letters, reports and simple tables.

Recommended BIT 010, 011A, or keyboarding/typing

speed of 20 wpm. **No credit** if taken after or concurrently with BIT 128A, 128B, 012A, 012B, 012C, or 012D. Total of 18 hours lecture and 18 hours laboratory.

BIT 102 SPREADSHEET BASICS

1 unit

Recommended preparation: *Enrollment in or completion of BIT 107.*

Introduction to basic concepts and use of spreadsheet software to create, edit, store, retrieve and print simple spreadsheets and charts. **No credit** if taken after or concurrently with BIT 103A or BIT 103B, BIT 133A, or BIT 133B. Total of 18 hours lecture and 18 hours laboratory.

BIT 105 BUSINESS SOFTWARE-MICROSOFT ACCESS

2 units

Prerequisite: *Enrollment in or completion of BIT 106.*

Intermediate to advanced relational database concepts to create database tables, forms, business reports, macros, and queries. **No credit** if taken after BIT 105B. Total of 36 hours lecture.

BIT 106 BUSINESS SOFTWARE — INTRODUCTION TO MICROSOFT OFFICE SYSTEM

3 units

Comprehensive overview of the Microsoft Office System applications including Word, Excel, PowerPoint, and Access; integration of applications to create reports and presentations. Total of 54 hours lecture.

BIT 107 BUSINESS SOFTWARE — WINDOWS

1 unit

Use and management of the environment and file system within the Windows operating system on both local and cloud systems. Concepts and terminology; end-user techniques for searching and for basic diagnostic and trouble-shooting procedures. Total of 18 hours lecture.

BIT 108 MICROSOFT OUTLOOK AND PRODUCTIVITY TOOLS

1 unit

Use and features of business communication software, email software, and emerging business technologies including Microsoft Outlook and Google Drive. Electronic document routing, organizers, calendars, meeting and facility schedulers, and collaborative techniques. Total of 18 hours lecture.

BIT 109 BUSINESS SOFTWARE — MICROSOFT POWERPOINT

2 units

Prerequisite: *BIT 106.*

Concepts and use of presentation graphics software to plan and develop effective business presentations. Total of 27 hours lecture and 27 hours laboratory.

**Course Identification Numbering System (C-ID)*

BIT 115 BUSINESS RECORDS SKILLS**1 unit**

Introduction to records management concepts and database software using Microsoft Access. Records management systems for organizing business information, materials, and records by applying standard indexing rules and using manual and electronic filing systems (alphabetic, numeric, geographic, chronologic, and subject). Total of 18 hours lecture.

BIT 117 COLLABORATIVE WEB-BASED WORKSPACES**1 unit**

Prerequisite: *Enrollment in or completion of BIT 107.*

Introduction to web-based collaborative workspace software to enhance work, data, and content collaboration in an organizational environment. Emphasis on working as a team, and on workspace sites, workflows, content publication, discussion boards, document libraries, tracking tasks, blogs, wikis, and managing users and permissions. Projects include the design and creation of customized workspaces to solve specific business needs. Total of 18 hours lecture.

BIT 121 LIFE DESIGN FOR THE 21ST CENTURY**3 units**

Life and occupational preparation; establish a dynamic 10-year plan which integrates goal setting, identity formation, decision making, budget projection, online career research, skills identification, and life-long learning. Total of 54 hours lecture.

BIT 122 INTERNET RESEARCH FOR BUSINESS**1 unit**

Conducting Internet research, and evaluating, managing, and organizing Internet research findings to effectively communicate information in business. Total of 18 hours lecture.

BIT 124 ADMINISTRATIVE BUSINESS PROCEDURES**3 units**

Prerequisite: *BIT 106.*

Administrative support procedures, task organization, time management, team concepts and customer service skills, business travel and meeting arrangements, effective personal interactions to facilitate office work flow, and making ethical choices in the office. Simulated on-the-job training. Total of 54 lecture hours.

BIT 125 BUSINESS SOFTWARE INTEGRATION**2 units**

Prerequisite: *Enrollment in or completion of BIT 105, BIT 109, BIT 128, and BIT 133.*

Integration of business software applications, including Microsoft Office and Google Drive, to report, analyze, and measure information for the purpose of business planning

and decision making. Total of 27 hours lecture and 27 hours laboratory.

BIT 128 BUSINESS SOFTWARE-MICROSOFT WORD**2 units**

Prerequisites: *Enrollment in or completion of BIT 106 and BIT 011.*

Application of intermediate to advanced word processing concepts to create, edit, and format business documents such as memos, forms, newsletters, reports, tables, and templates. Topics include mail merge, images, complex tables, macros, collaboration tools, and master documents. **No credit** if taken after BIT 128B. Total of 36 hours lecture.

BIT 131 PROFESSIONAL SKILLS FOR CAREER SUCCESS**3 units**

Navigating technology at work; creativity and innovation; interpersonal communications; time management; organization skills; effective listening; valuing diversity; and value-added service. Includes role playing and critical thinking activities to teach these valuable skills in an integrated manner. Total of 54 hours lecture.

BIT 133 BUSINESS SOFTWARE-MICROSOFT EXCEL**2 units**

Prerequisite: *Enrollment in or completion of BIT 106.*

Application of intermediate to advanced spreadsheet software to prepare budgets, record accounting information, and conduct financial analysis. Topics include formula and function creation, PivotTables and PivotCharts, macros, data analysis, what-if analysis, and charts. **No credit** if taken after BIT 133B. Total of 36 hours lecture.

BIT 135 BUSINESS SOFTWARE – CUSTOMER RELATIONSHIP MANAGEMENT**2 units**

Prerequisite: *Enrollment in or completion of MRKT 020.*

Introduction to Customer Relationship Management software to compile, format, and report sales, marketing, and customer service information. Emphasis will be on CRM software to track sales leads, organize marketing campaigns, and track customer interactions. Total of 36 hours lecture.

CHEMISTRY

(Natural Sciences Division)

CHEM 001A GENERAL CHEMISTRY AND CHEMICAL ANALYSIS**5 units**

Prerequisites: *(1)MATH 131 or its equivalent, and (2) CHEM 022 or equivalent skills as demonstrated through placement based on the chemistry assessment process.*

Standard general chemistry for science and engineering majors, with emphasis on quantitative methods and calculations. Atomic structure and chemical bonding, stoichiometry, gases, liquids, solids and solution chemistry. Introductions to equilibrium and organic chemistry. Quantitative analysis using analytical balances, gravimetric and volumetric procedures, spectrophotometry and calorimetry. Total of 54 hours lecture and 108 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

**C-ID: CHEM 110; CHEM SEQ 120S (with CHEM 001B)*

CHEM 001B GENERAL CHEMISTRY AND CHEMICAL ANALYSIS

5 units

Prerequisite: CHEM 001A.

Standard general chemistry for science and engineering majors, with emphasis on quantitative methods and calculations. Kinetics, equilibrium, thermodynamics, introduction to electrochemistry, coordination compounds, nuclear chemistry, and the chemistry of selected metals and nonmetals, potentiometric titrations and electrochemical cells. Total of 54 hours lecture and 108 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

**C-ID: CHEM SEQ 120S (with CHEM 001A)*

CHEM 002A CHEMISTRY — GENERAL, ORGANIC AND BIOCHEMISTRY

4 units

Prerequisite: MATH 125 or MATH 127B or MATH 128B or MATH 150.

Principles of chemistry for health science majors. Atomic and molecular structure, chemical bonding, nomenclature, chemical reactions and stoichiometry, gases, solutions, acids and bases, pH, buffers, nuclear and organic chemistry.

No credit if taken after CHEM 001A. Total of 54 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

**C-ID: CHEM 101*

CHEM 002B CHEMISTRY — GENERAL, ORGANIC AND BIOCHEMISTRY

4 units

Prerequisite: CHEM 002A.

Principles of chemistry for health science majors. Organic and biochemistry: reaction mechanisms, kinetics, enzymes, protein synthesis and metabolism. Total of 54 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

**C-ID: CHEM 102*

CHEM 008A ORGANIC CHEMISTRY

5 units

Prerequisite: CHEM 001B.

Standard organic chemistry for science majors. Structure, bonding, nomenclature, isomerism, stereochemistry and physical properties of organic compounds. A mechanistic approach to the reactions of hydrocarbons, alkyl halides, alcohols, dienes, aromatic compounds, organometallics, IR and NMR spectroscopy and mass spectrometry. Introduction to organic laboratory techniques; preparation, isolation and identification of organic compounds. **No credit** if taken after CHEM 014A and 016A. Total of 54 hours lecture and 108 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: CHEM 150; CHEM SEQ 160 (with CHEM 008B)*

CHEM 008B ORGANIC CHEMISTRY

5 units

Prerequisite: CHEM 008A.

Standard organic chemistry for science majors. A mechanistic approach to the reactions of alcohols, phenols, ethers and epoxides, aldehydes, ketones, carboxylic acids and their derivatives and amines. Photochemistry, organic redox, polymerization, rearrangements, synthesis and an introduction to biochemical molecules. Qualitative analysis, natural products, multistep synthesis and kinetics. **No credit** if taken after CHEM 014B and 016B. Total of 54 hours lecture and 108 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: CHEM SEQ 160S (with CHEM 008A)*

CHEM 020 INDEPENDENT STUDY

1 unit

Recommended Preparation: Enrollment in or completion of any college-level (1-99) course in the Natural Sciences.

Enrollment Limitation: Permission of the Dean.

Independent, faculty-guided student inquiry, project, research, laboratory experiment and/or field investigation. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

CHEM 022 INTRODUCTORY CHEMISTRY

4 units

Prerequisite: Enrollment in or completion of MATH 131 or equivalent.

Introduction to principles of chemistry with emphasis on quantitative methods and calculations. **For** science and engineering majors needing preparation for CHEM 001A, but open to all qualified students. Total of 54 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

**Course Identification Numbering System (C-ID)*

**CHEM 108 PROBLEM SOLVING SKILLS FOR SUCCESS
IN ORGANIC CHEMISTRY**

1 unit

Corequisite: CHEM 008B.

Development and rigorous practice of essential study techniques and course material for success in CHEM 008B. Integration of supplemental instruction, problem solving strategies and critical thinking skills. **Pass/no pass** grading. Total of 18 hours lecture.

CHILD DEVELOPMENT

(Social Sciences Division)

**CHDV 010 PRINCIPLES AND PRACTICES OF
TEACHING YOUNG CHILDREN**

3 units

Examination of the underlying theoretical principles of developmentally appropriate practices applied to programs, environments, emphasizing the key role of relationships, constructive adult-child interactions, and teaching strategies in supporting physical, social, creative and intellectual development for all young children. Includes a review of the historical roots of early childhood education programs and the evolution of the professional practices promoting advocacy, ethics, and professional identity. Total of 54 hours lecture.

*Transfer Credit: CSU. *C-ID: ECE 120*

CHDV 011 INFANT AND TODDLER DEVELOPMENT

3 units

Prerequisites: CHDV 010 and PSYC 021 or 121.

A study of infants and toddlers from pre-conception to age three including physical, cognitive, language, social, and emotional growth and development. Applies theoretical frameworks to interpret behavior and interactions between heredity and environment. Emphasizes the role of family and relationships in development. Total of 54 hours lecture.

Transfer Credit: CSU

**CHDV 012A ADMINISTRATION I: PROGRAMS IN
EARLY CHILDHOOD**

3 units

Prerequisites: CHDV 010 and PSYC 021 or 121.

Introduction to the administration of early childhood programs. Includes program types, program operations and fiscal management, regulatory systems, development and implementation of policies and procedures, community and family resources and relationships. **No credit** if taken after CHDV 112A. Total of 54 hours lecture.

Transfer Credit: CSU; UC credit under review.

**CHDV 012B ADMINISTRATION II: PERSONNEL AND
LEADERSHIP**

3 units

Prerequisite: CHDV 112A.

Current issues in administration. Effective personnel management strategies including employee advancement through professional growth and development. Understanding applicability of legal and ethical responsibilities. **No credit** if taken after CHDV 112B. Total of 54 hours lecture.

Transfer Credit: CSU; UC credit under review.

CHDV 013A PRACTICUM IN CHILD DEVELOPMENT - A
2 units

Prerequisites: CHDV 010 *and* PSYC 021 or 121.

Corequisites: CHDV 013AF.

Student teachers design experiences that promote positive development and learning for young children. Students demonstrate developmentally appropriate early childhood activities and lesson plans. Emphasis on child-centered, play-initiated approaches to teaching, learning and assessment. Knowledge of curriculum content areas. Total of 36 hours lecture.

*Transfer Credit: CSU. *C-ID: ECE 210*

**CHDV 013AF FIELD PRACTICE IN CHILD
DEVELOPMENT - A**

2 units

Prerequisite: CHDV 010 and PSYC 021 or 121 and maintain enrollment in 7 or more units, including CHDV 013A.

Corequisite: CHDV 013A.

Practical classroom experiences to connect theory and practice in Child Development; develop professional behaviors in student teachers while working with young children; and build a comprehensive understanding of children and families in a classroom setting, including understanding of early intervention needs and practices. Demonstration of developmentally appropriate early childhood teaching competencies under the supervision of CHDV faculty and other qualified early education professionals. Emphasis on child centered, play-initiated approaches to teaching, learning and assessment; and knowledge of curriculum content areas as student teachers implement and evaluate experiences that promote positive development and learning for young children. Total of 120 hours field practice.

*Transfer Credit: CSU; UC credit under review. *C-ID: ECE 210*

**CHDV 013B PRACTICUM IN CHILD
DEVELOPMENT - B**

2 units

Prerequisites: CHDV 013A and CHDV 013AF and maintain enrollment of 7 units or more including field practice.

Corequisite: CHDV 013BF.

*Course Identification Numbering System (C-ID)

Opportunity to learn developmentally-appropriate early childhood teaching strategies. Participation in advocacy project and development of Professional Portfolio. Meets partial fulfillment of the state requirement for the California Child Development Permit. Total of 36 hours lecture.
Transfer Credit: CSU

CHDV 013BF FIELD PRACTICE IN CHILD DEVELOPMENT B

2 units

Prerequisite: CHDV 013A and CHDV 013AF.

Corequisite: CHDV 013B.

Opportunity to demonstrate developmentally-appropriate early childhood teaching competencies under guided supervision. Students will utilize practical classroom experiences to connect theory and practice, develop professional behaviors, and build a comprehensive understanding of children and families, including gaining experience with Parent Conferencing. Child centered, play-oriented approaches to teaching, learning, and assessment will be utilized. Meets partial fulfillment of the state requirement for the California Child Development Permit. Total of 120 hours field practice.

Transfer Credit: CSU; UC credit under review.

CHDV 014 OBSERVATION AND ASSESSMENT OF YOUNG CHILDREN

3 units

Prerequisite: CHDV 010 and PSYC 021

This course focuses on the appropriate use of assessment and observation strategies to document development, behavior, growth, play and learning in order to join with families and professionals in promoting children's success and maintaining quality programs. Recording strategies, rating systems, portfolios, and multiple assessment methods are explored. Child/student observations will be conducted and analyzed. **Recommended** CHDV 013A and 020. Total of 54 lecture hours.

*Transfer Credit: CSU. *C-ID: ECE 200*

CHDV 015 CHILD, FAMILY AND COMMUNITY

3 units

Recommended preparation: CHDV 010 and PSYC 021 or 121.

An examination of the developing child in a societal context which focuses on the interrelationships of family, school, and community and emphasizes historical and socio-cultural factors. The processes of socialization and identity development will be highlighted, showing the importance of respectful, reciprocal relationships that support and empower families. Total of 54 hours lecture.

*Transfer Credit: CSU. *C-ID: CDEV 110*

CHDV 016 HEALTH, SAFETY AND NUTRITION

3 units

Prerequisites: CHDV 010 and PSYC 021 or 121.

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 health, mental health and safety for both children and staff will be identified along with the importance of collaboration with families and health professionals. Focus on integrating the concepts into everyday planning and program development. CPR techniques, pediatric first aid; prevention and detection of child abuse. **Recommended** enrollment in CHDV 013A, B or C. **No credit** if taken after CHDV 116. Total of 54 hours lecture and 15 hours laboratory.

*Transfer Credit: CSU. *C-ID: ECE 220*

CHDV 017 TEACHING CHILDREN IN A DIVERSE SOCIETY

3 units

Development of social identities in diverse societies including theoretical and practical implications of oppression and privilege affecting young children, families, programs, classrooms, teaching, education and schooling. Exploration of various classroom strategies emphasizing culturally and linguistically appropriate anti-bias approaches supporting children in becoming competent members of a diverse society. Self-examination and reflection of one's own issues and understanding of educational principles in integrating social identity, stereotypes and bias, social and educational access, media, schooling, better informed teaching practices and/or program development. **No credit** if taken after CHDV 117. Total of 54 hours lecture.

*Transfer Credit: CSU. *C-ID: ECE 230*

CHDV 020 INTRODUCTION TO CURRICULUM PLANNING

3 units

Prerequisites: CHDV 010 and PSYC 021 or 121.

Recommended Preparation: CHDV 013A.

Overview of knowledge and skills providing appropriate curriculum and environments for children from birth to age 6. A teacher's role in supporting development and engagement for young children. Strategies for developmentally-appropriate practice based on observation and assessments across the curriculum, including 1) academic content areas, 2) play, art, and creativity, 3) development of social-emotional, communication, and cognitive skills, and 4) emphasizing the essential role of play. Includes language and literacy, social and emotional learning, sensory learning, art and creativity, math and science. **No credit** if taken after CHDV 120. Total of 54 lecture hours.

*Transfer Credit: CSU. *C-ID: ECE 130*

*Course Identification Numbering System (C-ID)

CHDV 022 INFANT TODDLER CARE AND EDUCATION**3 units****Prerequisite:** CHDV 011.

Application of current theory and research to the care and education of infants and toddlers in group settings. Examines essential policies, principles and practices that lead to quality care and developmentally appropriate curriculum for children birth to 36 months. Total of 54 hours lecture.

CHDV 024A SPECIAL TOPICS IN CHILD DEVELOPMENT – HEALTH AND SAFETY**2 units**

Readings, discussions, papers and exercises focusing on topics of current and general interest in health and safety. Focus on critical thinking and analytic skills. Total of 36 hours lecture.

*Transfer Credit: CSU***CHDV 024B SPECIAL TOPICS IN CHILD DEVELOPMENT – CURRICULUM****2 units**

Readings, discussions, papers and exercises focusing on topics of current and general interest in curriculum. Focus on critical thinking and analytic skills. Total of 36 hours lecture.

*Transfer Credit: CSU***CHDV 024C SPECIAL TOPICS IN CHILD DEVELOPMENT – THE YOUNG CHILD****2 units**

Readings, discussions, papers and exercises focusing on topics of current and general interest regarding the young child. Focus on critical thinking and analytic skills. Total of 36 hours lecture.

*Transfer Credit: CSU***CHDV 024D SPECIAL TOPICS IN CHILD DEVELOPMENT – WORKING WITH PARENTS****2 units**

Readings, discussions, papers and exercises focusing on topics of current and general interest in working with parents. Focus on critical thinking and analytic skills. Total of 36 hours lecture.

*Transfer Credit: CSU***CHDV 024E SPECIAL TOPICS IN CHILD DEVELOPMENT – MULTICULTURAL ISSUES****2 units**

Readings, discussions, papers and exercises focusing on topics of current and general interest in multicultural issues. Focus on critical thinking and analytic skills. Total of 36 hours lecture.

*Transfer Credit: CSU***CHDV 024F SPECIAL TOPICS IN CHILD DEVELOPMENT – DISCIPLINE****2 units**

Readings, discussions, papers and exercises focusing on topics of current and general interest in disciplining young children. Focus on critical thinking and analytic skills. Total of 36 hours lecture.

*Transfer Credit: CSU***CHDV 024G SPECIAL TOPICS IN CHILD DEVELOPMENT – ENVIRONMENT****2 units**

Readings, discussions, papers and exercises focusing on topics of current and general interest in childcare environment. Focus on critical thinking and analytic skills. Total of 36 hours lecture.

*Transfer Credit: CSU***CHDV 024H SPECIAL TOPICS IN CHILD DEVELOPMENT – ADMINISTRATION****2 units**

Readings, discussions, papers and exercises focusing on topics of current and general interest in administration of childcare centers. Focus on critical thinking and analytic skills. Total of 36 hours lecture.

*Transfer Credit: CSU***CHDV 025A EARLY CHILDHOOD EDUCATION STEM A – MATHEMATICS****3 units****Prerequisites:** CHDV 010 and PSYC 021.

Focus on the principles and methods of planning, presenting and evaluating STEM experiences for young children ages two to five. Students will develop activities that foster children's natural curiosity about mathematical and engineering concepts. These activities will be designed to encourage exploration, experimentation, problem solving and discovery. Methods for adapting math and engineering experiences for young children with special needs will also be discussed. Total of 54 hours lecture.

*Transfer Credit: CSU; UC credit under review.***CHDV 025B EARLY CHILDHOOD STEM - SCIENCE****3 units****Prerequisite:** CHDV 025A.

Integration of developmentally appropriate STEM content with a focus on science and technology into the early childhood classroom curriculum. The process of using inquiry tools and problem-solving strategies and focused learning centers with content embedded in all other classroom areas is explored. Examine numerous evidence-based instructional strategies for teaching young children, including those who are culturally, linguistically and ability diverse. Total of 54 hours lecture.

Transfer Credit: CSU; UC credit under review.

CHDV 030 INTRODUCTION TO CHILDREN WITH SPECIAL NEEDS

3 units

Prerequisites: CHDV 010 and PSYC 021 or PSYC 121.

Introduces the variations in development of children with special needs ages birth through eight and the resulting impact on families. Includes an overview of historical and societal influences, laws relating to children with special needs, and the identification and referral process. **No credit** if taken after CHDV 128. Total of 54 hours lecture.

Transfer Credit: CSU; UC credit under review.

CHDV 035 INTRODUCTION TO CURRICULUM AND STRATEGIES FOR CHILDREN WITH SPECIAL NEEDS

3 units

Prerequisite: CHDV 010.

Covers curriculum and intervention strategies for working with children with disabilities and other special needs in partnership with their families. Focus on the use of observation and assessment in meeting the individualized needs of children in inclusive and natural environments. The role of the teacher as a professional working with families, collaboration with interdisciplinary teams, and cultural competence. **No credit** if taken after SET 100. Total of 54 hours lecture.

Transfer Credit: CSU; UC credit under review.

CHDV 105 CHILDREN WITH CHALLENGING BEHAVIORS

3 units

Prerequisite: CHDV 010 and PSYC 021.

Overview of the developmental, environmental and cultural factors that impact the behavior of young children, including family stress, child temperament, violence, attachment disorders, and special needs, as well as proactive intervention and prevention techniques. Topics include addressing why children misbehave, how to carefully observe a child, how to create a positive environment to encourage appropriate behavior, and how to effectively address many types of behaviors including those that are aggressive and antisocial, disruptive, destructive, emotional and dependent. **No credit** if taken after SET 105. Total of 54 hours lecture.

CHDV 110 SKILLS FOR COLLEGE SUCCESS IN CHILD DEVELOPMENT

1 unit

Development of essential study techniques for success in the child development program; orientation to applications of computer-based technology; time management; textbook mastery, lecture outlining, test taking, and critical analysis. Total of 18 hours lecture.

CHDV 113 EARLY INTERVENTION: HOME VISITING

3 units

Prerequisite: CHDV 010 and CHDV 035.

Overview of the basics required for an early intervention assistant to effectively provide services to a child with a disability and the family in the home environment. Philosophies regarding early intervention services in the home. Topics include the diversity of environments, family systems and interpersonal communication styles. Additional topics provide support relating to personal organization and preparation for the visits, collaboration with other professionals, infant mental health and developing appropriate home-based interventions for the child and family. **No credit** if taken after SET 113. Total of 54 hours lecture.

CHDV 114 EARLY INTERVENTION

3 units

Prerequisite: CHDV 010 and CHDV 011.

Study of infants and toddlers with disabilities, atypical development or other special needs, both in the early intervention setting and in the child care setting. Explores strategies and interventions used in the field of early intervention. Current theories in early intervention, early relationships, family systems, grief processing and stressors will be studied. Total of 54 hours lecture.

CHDV 118 LANGUAGE AND LITERACY IN EARLY CHILDHOOD

3 units

Introduction and survey of the range and stages of language and literacy development theories, practices and activities that support young children's emerging language and literacy skills, birth through age 8. Total of 54 hours lecture.

Transfer Credit: CSU; UC credit under review.

CHDV 119 ADULT SUPERVISION AND MENTORING IN EARLY CARE AND EDUCATION

3 units

Prerequisites: CHDV 013A, 015, 120.

Methods and principles of supervising student teachers, volunteers, staff, and other adults in early care and education settings. Emphasis is on the roles and development of early childhood professionals as mentors and leaders. Total of 54 hours lecture.

CHDV 122 PRACTICUM IN EARLY INTERVENTION/SPECIAL EDUCATION

2 units

Prerequisite: CHDV 035 and CHDV 010.

Corequisite: CHDV 122F.

Preparation for teaching basic academic and life processes skills to students with disabilities. Theory and practice includes the basic principles of educational and developmental psychology; the art of observing, teaching

and guiding young children; planning and administration of developmentally appropriate inclusive educational activities; school safety and health issues; and the social and emotional foundations of early care and education. **No credit** if taken after SET 122. Total of 36 hours lecture.

CHDV 122F FIELD PRACTICE IN EARLY INTERVENTION/SPECIAL EDUCATION

1 unit

Corequisite: CHDV 122.

Practical classroom experiences to make connections between theory and practice with infants and young children with disabilities and other special needs, including understanding of early intervention needs and practices. Demonstration of developmentally appropriate early childhood teaching competencies under the supervision of qualified early education professionals. Emphasis on child-centered, play-oriented approaches to teaching, learning and assessment; and knowledge of curriculum content areas as student teachers implement and evaluate experiences that promote positive development and learning for young children with disabilities or other special needs. Total of 60 hours field practice.

CHDV 196 CHILD DEVELOPMENT LABORATORY

1 unit

Opportunity for child development and education students to study in their chosen specialization in child development at the advanced level by performing guided laboratory applications and exercises. Total of 9 hours lecture and 27 hours laboratory.

CHINESE

(Languages Division)

CHIN 001 ELEMENTARY CHINESE (Mandarin)

5 units

Pronunciation and grammar; reading and writing Chinese characters; vocabulary building. Introduction to geography; customs and culture of China. Corresponds to first year of high school Chinese. Total of 90 hours lecture.

Transfer Credit: CSU; UC

CHIN 002 ELEMENTARY CHINESE (Mandarin)

5 units

Prerequisite: CHIN 001, or the first year of high school Chinese, or placement based on the foreign language assessment process.

Grammar; oral and written composition; customs and culture. **No credit** if taken after CHIN 002A. Total of 90 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

CHIN 002A ELEMENTARY CHINESE (Mandarin) FOR ADVANCED BEGINNERS

5 units

Intensive training in oral and written Chinese. Designed for students who already have some degree of fluency in spoken Chinese, but have had little or no formal training in reading and writing of Chinese characters. Improvement of oral expression. Introduction to Chinese grammar essentials, readings of simple contemporary Chinese stories; oral and written composition. **No credit** if taken after CHIN 001 or 002. Total of 90 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

CHIN 003 INTERMEDIATE CHINESE (Mandarin)

5 units

Prerequisite: CHIN 002 or CHIN 002A, or two years of high school Chinese, or placement based on the foreign language assessment process.

Grammar; oral and written composition; reading of intermediate texts, including those on Chinese history, geography and culture. Total of 90 hours lecture.

Transfer Credit: CSU; UC

CHIN 004 INTERMEDIATE CHINESE (Mandarin)

5 units

Prerequisite: CHIN 003 or, three years of high school Chinese, or placement based on the foreign language assessment process.

Continuation of grammar, oral and written composition; reading of texts of moderate difficulty, including modern Chinese literature. Total of 90 hours lecture.

Transfer Credit: CSU; UC

CHIN 005 ADVANCED CHINESE READING AND COMPOSITION

3 units

Prerequisite: CHIN 004 or placement based on the foreign language assessment process.

Reading and writing of Chinese texts with advanced written styles and syntax. Total of 54 hours lecture.

Transfer Credit: CSU; UC

CHIN 008A INTRODUCTION TO CHINESE CONVERSATION (Mandarin)

2 units

Prerequisites: CHIN 002, CHIN 002A, or placement based on the foreign language assessment process.

Practice in oral self-expression and understanding spoken Chinese. **No credit** if taken after CHIN 003 or CHIN 009A-B. Total of 36 hours lecture.

Transfer Credit: CSU

CHIN 008B INTRODUCTION TO CHINESE CONVERSATION (Mandarin)

2 units

Prerequisites: CHIN 002, CHIN 002A, or placement based on the foreign language assessment process.

Practice in oral self-expression and understanding spoken Chinese. **No credit** if taken after CHIN 003 or CHIN 009A-B. Total of 36 hours lecture.

Transfer Credit: CSU

CHIN 009A CHINESE CONVERSATION (Mandarin)

2 units

Prerequisite: CHIN 003, CHIN 008A-B, or placement based on the foreign language assessment process.

Intensive practice in oral expression and comprehension of spoken Chinese. Total of 36 hours lecture.

Transfer Credit: CSU

CHIN 009B CHINESE CONVERSATION (Mandarin)

2 units

Prerequisite: CHIN 003, CHIN 008A-B, or placement based on the foreign language assessment process.

Intensive practice in oral expression and comprehension of spoken Chinese. Total of 36 hours lecture.

Transfer Credit: CSU

CHIN 009C CHINESE CONVERSATION (Mandarin)

2 units

Prerequisite: CHIN 003, CHIN 008A-B, or placement based on the foreign language assessment process.

Intensive practice in oral expression and comprehension of spoken Chinese. Total of 36 hours lecture.

Transfer Credit: CSU

CHIN 010 CHINESE CIVILIZATION

3 units

The study of Chinese literature, arts, philosophy, geography, religion and the social and political environment; Chinese contributions to civilization from the classical period to modern times. (Course conducted in English.) Total of 54 hours lecture.

Transfer Credit: CSU; UC

CHIN 012 CHINESE LITERATURE IN TRANSLATION

3 units

Prerequisite: Eligibility for ENGL 001A.

Reading and discussion of major works of Chinese literature in translation from different historical periods. Selected readings will be made from different genres: poetry, drama, essays and the novel. (Course conducted in English.) Total of 54 hours lecture.

Transfer Credit: CSU; UC

CHIN 022 CHINESE CALLIGRAPHY

3 units

History, development, aesthetics, and appreciation of Chinese calligraphy. An examination of Chinese character formation, evolution and etymology as well as a survey of varieties of Chinese scripts and hands-on practice of Chinese calligraphy. (Course conducted in English.) Total of 54 hours lecture.

Transfer Credit: CSU; UC

CHIN 050 CHINESE CINEMA

3 units

Prerequisite: Eligibility for ENGL 001A.

Introduction to Chinese cinema. Chinese culture, society, and historical periods through the viewing and discussion of Chinese films from mainland China, Hong Kong, and Taiwan. (Course conducted in English). Total of 54 hours lecture.

Transfer Credit: CSU; UC

CHIN 150A CHINESE FOR BUSINESS AND TRAVEL

2 units

Practical conversational Chinese for business and travel. Contemporary culture in Chinese-speaking areas. Total of 36 hours lecture.

CHIN 150B CHINESE FOR BUSINESS AND TRAVEL

2 units

Prerequisite: CHIN 150A or placement based on the foreign language assessment process.

Further instruction in conversational Chinese for business and travel. Contemporary culture in Chinese-speaking areas. Total of 36 hours lecture.

CINEMA

(Visual Arts and Media Studies)

CINE 007A EARLY FILM HISTORY

3 units

Development of motion pictures from their inception to the 1940's. Total of 54 hours lecture.

Transfer Credit: CSU; UC

CINE 007B CONTEMPORARY FILM HISTORY

3 units

Recommended preparation: CINE 007A.

Survey of national and international film movements and developments from the 1950's to the present with special attention given to the influence of Hollywood studios and directors in the world of cinema, art and ideas. Total of 54 hours lecture.

Transfer Credit: CSU; UC

CINE 025 FILM ART**3 units**

Aesthetic and technical analysis of camera, lighting, sound, direction and structure in short and feature films with an emphasis on innovation. Total of 54 hours lecture.
Transfer Credit: CSU; UC

CINE 026A BEGINNING ELECTRONIC FILMMAKING**3 units**

Introduction to the theory, terminology, and process of motion picture production for film. Includes basic cinematography including the operation, function and creative uses of production and post-production equipment, scriptwriting, camera operation, shot composition, lighting, sound recording and mixing, and editing. Total of 36 hours lecture and 72 hours laboratory.
Transfer Credit: CSU; UC

CINE 026B INTERMEDIATE FILMMAKING – ELECTRONIC**3 units****Prerequisite:** *CINE 026A.*

Intermediate motion picture production. Editing of picture and sound utilizing adjustable iris camcorders. Individual and group projects selected from the following: commercials, experimental, documentary and dramatic film forms. Total of 36 hours lecture and 72 hours laboratory.
Transfer Credit: CSU; UC

CINE 026C ADVANCED FILMMAKING**3 units****Prerequisite:** *CINE 026B.*

Advanced video or 16mm group motion picture production. Concentration on the roles of director of photography, camera operator, unit production manager, sound crew and editor in the production of short films. Total of 36 hours lecture and 72 hours laboratory.
Transfer Credit: CSU

CINE 027 CINEMATOGRAPHY**3 units**

Introduction to the fundamental technical and aesthetic principles of motion picture photography. Practical training in the use of motion picture cameras. Introduction to image control through exposure, lighting, and selection of film, camera, lens, and filters. Examination of the cinematographer as a visual storyteller to develop a broader understanding of the balance between artist and technician. Examination of the different crew positions and processes of the camera crew. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU; UC***CINE 126 DIGITAL FILM NARRATIVE****3 units****Prerequisites:** *CINE 026A.*

Practical and aesthetic construction of motion pictures using the principles and techniques of computer based non-linear editing for film, video, and multimedia. **Total** of 36 hours lecture and 72 hours laboratory.

CINE 127 ADVANCED CINEMATOGRAPHY**3 units****Prerequisites:** *CINE 026A and CINE 027.***Recommended preparation:** *CINE 126.*

Advanced training and study of techniques and aesthetics in use of motion picture cameras and lighting equipment for those considering a professional career in cinematography. Advanced study of scene creation as well as overall visual design of an entire film. In-depth examination of the different crew positions of the camera crew combined with practical experience. Creation of work for professional portfolio. Total of 36 hours lecture and 72 hours laboratory.

CINE 129 CINEMA PRODUCTION PORTFOLIO**3 units****Prerequisite:** *CINE 026C.*

Cinema Production/Filmmaking portfolio development, preparation and production for transfer to four-year colleges or professional use. Advanced cinema production/filmmaking, in conception and execution. Development of professional presentation skills. Total of 36 hours lecture and 72 hours laboratory.

COLLEGE**(Counseling)****COLL 001 FIRST YEAR SEMINAR****3 units**

Development of thinking strategies that can be used for lifelong problem solving in academic, social, and personal life. Introduces critical thinking, information literacy, college resources, motivating factors and study skills for student success. Total of 54 hours lecture.
Transfer Credit: CSU; UC

COMMUNICATION**(Performing and Communication Arts Division)****COMM 001 SURVEY OF MASS COMMUNICATION****3 units**

Mass media as information distributors; print media, radio and television broadcasting, motion pictures, public

relations, sales and advertising. Rights and responsibilities under the First Amendment. Total of 54 hours lecture.
*Transfer Credit: CSU; UC. *C-ID: JOUR 100*

COMM 020 INDEPENDENT STUDY

1 unit

Prerequisite: *Permission of department chairperson.*
Individual projects in the communication arts and sciences. Total of 54 hours laboratory.
Transfer Credit: CSU

COMM 101 COMMUNICATION FIELD PRACTICE

1 unit

Prerequisites: *Maintain enrollment in 7 units or more including field practice; enrollment in or completion of at least one of the following: SPCH 005AB, 018, TVR 002B, 014A-B, 016A, 018, 021, 106A-B, THRT 012A.*
Student projects and supervised on-campus experience in speech pathology, telecommunications, theater arts (including on-campus radio and television production), engineering, newswriting, theater arts technology. **Pass/no pass** grading. Total of 90 hours field practice.

COMM 102 COMMUNICATION FIELD PRACTICE

2 units

Prerequisites: *Maintain enrollment in 7 units or more including field practice; enrollment in or completion of at least one of the following: SPCH 005AB, 018, TVR 002B, 014A-B, 016A, 018, 021, 106A-B, THRT 012A.*
Student projects and supervised on-campus experience in speech pathology, telecommunications, theater arts (including on-campus radio and television production), engineering, newswriting, theater arts technology. **Pass/no pass** grading. Total of 180 hours field practice.

COMPUTER INFORMATION SYSTEMS

(Business Division)

CIS 001 INTRODUCTION TO COMPUTERS

3 units

Computer hardware, software, operating systems, file management, local area networks, Internet, digital data representation, and digital media. Computer technology related issues and future trends. Hands-on experience with word processing and presentation software. **No credit** if taken after CIS 010. Total of 36 hours lecture and 54 hours laboratory.
Transfer Credit: CSU; UC

CIS 010 INTRODUCTION TO INFORMATION SYSTEMS

3 units

Foundation course including hardware, system and application software, networking, programming languages, systems analysis and design, information systems and usage of the Internet, the web, and E-Commerce. Hands-on experience with programming, webpage design, spreadsheets, database and Internet software. Total of 36 hours lecture and 54 hours laboratory.
*Transfer Credit: CSU; UC. *C-ID: ITIS 120*

CIS 011 INFORMATION AND COMMUNICATION TECHNOLOGY ESSENTIALS

4 units

Installation, configuration, and troubleshooting of computer hardware, mobile devices, printers, software, operating systems, networking, security, and operational procedures. Total of 54 hours lecture and 54 hours laboratory.
*Transfer Credit: CSU. *C-ID: ITIS 110*

CIS 012 INTRODUCTION TO PROGRAMMING

3 units

Prerequisite: *Enrollment in or completion of CIS 010.*
Foundation course in programming for students with little or no programming knowledge or experience. Topics will cover the building blocks of a program, life cycle of a program, user-developer relationships, design interface features, instruction components, and basic coding elements. Total of 36 lecture hours and 54 hours of laboratory.
Transfer Credit: CSU; UC

CIS 014 C++ PROGRAMMING

3 units

Prerequisites: *CIS 012.*
Foundations of C and C++. Operators, functions, arrays, pointers, structures, unions, classes, C++ data types, polymorphism, inheritance, encapsulation, virtual functions, templates, file processing, control structures, and an emphasis on object oriented program design. Total of 36 hours lecture and 54 hours laboratory.
Transfer Credit: CSU; UC

CIS 016 JAVA PROGRAMMING

3 units

Prerequisites: *CIS 012.*
Java programming language: classes, methods, operators, encapsulation, polymorphism, inheritance, dynamic binding, file processing, control structures, function overloading, use of AWT, creation and use of applets in Internet applications, and an emphasis on object oriented program design. Total of 36 hours lecture and 54 hours laboratory.
Transfer Credit: CSU; UC

*Course Identification Numbering System (C-ID)

CIS 020 INDEPENDENT STUDY

1 unit

Prerequisites: *Minimum grades of C in 12 units of computer science or computer information systems courses.* Individual projects; problem formulation, design, documenting, programming and testing. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

CIS 022 INTRODUCTION TO THE INTERNET

3 units

Prerequisite: *CIS 010.*

General overview of computer systems, networking, and the Internet. World Wide Web, email, telnet, ftp, newsgroups, finding information on the Internet, and basic Web page creation. Legal, ethical, privacy and security issues on the Internet. Total of 90 hours lecture.

Transfer Credit: CSU

CIS 030 FUNDAMENTALS OF COMPUTER NETWORKS

3 units

Introduction to network applications; fundamental communication concepts; data communication hardware; protocols and software; microcomputers and communications; network configurations, management and security. Total of 54 hours lecture and 18 hours laboratory.

Transfer Credit: CSU

CIS 031 INTRODUCTION TO DATABASE MANAGEMENT SYSTEMS

3 units

Prerequisite: *CIS 011.*

Introduction to concepts in data and information management centered around the core skills of identifying organizational information requirements, conceptual data modeling techniques, conversion of conceptual data models into relational data models, verification of structural characteristics with normalization techniques, and implementation of a relational database using an industrial-strength database management system. Overview of data quality and data security tasks, database application development, and data and information management technologies that provide decision support capabilities under the broad business intelligence umbrella. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU. UC credit under review.

CIS 036 INTRODUCTION TO VISUAL BASIC

3 units

Prerequisite: *CIS 010.*

Recommended Preparation: *CIS 012.*

Introduction to programming using Visual Basic. Course will cover guidelines to build a simple application; and how to create a graphical user interface (GUI) design uti-

lizing various design tools. Fundamentals will be presented on basic coding elements, data file manipulation, use of variables, constants, selection and branching structures, looping, data validation, sub and function procedures, string manipulation, and creating and accessing arrays. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC

CIS 038 ADVANCED VISUAL BASIC

3 units

Prerequisite: *CIS 036.*

Advanced techniques in the use of VISUAL BASIC, such as user-friendly menus, internal program documentation and program structure; subroutines, file manipulation, special functions, problem solving and graphics. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC

CIS 040 UNIX/LINUX ADMINISTRATION

3 units

Recommended Preparation: *CIS 011.*

Installation, configuration, and troubleshooting of Unix/Linux operating systems in a small or enterprise environment: types of installation, device drivers, kernel, process management, scripting, packages, networking services, system services, storage, cloud computing, remote management, updates, monitoring, system and data recovery, authorization and authentication, and advanced management tools. Preparation for the CompTIA Linux+, LPIC-1: Certified Linux Administrator, and LPIC-2: Certified Linux Engineer certification exams. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU

CIS 041 CCNA R&S: INTRODUCTION TO NETWORKS

3 units

Recommended Preparation: *CIS 011.*

Architecture, structure, functions, components, and models of the Internet and other computer networks. Principles and structure of IP (Internet Protocol) addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for further study of computer networks. Use of the OSI (Open Systems Interconnection) and TCP/IP (Transmission Control Protocol / Internet Protocol) layered models to examine the nature and roles of protocols and services at the application, network, data link, and physical layers. Preparation for the CompTIA Network+, Cisco CCENT and CCNA Routing and Switching certification exams. **No credit** if taken after CIS 161. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC credit under review.

CIS 042 CCNA R&S: ROUTING AND SWITCHING ESSENTIALS

3 units

Prerequisites: *CIS 041 or CIS 161.*

Configuration and troubleshooting of static routing, Routing Information Protocol (RIP), Open Shortest Path First (OSPF), Virtual LANs (VLANs), Inter-VLAN routing, Access Control Lists (ACLs), Dynamic Host Configuration Protocol (DHCP), and Network Address Translation (NAT). Preparation for the Cisco CCENT and CCNA Routing & Switching certification exams. **No credit** if taken after CIS 162. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC credit under review.

CIS 045 MCSA: MICROSOFT WINDOWS SYSTEM ADMINISTRATION 1

4 units

Prerequisite: *CIS 011.*

Recommended Preparation: *CIS 010.*

Deploy, configure, maintain, troubleshoot, and support server hardware and server software technologies in a small to enterprise environment, including a cloud computing environment with an emphasis on the administration of Microsoft Windows Server operating systems infrastructure; storage solutions, server virtualization using Hyper-V, failover clustering, Network Load Balancing, ADDS, DNS, DHCP, MDT, WDS, WSUS, IPAM, remote access, DirectAccess, VPNs, BranchCache, network virtualization, network controller, IPv4 and IPv6, system and data recovery. Preparation for the CompTIA Server+ and Microsoft MCSA Windows Server certification exams. Total of 54 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC credit under review.

CIS 050 SURVEY OF E-COMMERCE/ E-BUSINESS TECHNOLOGY

3 units

Prerequisite: *CIS 010.*

Fundamentals of E-commerce technologies which will build student skills and knowledge in developing, designing and managing a business on the internet. Topics include, but are not limited to, current technical issues, such as internet, intranet, extranet, tools, and technology; and business issues such as the application of business concepts, current practice, and strategic opportunities that surround the emergence of E-Commerce. Students will develop an understanding of technology infrastructure that enables e-commerce and the impact to e-commerce on business and the economy. Total of 90 hours lecture.

Transfer Credit: CSU

CIS 055 INTRODUCTION TO E-BUSINESS PRACTICES

3 units

Prerequisite: *CIS 010.*

Plan, design, build, tune, troubleshoot, secure, and manage a fully operational e-commerce site; client-server con-

figuration, website evaluation strategies, electronic data interchange, revenue models, encryption, and security. Total of 90 hours lecture.

Transfer Credit: CSU

CIS 060 E-COMMERCE FUNDAMENTALS

3 units

Prerequisite: *CIS 010.*

Basic rules of business, law, and marketing will be expanded, contracted, and applied for E-commerce, as well as an investigation of rules created specifically for internet business. Total of 90 hours lecture.

Transfer Credit: CSU

CIS 061 INTRODUCTION TO INFORMATION SYSTEMS SECURITY

3 units

Prerequisite: *CIS 011 and either CIS 041 or CIS 161.*

Principles of information systems security related to providing, managing, and maintaining secure systems at various organizational levels. Administration of network protocols, analysis of hardware/software processes, communications, applications, policies, and procedures. Principles of cybersecurity, risk management/assessments, reporting, dealing with social challenges and demands, legal and ethical issues, security planning, physical security, and technology. Preparation for the CompTIA Security+ certification exam. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC credit under review.

CIS 062 INTRODUCTION TO SYSTEMS ANALYSIS

3 units

Prerequisite: *CIS 010.*

Information systems and the discipline of systems analysis to analyze solutions to a variety of realistic IT problems. Develops skills in applying the tools, techniques, and concepts of systems analysis to information systems development in order to identify and apply constraints to determine feasibility. Apply criteria to select the best information technology solution from alternatives. Total of 54 hours lecture.

Transfer Credit: CSU

CIS 063 INTRODUCTION TO CYBERSECURITY: ETHICAL HACKING

3 units

Prerequisite: *CIS 061.*

Concepts, principles, and techniques for attacking and disabling a network within the context of properly securing a network. Emphasis on network attack methodologies and appropriate defenses and countermeasures. Preparation for the EC Council's Certified Ethical Hacking certification exam. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC credit under review.

CIS 065 COMPUTER FORENSICS FUNDAMENTALS

3 units

Prerequisite: *CIS 061.*

Methods used to properly conduct a computer forensics investigation based on objectives of the International Association of Computer Investigative Specialists (IACIS) certification. Topics covered include an overview of computer forensics as a profession, the computer investigation process, ethics, operating systems boot processes and disk structures, data acquisition and analysis; technical writing, and computer forensics tools. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC credit under review.

CIS 066 ASSEMBLY LANGUAGE PROGRAMMING

3 units

Prerequisites: *CS 002 or CIS 010; and one of the following: CS 010, CS 012, CS 043, CIS 036, CIS 064, CIS 134.*

Computer organization and data structures; machine instruction sets; macros; subroutines; input/output control system; binary, octal and hexadecimal numbers systems; 8088 assembly mnemonics. Total of 90 hours lecture.

Transfer Credit: CSU; UC

CIS 074 INTRODUCTION TO OBJECT ORIENTED SYSTEMS ANALYSIS AND DESIGN

3 units

Prerequisite: *CIS 016.*

Introduction to object-oriented systems analysis and design using unified modeling language (UML). Design solutions using the system development life cycle; determination of information system requirements. Use cases, use case diagrams, domain models, interaction diagrams, and design class diagrams. Total of 90 hours lecture.

Transfer Credit: CSU

CIS 080 MICROCOMPUTER APPLICATIONS

3 units

IC3 Certification training and preparation. Includes an overview of computers as well as introduction to Microsoft Word, Excel, PowerPoint, Access, Internet and E-mail. Total of 54 hours lecture.

Transfer Credit: CSU

CIS 115 MICROCOMPUTER FIELD PRACTICE

2 units

Prerequisites: *CIS 030 and maintain enrollment of 7 units or more, including field practice.*

Work in industry installing hardware and software; training users on uses of the microcomputer. Pass/no pass grading. Total of 180 hours field practice.

CIS 132 FOURTH GENERATION LANGUAGES

3 units

Prerequisite: *Any other CIS course.*

An introduction to common non-procedural languages with emphasis on SQL. Table creation, queries, reporting from files, building systems, accessing a database. Total of 54 hours lecture.

CIS 133 LOCAL AREA NETWORKS (LANs)

3 units

Prerequisite: *CIS 010.*

A comprehensive overview of LANs. Analysis of transmission media, systems architectures, and cost/benefit tradeoffs. Interconnectivity issues. Prepares students for Industry-level certification. Total of 54 hours lecture and 36 hours laboratory.

CIS 135 CLIENT/SERVER DEVELOPMENT

1 unit

Systems development guidelines and principles that govern the client/server environment, what they are, and how they are implemented. Practical solutions to building sound and stable client/server applications. Hardware and software components relevant to a client/server architecture and application implementation. Total of 18 hours lecture and 36 hours laboratory.

CIS 137 MCSA: MICROSOFT WINDOWS CLIENT OPERATING SYSTEMS

3 units

Recommended preparation: *CIS 011.*

Installation, configuration, and troubleshooting of Microsoft Windows client operating systems in a small or enterprise environment: different types of installation, device drivers, networking services, storage, apps, remote management, updates, monitoring, system and data recovery, authorization and authentication, and advanced management tools. Preparation for the Microsoft Certified Solutions Associate (MCSA): Windows client operating systems certification exam. Total of 36 hours lecture and 54 hours laboratory.

CIS 139 WINDOWS SERVER

3 units

Prerequisite: *CIS 137.*

Understanding the Windows Server operating system. Coverage of Windows Server architecture and features. Installation and configuration of Windows Server. Security, administration, and implementation in a networking environment. Managing groups, folders, files, and object security. Remote access and virtual private networks. Managing internet and network interoperability. Prepares students for industry-level certification. Total of 54 hours lecture and 36 hours laboratory.

CIS 141 MCSE: MICROSOFT EXCHANGE SERVER ADMINISTRATION

3 units

Prerequisite: *CIS 140B*.

Install, configure and manage Microsoft Exchange Server in a Windows Active Directory environment. Configure Microsoft Exchange Server roles. Manage users, mailboxes, security, and database. Configure connectors, antivirus and anti-spam systems, transport rules and message compliance, archiving, policies, client connectivity, public folders, and high availability. Backup and restore Exchange Server. Total of 54 hours lecture and 54 hours laboratory.

CIS 142 ADMINISTERING MICROSOFT SQL SERVER DATABASES

3 units

Prerequisite: *CIS 139*.

Install, configure, and support Microsoft SQL Server and database including, managing storage, setting up user accounts, assigning permissions, securing SQL Server, backing up and restoring databases, performing other administrative tasks, transferring data in and out of SQL Server databases, diagnosing system problems, and ensuring high-availability. Total of 54 hours lecture and 36 hours laboratory.

CIS 142A MCSA SQL: MICROSOFT DATABASE DEVELOPMENT

3 units

Recommended Preparation: *CIS 011 and CIS 031*.

Program databases and manage and query data with Microsoft Transact-SQL language. Design, implement, and maintain SQL Databases using Microsoft SQL Server product features and tools. Preparation for the Microsoft Certified Solutions Associate (MCSA) SQL: Database Development certification. Total of 36 hours lecture and 54 hours laboratory.

CIS 142B MCSA SQL: MICROSOFT DATABASE ADMINISTRATION

3 units

Prerequisites: *CIS 045 and CIS 142A*.

Install, configure, and maintain Microsoft SQL Server and databases including managing storage, setting up user accounts, authenticating and authorizing users, securing SQL Server, backing up and restoring databases, performing other administrative tasks, transferring data in and out of SQL Server databases, diagnosing system problems, and ensuring high-availability. Preparation for the Microsoft Certified Solutions Associate (MCSA) SQL: Database Administration certification. Total of 36 hours lecture and 54 hours laboratory.

CIS 142C MCSA SQL: MICROSOFT BUSINESS INTELLIGENCE DEVELOPMENT

3 units

Prerequisite: *CIS 142A*.

Implementation of a data warehouse platform using Microsoft SQL Server to support Business Intelligence (BI) solutions. Topics include SQL Server Integration Services, SQL Server Data Quality Services and SQL Server Master Data Services. Preparation for the Microsoft Certified Solutions Associate (MCSA) SQL: Business Intelligence certification. Total of 36 hours lecture and 54 hours laboratory.

CIS 146 MCSA: MICROSOFT WINDOWS SYSTEM ADMINISTRATION 2

4 units

Prerequisite: *CIS 045*.

Implementation and administration of Active Directory Domain Services (AD DS), distributed AD DS, AD DS sites and replication, users and groups, Group Policy Objects (GPOs), Azure Active Directory, Active Directory Certificate Services (AD CS), Active Directory Rights Management Services (AD RMS), and Active Directory Federation Services (AD FS). Preparation for the Microsoft MCSA Windows Server certification exam. Total of 54 hours lecture and 54 hours laboratory.

CIS 151 VMWARE VSPHERE: INSTALL, CONFIGURE, MANAGE

3 units

Prerequisite: *CIS 011*.

Installation, configuration and management of VMware vSphere which includes ESXi hosts and vCenter server with hands-on training and lecture. Upon completion of this course, students can take VCP (VMware Certified Professional) exam. Total of 36 hours lecture and 54 hours of laboratory.

CIS 163 CCNA R&S: SCALING NETWORKS

3 units

Prerequisite: *CIS 042 or CIS 162*.

Spanning Tree Protocols (STP), VLAN Trunk Protocol (VTP), Wireless LAN, Multi-area Open Shortest Path First (OSPF), Enhanced Interior Gateway Routing Protocol (EIGRP), Wireless LANs, and Cisco IOS software management. Preparation for the CCNA Routing & Switching certification exam. Total of 36 hours lecture and 54 hours laboratory.

CIS 164 CCNA R&S: CONNECTING NETWORKS

3 units

Prerequisite: *CIS 163*.

Point-to-Point Protocol (PPP), Frame Relay, Network Address Translation (NAT), broadband solutions, Virtual Private Networks (VPNs), Syslog, Simple Network Management Protocol (SNMP), Netflow, and network troubleshooting. Preparation for the CCNA Routing & Switching certification exam. Total of 36 hours lecture and 54 hours laboratory.

CIS 165 CCNP R&S ROUTE: IMPLEMENTING IP ROUTING

4 units

Prerequisite: *CCNA Certificate or equivalent.*

Recommended preparation: *CCNA Certificate.*

Authorized Cisco Networking Academy CCNP R&S ROUTE course with lecture and hands-on lab. Advanced topic in Cisco routing including how to design, configure, maintain and scale routed networks that are growing in size and complexity. Using Cisco routers connected in LANs and WANs typically found at medium to large network sites. Emphasis toward preparing for the Cisco Certified Network Professional (CCNP) examination. Total of 54 hours lecture and 72 hours laboratory.

CIS 166 CCNP: BUILDING CISCO REMOTE ACCESS NETWORKS

4 units

Prerequisite: *CIS 165.*

How to design, configure, maintain, and scale a remote access network using Cisco routers and switches. Build and configure a remote access network to interconnect central sites to branch offices and home office/telecommuters, control access to the central site, and maximize bandwidth utilization over the remote links. Emphasis toward preparing for the Cisco Certified Network Professional (CCNP) examination. Total of 54 hours lecture and 72 hours laboratory.

CIS 167 CCNP R&S IMPLEMENTING CISCO IP SWITCHED NETWORKS

4 units

Prerequisite: *CIS 165.*

How to build and manage campus networks using multilayer switching technologies. Covers campus network design, VLANs, Spanning-Tree Protocol (STP), inter-VLAN routing, Multilayer Switching (MLS), Cisco Express Forwarding (CEF), Hot Standby Router Protocol (HSRP). Securing the switched network model, including setting passwords, local and remote login, modifying default privilege levels, and applying Layer 3 traffic management techniques to the campus network. Very detailed information regarding the role of switches in multicasting. Emphasis toward preparing for the Cisco Certified Network Professional (CCNP) examination. Total of 54 hours lecture and 72 hours laboratory.

CIS 168 CCNP TSHOOT: TROUBLESHOOTING AND MAINTAINING IP NETWORKS

4 units

Prerequisite: *CIS 167.*

Diagnose, isolate, and correct network failures and performance problems. Identify troubleshooting targets and use appropriate troubleshooting tools to manage network.

Emphasis toward preparing for the Cisco Certified Network Professional, Troubleshooting (CCNP TSHOOT) examination. Total of 54 hours lecture and 72 hours laboratory.

CIS 169A CCNA SECURITY

4 units

Enrollment Limitation: *Valid CCNA Certification or equivalent.*

Design and implement security solutions that will protect the network from outside attacks. Emphasis on security policy design and management, security technologies, and solutions, firewall and secure router design, installation, configuration, and maintenance, implementation of AAA and VPN using routers and firewalls. A part of Cisco Networking Academy Program preparing students for CCNA Security certification exam. Total of 54 hours lecture and 72 hours laboratory.

CIS 169B NETWORK SECURITY 2

4 units

Prerequisite: *CIS 169A.*

Focuses on the overall security process in a network including security policy design and management, security technologies, products, and solutions. Firewall and secure router design, installation, configuration, and maintenance along with intrusion prevention system implementation using routers and firewall will be covered. VPN implementation using routers and firewalls will be covered. A part of Cisco Networking Academy Program preparing students for CCSP (Cisco Certified Security Professional) certificate. Total of 72 hours lecture and 54 hours laboratory.

CIS 170 CISCO IP TELEPHONY

4 units

Prerequisite: *CIS 166.*

Introduction to converged voice and data networks as well as the challenges faced by its various technologies. Presents Cisco solutions and implementation considerations to address those challenges. Total of 72 hours lecture and 54 hours laboratory.

CIS 190 WEB SERVER DEVELOPMENT

3 units

Prerequisite: *CIS 011 or CIS 136.*

Foundations of the Internet and the World Wide Web: Intranets, technical aspects of the Web, Internet and Web Servers, hypermedia, HTML, scripting languages, Web page development, basic data communication and networking, Web browsers, search engines, file transferring, email, FTP, HTTP, POP, SMTP, TCP/IP, URL's, Web Security, and emphasis on the development of a Web site. Total of 54 hours lecture and 36 hours laboratory.

CIS 192 INTRODUCTION TO WEB AUTHORING

3 units

Principles of web page design using HTML, XHTML, CSS, and JavaScript. Practical solutions to building multimedia-based Web Pages using emerging technologies. Total of 36 hours lecture and 54 hours laboratory. **No credit** if taken after GRFX 192.

CIS 193 WEB APPLICATIONS USING JAVASCRIPT

3 units

Prerequisite: CIS 012.

Web application programming using JavaScript. Course covers adding and manipulating JavaScript code; handling expressions, debugging and error handling; working with browsers, Object-Oriented programming, manipulating strings and arrays; handling security, programming interfaces with today's devices, updating Web pages with Ajax and HTTP, requesting and receiving server data; coding and implementing JQuery's built-in effects. Total of 36 hours lecture and 54 hours laboratory.

CIS 197 WEB APPLICATIONS USING PHP & MYSQL

3 units

Prerequisite: CIS 012.

PHP and MySQL, an open source relational database commonly used with PHP. Object-oriented programming to build professional, database-driven Web sites that incorporate authentication and security. Includes a comprehensive Web development project that applies core concepts resulting in a PHP code demonstration site. Total of 36 hours lecture and 54 hours laboratory.

CIS 199 WEB SCRIPTING AND WEB SERVER SECURITY

3 units

Prerequisite: CIS 012.

Web Scripting and Web Security from both the client and server-side. Fundamentals in markup languages (HTML/XHTML), scripting languages like JavaScript, PHP, Ajax, and ASP.NET, SQL, Ruby on Rails, and the introduction to mobile software development. Total of 36 hours lecture and 54 hours laboratory.

COMPUTER SCIENCE

(Mathematics Division)

CS 001 INTRODUCTION TO COMPUTERS AND PROGRAMMING

5 units

The history of computing, basic computer operation, the notion of an algorithm, variable definitions, expressions, input/output, branches, loops, functions, parameters,

selection, iterative techniques, arrays, strings. **For** non-engineering and non-science majors or for students considering taking CS 002 but needing additional preparation. **No credit** if taken after CS 002. Total of 72 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC

CS 002 FUNDAMENTALS OF COMPUTER SCIENCE I

4 units

Prerequisite: MATH 007B or 009.

First programming course in the series of Introduction to Computer Science courses. Problem solving through structured programming of algorithms on computers using the basics of the C++ object-oriented language. Includes variables, expressions, input/output (I/O), branches, looping constructs, functions, argument passing, single and double dimensional arrays, strings, file I/O, C++ vectors, software design principles, testing, and debugging techniques. Students will be required to develop at least one computer program in excess of 600 lines of code. **For** STEM Majors: Computer Science, Computer Engineering, Mathematics, and Science majors, but open to all qualified students. Total of 54 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC. *C-ID: COMP 122

CS 003A FUNDAMENTALS OF COMPUTER SCIENCE II (C++)

4 units

Prerequisite: CS 002.

Second programming course in the series of Introduction to Computer Science courses. Continuation of the C++ language including: classes, structures and unions, overloaded operators and friend functions, pointers and dynamic arrays, function pointers, functors, abstract data types and container objects polymorphisms, inheritance and multiple inheritance, templates and the Standard Template Library, exception handling, namespaces and separate compilation, recursion, creation of libraries, advanced software design, testing, and debugging techniques. **May be taken concurrently** with CS 003B. **For** STEM Majors: Computer Science, Computer Engineering, Mathematics, and Science majors, but open to all qualified students. Total of 54 hours lecture and 72 hours laboratory.

Transfer credit: CSU; UC

CS 003B FUNDAMENTALS OF COMPUTER SCIENCE II (JAVA)

4 units

Prerequisite: CS 002.

Alternate second programming course in the series of Introduction to Computer Science courses. JAVA language including: Data types, variables, control structures, GUI and Object Oriented Design, user-defined methods, method overloading, user-defined classes and abstract data

types, accessor and mutator methods, collections, single and multidimensional arrays, polymorphisms, inheritance, exception handling, recursion, searching and sorting algorithms, creation of libraries, advanced software design, testing, and debugging techniques web-based applets. **May be taken concurrently** with CS 003A. **For STEM Majors:** Computer Science, Engineering, Mathematics, and Science majors, but open to all qualified students. Total of 54 hours lecture and 72 hours laboratory.

Transfer credit: CSU; UC

CS 003C FUNDAMENTALS OF COMPUTER SCIENCE II (PYTHON)

4 units

Prerequisite: CS 002.

Second programming course in the series of Introduction to Computer Science courses. Topics of the Python language include: data types, variables, control structures, Python Objects and Oriented Design, standard and advanced mathematical libraries, tool-chain use and Python Frameworks, user-defined classes and abstract collections, single and multidimensional arrays, Python lists, tuples, collections, and dictionaries. **May be taken concurrently** with CS 003A or CS 003B. **Recommended** for STEM Majors: Computer Science, Engineering, Mathematics, and Science majors, but open to all qualified students. Total of 54 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

CS 006 INTRODUCTION TO APPLIED LOGIC DESIGN

4 units

Prerequisite: CS 002.

Characteristics of digital systems, truth functions, Boolean algebra, switching devices, minimization of Boolean functions, single and multiple output circuits, Mealy and Moore networks. Karnaugh maps, state tables. Design and optimization of combinational circuits and sequential circuits. **Recommended** completion of or concurrent enrollment in Math 022. **For** Computer Science, Computer Engineering, Mathematics, and Science majors, but open to all qualified students. Total of 54 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC

CS 008 FUNDAMENTALS OF COMPUTER SCIENCE III – DATA STRUCTURES

4 units

Prerequisite: CS 003A or 003B.

Third programming course in the series of Introduction To Computer Science courses. Data structure concepts in designing and implementing algorithms taught in the C++ programming language. Lists, arrays, binary trees, b-trees, AVL trees, heaps, stacks, queues, priority queues, hashing and graphs. Searching, sorting and merging algorithms. Advanced concepts and manipulation of C++ pointers, pointers to functions in C++ class members, functors and

advanced pointer arithmetic. At least two programming assignments of 1,500 to 2,500 lines of C++ code will be required of each individual student. At least one two student team project of 3,000 to 4,000 lines of code will be required. **For STEM Majors:** Computer Science, Computer Engineering, Mathematics, and Science majors, but open to all qualified students. Total of 54 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

CS 018 UNIX SCRIPTING WITH BASH

4 units

Prerequisite: CS 002.

Shell scripting, script parameters, looping, piping, background processing, pattern manipulation, functions, subroutines, process forking, major BASH utilities, AWK scripting. **For** Computer Science, Computer Engineering, Mathematics, and Science majors, but open to all qualified students. Total of 54 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

CS 020 INDEPENDENT STUDY

1 unit

Prerequisites: Completion of three other computer science courses.

Individual projects; problem formulation, design, documenting, programming and testing. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

CS 038 INTRODUCTION TO SOFTWARE ENGINEERING

5 units

Prerequisite: CS 008.

Introduction to the concepts, methods, and current practice of software engineering and the software life cycle. Study of large-scale software production; software life cycle models as an organizing structure; principles and techniques appropriate for each stage of production. Laboratory work involves a group project illustrating these elements. Total of 90 hours lecture.

Transfer Credit: CSU; UC

CS 045 DISCRETE STRUCTURES WITH COMPUTER SCIENCE APPLICATIONS

5 units

Prerequisite: CS 002.

Specification, development and analysis of algorithms. Sets, relations and functions. Logic and mathematical structures used in computer science. Introduction to combinatorics. Programming projects to exemplify these concepts. **For** Computer Science, Computer Engineering, Mathematics, and Science majors, but open to all qualified students. Total of 72 hours lecture 54 hours laboratory.

Transfer Credit: CSU; UC

CS 066 ASSEMBLY LANGUAGE PROGRAMMING FOR THE SCIENCES AND MATHEMATICS

4 units

Prerequisite: CS 002.

Number systems and their rules for arithmetic; basic computer organization concepts; register manipulation, pseudocode development; instruction formats, addressing modes, parameter passing using a stack frame; assemblers and linkage editors; modular program design and development. **For** Computer Science, Computer Engineering, Mathematics, and Science majors, but open to all qualified students. Total of 54 hours lecture and 54 hours laboratory. *Transfer Credit: CSU; UC*

CS 080 SEMINAR IN COMPUTER SCIENCE AND COMPUTER ENGINEERING

2 units

Introduces students to current topics, career paths, and current research topics within Computer Science and Computer Engineering disciplines. **For** Computer Science, Computer Engineering, Mathematics, and Science majors but open to all qualified students. Total of 36 hours lecture. *Transfer Credit: CSU*

COSMETOLOGY

(Community Education Center)

COSM 100 INTRO TO COSMETOLOGY

9 units

Fundamental theory, techniques, and procedures on basic hair, skin, and nail care. Lectures, demonstrations and practical procedures in basic hair, skin, and nail care with emphasis on safely and client protection. Other topics include California State Board of Barbering and Cosmetology rules and regulations, health and safety codes, general science as it relates to cosmetology, infection control, chemistry, and electricity. Total of 81 hours lecture and 243 hours laboratory.

COSM 101 HAIRCUTTING

4¹/₂ units

Prerequisite: COSM 100.

Theory of advanced haircutting techniques and procedures. Lectures, demonstrations and practical procedures in haircutting terminology, safety precautions, disinfection, proper use and handling of cutting implements, and client consultation. Total of 36 hours lecture and 135 hours laboratory.

COSM 102 HAIR COLOR

4¹/₂ units

Prerequisite: COSM 100.

Different types of hair color applications and techniques for various hair color categories. Hands-on workshops with

semi, demi, and permanent hair color to include: special effects hair color applications, lighteners, foiling, weaving/slicing, combination color design patterns, alternation/partial highlights, lowlighting, gray coverage formulations, contrast-zones color patterns, and toner applications. Total of 36 hours lecture and 135 hours laboratory.

COSM 103 HAIRSTYLING

4¹/₂ units

Prerequisite: COSM 100.

Theory of professional hairstyling techniques and procedures. Lectures, demonstrations and practical procedures in wet hair styling, thermal styling and long hair styling. Total of 36 hours lecture and 135 hours laboratory.

COSM 104 CHEMICAL TEXTURE

4¹/₂ units

Prerequisite: COSM 100.

Theory of professional chemical texturizing techniques and procedures. Lectures, demonstrations and practical procedures in permanent waving, chemical relaxing, and soft curl re-forming. Total of 36 hours lecture and 135 hours laboratory.

COSM 105 SKIN CARE

4¹/₂ units

Prerequisite: COSM 100.

Skin disorders and diseases and the different types of skin services offered in the salon. Total of 36 hours lecture and 135 hours laboratory.

COSM 106 NAIL CARE

4¹/₂ units

Prerequisite: COSM 100.

Study of nail disorders and diseases and the different types of nail services offered in the salon. Total of 36 hours lecture and 135 hours laboratory.

COSM 107 STATE BOARD

4¹/₂ units

Prerequisite: COSM 100.

Preparation for the State Board examination to become licensed cosmetologists. Emphasis is placed on State Board theoretical and practical topics. Total of 36 hours lecture and 135 hours laboratory.

COSM 108 PROFESSIONAL DEVELOPMENT

4¹/₂ units

Proper steps to take for seeking employment, customer service, business ethics, marketing, time management, and the advantages and disadvantages of owning a salon or renting a booth. Total of 36 hours lecture and 135 hours laboratory.

COSM 109 SALON

3 units

Prerequisite: *COSM 100.*

Practical salon experience working on clients. Total of 162 hours of laboratory.

COSM 114A-D COSMETOLOGY THEORY AND LABORATORY

36 units

Prerequisite: *COSM 114B-D each require the satisfactory completion of the preceding course in this sequence. COSM 115 may be substituted for COSM 114A.*

Principles of cosmetology including sanitation, state regulations, business methods and chemistry. Related theory and procedures for hair shaping, hair styling, chemical hair treatments, scalp treatments, hair coloring, manicuring, facials and makeup. **Each course** 9 units, and a total of 90 hours lecture and 270 hours laboratory.

COSM 115 COSMETOLOGY THEORY AND LABORATORY

8 units

Principles of cosmetology including sanitation, state regulations, business methods and chemistry. Related theory and procedures for hair shaping, hair styling, chemical hair treatments, scalp treatments, hair coloring, manicuring, facials and makeup. **Eight weeks. Summer** intersession. Total of 80 hours lecture and 240 hours laboratory.

COSM 116A ADVANCED PRINCIPLES OF COSMETOLOGY

8 units

Prerequisite: *COSM 114A or 115.*

Principles of cosmetology including sanitation, state regulations, business methods and chemistry. Related theory and procedures for hair shaping, hair styling, chemical hair treatments, scalp treatments, hair coloring, manicuring, facials and makeup. **Eight weeks. Summer** intersession. Total of 80 hours lecture and 240 hours laboratory.

COSM 116B ADVANCED PRINCIPLES OF COSMETOLOGY

4 units

Prerequisite: *COSM 114A.*

Principles of cosmetology including sanitation, state regulations, business methods and chemistry. Related theory and procedures for hair shaping, hair styling, chemical hair treatments, scalp treatments, hair coloring, manicuring, facials and makeup. **Eight weeks. Summer** intersession. Total of 40 hours lecture and 120 hours laboratory.

COSM 117A COSMETOLOGY THEORY AND LABORATORY

3 units

Prerequisite: *COSM 114A-D.*

Principles of cosmetology including sanitation, state regulations, business methods and chemistry. Related theory and procedures for hair shaping, hair styling, chemical hair treatments, scalp treatments, hair coloring, manicuring, facials and makeup. **Three weeks.** Total of 15 hours lecture and 45 hours laboratory.

COSM 117B COSMETOLOGY THEORY AND LABORATORY

3 units

Prerequisite: *COSM 117A.*

Principles of cosmetology including sanitation, state regulations, business methods and chemistry. Related theory and procedures for hair shaping, hair styling, chemical hair treatments, scalp treatments, hair coloring, manicuring, facials and makeup. **Three weeks.** Total of 15 hours lecture and 45 hours laboratory.

COSM 150 INSTRUCTIONAL TECHNIQUES IN COSMETOLOGY

10 units

Prerequisite: *State of California Cosmetology License.*

Course is designed for licensed cosmetologists who want to become cosmetology instructors. Introduces principles of learning, effective teaching methods and techniques, classroom management, and organizational skills. Emphasis is placed on planning, presenting, and evaluating lessons in both the classroom and clinic/laboratory setting. Total of 80 hours lecture and 240 hours laboratory.

COSM 151 INSTRUCTIONAL TECHNIQUES IN COSMETOLOGY

10 units

Prerequisite: *COSM 150.*

This course is designed for licensed cosmetologists who want to become cosmetology instructors. Continues the principles of learning, effective teaching methods, techniques and organizational skills, and introduces lesson presentation, classroom management and use of technology for curriculum delivery. Emphasis is placed on classroom delivery and evaluation of student performance. Total of 80 hours lecture and 240 hours laboratory.

COUNSELING

(Counseling)

COUN 010 INTRODUCTION TO COLLEGE

1 unit

Recommended preparation: *Completion of placement assessment.*

Designed to help students successfully navigate the higher education system. Understanding of college policies and

procedures, campus services and resources and associate degree and transfer requirements. Students will develop an individual educational plan based on their specific academic/career goal(s). **Short term class.** Total of 18 hours lecture.

Transfer Credit: CSU

COUN 011 LEARNING STRATEGIES AND COLLEGE SKILLS DEVELOPMENT

1 unit

Analysis of college success factors and learning styles of student achievement. Development of strategies for success in educational and work environments. Organizing tasks involved when studying and the tools to do it. **Short term class.** Total of 18 hours lecture.

Transfer Credit: CSU

COUN 012 PERSONAL GROWTH AND DEVELOPMENT

3 units

A comprehensive course that integrates personal and professional growth through the development of effective communication skills, positive self-image and self-esteem, and strategies for problem solving and decision making. Analysis of life course events, such as the development of career and educational objectives. Emphasis is on personal health assessment and strategies for coping with stress. Total of 54 hours lecture.

Transfer Credit: CSU

COUN 013 PEER MENTORING SKILLS

3 units

Principles and practices of peer mentoring fellow students new to the college setting. Practice basic helping skills along with learning how to utilize knowledge of higher education, matriculation and college success strategies. **No credit** if taken after Coun 103. Total of 54 hours lecture.

Transfer Credit: CSU

COUN 017 CAREER PLANNING

2 units

Career research and planning using assessments of interests, values, skills, and temperament. Exploration of job duties and educational/training requirements. Job search skills. Total of 36 hours lecture.

Transfer Credit: CSU

COUN 020 INDEPENDENT STUDY

1 unit

Prerequisite: COUN 010.

Individualized projects, research techniques, written reports. Total of 54 hours laboratory.

Transfer Credit: CSU

COUN 030 PERSONAL EXPLORATION OF LEADERSHIP

3 units

Introduction to the fundamental elements of leadership. Exploration of leadership theories and models as well as individual values and beliefs with which to develop a personal philosophy of leadership. Exploration of how the roles of culture, diversity and gender can play in leadership. Application of course content to daily life and leadership contexts. Total of 54 hours lecture.

Transfer Credit: CSU

COUN 111 EDUCATIONAL PLANNING AND STUDY SKILLS

1/2 unit

Educational planning, study skills and transfer requirements. Testing to identify interests and abilities. **Pass/no pass** grading. Total of 9 hours lecture.

COUN 112 STUDENT DEVELOPMENT

1 unit

Effective personal and social relations in the academic and social environment. Problem solving techniques. **Pass/no pass** grading. Total of 18 hours lecture.

CULINARY ARTS

(Engineering and Technology Division)

CUL 145A INTRODUCTION TO CULINARY ARTS/FOOD SERVICES

10 units

This course introduces the student to basic tool usage and cooking skills that can be applied in any level or type of food service operation. History of the food services industry, sanitation and safety requirements, food terminology through lecture, demonstration and hands-on practice. **Required** instructional trips. Total of 90 hours lecture and 270 hours laboratory.

CUL 145B INTRODUCTION TO FOOD SERVICES PRODUCTION

10 units

Prerequisite: CUL 145A.

This course is designed to develop skills in garnishing, sauces, soups, and breakfast cookery preparation and presentation. It includes development of recipes and menus for breakfast and lunch service. **Required** instructional trips. Total of 90 hours lecture and 270 hours laboratory.

CUL 145C QUANTITY COOKING TECHNIQUES

10 units

Prerequisite: CUL 145B.

Designed to develop techniques and skills for cooking for large groups. Emphasis is on menu setup, basic food pro-

duction including cold and hot buffets, vegetable preparation, entree preparation, and fine dining service. Development of team leadership and supervisory skills. **Required** instructional trips. Total of 90 hours lecture and 270 hours laboratory.

CUL 145D SPECIAL EVENTS MANAGEMENT

10 units

Prerequisite: CUL 145C.

Event scheduling, training and supervision of food service workers in a dining setting. Banquet, fine dining, and theme events setup and take-down. Food and beverage purchasing, dining ware storage and upkeep, written contract development, and common business practices. **Required** instructional trips. Total of 90 hours lecture and 270 hours laboratory.

CUL 154A INTRODUCTION TO FOOD SERVICE BAKING AND PASTRY

3 units

Quantity baking for the beginner; quick breads, rolls and fancy pastries. **No credit** if taken after Food 154. Total of 36 hours lecture and 54 hours laboratory.

CUL 154B ADVANCED BAKING AND PASTRY

3 units

Prerequisite: CUL 154A.

Large quantity baking for the advanced student: designer pastries, tiered and decorated cakes, Artisan breads, and laminated doughs. Total of 36 hours lecture and 54 hours laboratory.

CUL 158 FIELD PRACTICE IN FOOD SERVICES

4 units

Prerequisite: Maintain enrollment in 7 units or more including field practice and enrollment in or completion of Culinary Arts course.

Supervised field experience or employment in food services, on-the-job training with local firm. Total of 360 hours field practice.

CUL 160A INTRODUCTION TO CATERING

3 units

Small-scale catering; menu planning, food preparation, sanitation, food display, party theme presentations; cost analysis, purchasing, legal responsibilities and liabilities and time management. **No credit** if taken after Food 160. Total of 36 hours lecture and 54 hours laboratory.

CUL 160B ADVANCED CATERING

3 units

Prerequisite: CUL 160A.

Advanced catering technique applications for off-premise services of special occasions for large groups; menu de-

velopment for gourmet/international foods, specialty desserts, special dietary needs. Catering business strategies; cost analysis, time management, purchasing requirements, legal responsibilities/liabilities, safety and sanitation requirements. Total of 36 hours lecture and 54 hours laboratory.

DANCE

(Performing and Communication Arts Division)

DANC 002 HEALTH AND FITNESS FOR DANCERS

2 units

Physical, psychological and professional health and fitness issues and needs of dancers and dance related activities. Analysis and exploration of effective training and conditioning, diet and fitness, injury prevention and care, and positive behaviors for career and lifelong wellness. Assessment skills regarding diet and training products and the impact of substance abuse. For dancers and individuals interested (in careers) in dance and dance-related alternatives, including, but not limited to, performance, choreography, teaching, training and physical therapy; open to all students. Total of 36 hours lecture and 18 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*

DANC 003 CONDITIONING FOR DANCERS

1 unit

Exercises as mental and physical preparation for dance. Use of floor mat exercises and a floor barre to increase flexibility, balance, strength, body alignment and use of turn out. Relaxation and visualization techniques. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

DANC 004H WORLD ETHNIC DANCE: SPAIN/ PORTUGAL

1 unit

Dance skills and techniques specific to traditional dance forms of various world cultures; history; music, rhythms and accent, instruments and tonal qualities; body carriage and style; steps, patterns and combinations; parts/sections of and whole dances. Section may concentrate on one country/dance form or include combination of regional dances and dance forms. **Maximum credit** 2 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Dance Elective Family:** DANC 004A-H, 005AB, 006AB, 037AB. Total of 54 hours laboratory.

Transfer credit: CSU; UC credit limitations. See counselor.

DANC 005A SOCIAL DANCE

1 unit

Skills in popular social dances of the late 19th to mid-20th century; a chronological survey including, but not limited

to, waltz, foxtrot, Charleston, swing, cha cha cha, rhumba, samba, mambo, merengue, tango. **Maximum credit** 1 unit, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Dance Elective Family**: DANC 004A-H, 005AB. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

DANCE 005B SOCIAL DANCE

1 unit

Skills in popular dances of the latter part of the 20th century including, but not limited to twist, salsa, hip hop, country/western line dancing, Latin, swing, tango. **Maximum credit** 1 unit, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Dance Elective Family**: DANC 004A-H, 005AB. Total of 54 hours laboratory.

Transfer credit: CSU; UC credit limitations. See counselor.

DANC 006A TAP DANCE I

1 unit

Beginning fundamentals of tap dance technique; basic traditional tap steps and combinations, elementary rhythmic and syncopated structures and stylistic patterns. Historical and cultural influences, basic vocabulary of the idiom. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

DANC 006B TAP DANCE II

1 unit

Prerequisite: DANC 006A.

Fundamentals of tap for advanced beginners. Study of traditional steps in various meters and rhythmic styles, with variations and added vocabulary. Increased emphasis on technique and expressive styling. Detailed study of tap history and cultural influences. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

DANC 006C TAP DANCE III

1 unit

Prerequisite: DANC 006B or equivalent.

Intermediate tap technique, with sequences of increased complexity, tempo and duration. Introduction to close-to-the floor dancing and air tricks. Close attention to musicality, styling and carriage of the arms and upper body. Participation in concert performance. Total of 54 hours laboratory.

Transfer credit: CSU; UC credit limitations. See counselor.

DANC 006D TAP DANCE IV

1 unit

Prerequisite: DANC 006C or equivalent.

Intermediate and advanced tap technique, with continued emphasis on showmanship and the expression of narrative through dance. Close attention to musicality, styling and carriage of the arms and upper body. Introduction to

further tricks and to improvisation. Creation of a concert piece for performance. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

DANC 008A BEGINNING COMPOSITION AND CHOREOGRAPHY

2 units

Recommended Preparation: DANC 009A, 011A, 014A, or 015A, or the equivalent.

Introduction to the elements and basic principles of dance composition and choreography and their application to all styles of dance, including, but not limited to ballet, ethnic, jazz, modern and tap; exploration and experimentation through lectures, improvisation and problem solving with varied literal and nonliteral themes, differing forms, working methods and processes, musical forms and alternative accompaniments in order to design and create movement phrases and compositions for individual and group arrangements. Final projects presentation/performance. Total of 18 hours lecture and 54 hours laboratory.

Transfer credit: CSU; UC credit under review.

DANC 008B INTERMEDIATE COMPOSITION AND CHOREOGRAPHY

2 units

Prerequisite: DANC 008A.

Exploration and application of compositional elements in designing and creating movement phrases and compositions of greater length and complexity with emphasis on technique and presentation; experimentation with self-constructed/designed accompaniment of nontraditional style including sounds, silence, voice, words and phrases. Solo or group composition presentation/performance. Total of 18 hours of lecture and 54 hours laboratory.

Transfer Credit: CSU; UC credit under review.

DANC 009A MODERN DANCE I

1 unit

An introduction to the art and discipline of modern dance technique through fundamental skills and beginning technique practices. Emphasis is on awareness of the body as an expressive instrument. Study and practice of the basic dance elements of space, time and energy are engaged through movement combinations, traveling in space, floor and center work and creative exploration. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

DANC 009B MODERN DANCE II

1 unit

Prerequisite: DANC 009A.

The study of the art and discipline of modern dance technique at an advanced beginning level. Emphasis is placed on developing the body as an expressive instrument, fo-

cusing on technical skills and aesthetic concepts. Increasing complexity in movement phrasing, dynamics, spatial clarity, musicality and creative exploration is introduced. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

DANC 009C MODERN DANCE III

1 unit

Prerequisite: DANC 009B.

Intermediate modern dance; explores the craft of contemporary modern dance technique at an intermediate level. Emphasis is on increasingly complex movement material including floor and aerial work, spatial clarity and design, energy dynamics, alignment, rhythmic abilities, musicality, elements of choreographic composition and performance qualities. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

DANC 009D MODERN DANCE IV

1 unit

Prerequisite: DANC 009C.

Advanced technique skills in contemporary modern dance; emphasis is focused on the dancer as “artist” with continuing development of dynamic articulation of the body in motion, physicality, expressivity and presence. Enhanced experiences in the observation and analysis of movement, as well as elements of choreography and staging are explored. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

DANC 010 MODERN DANCE PRODUCTION

2 units

Recommended preparation: Audition or completion of DANC 009C.

Participation in dance performance and staging. **Maximum credit** 8 units, 2 units each semester. **Maximum of 4 enrollments** in the **Dance Production Family:** DANC 010, 022AB. Total of 108 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

DANC 011A BALLETT I

1 unit

Beginning level Classical Ballet technique emphasizing proper placement and alignment, use of turn-out, musicality, quality of movement, a creative approach to learning the art-form, self-awareness, artistry, and expression. **Recommended** previous dance experience. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

DANC 011B BALLETT II

1 unit

Prerequisite: DANC 011A.

Second level Beginning Classical Ballet technique emphasizing proper placement and alignment, use of turn-out,

musicality, quality of movement, a creative approach to learning the art-form, self-awareness, artistry, and expression. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

DANC 011C BALLETT III

1 unit

Prerequisite: DANC 011B.

Development of intermediate level ballet technique and artistry. Emphasis on technique and combinations of increasing complexity and duration, leading to greater endurance, control, and progressively refined, artistic, and dynamic execution and performance. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

DANC 011D BALLETT IV

1 unit

Prerequisite: DANC 011C.

Second level Intermediate Classical Ballet. Continues to emphasize proper placement and technique while performing steps that have greater difficulty and combinations that have greater complexity. Continued development of an integrated and embodied experience of musicality, artistry, expression, and the performance skills and strength that prepare students for advanced work. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

DANC 012 IMPROVISATION

1 unit

Improvisation in dance and choreography. For all levels of dance. Total of 54 hours laboratory.

Transfer Credit: CSU; UC under review.

DANC 013 PILATES-BASED METHOD FOR ALIGNMENT AND CORRECTION

1 unit

Alignment and correctives work based on exercises and concepts developed by Joseph H. Pilates. Mat work with emphasis exercises on improved body alignment, strength, flexibility, control, coordination and breathing. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

DANC 014A HIP HOP DANCE I

1 unit

Foundations of hip hop dance, including basic vocabularies, style, rhythms and cultural conventions of the urban and popular genre. Includes daily warm-ups, phrases, dances and opportunities to “freestyle,” using footwork, coordinations, gestures, patterns and floor work typical of hip hop dance. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit under review.

DANC 014B HIP HOP DANCE II**1 unit****Prerequisite:** *DANC 014A.*

Intermediate level hip hop dance, including more complex vocabularies, styles, rhythms and cultural conventions of the urban and popular genre. The class may include daily warm-ups, phrases, dances and opportunities to “free-style,” using footwork, coordinations, gestures, patterns and floor work typical of hip hop dance. The course will consider Hip Hop as a global cultural phenomenon, highlighting it as part of the African Diaspora, techno culture, and mass entertainment. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit under review.

DANC 015A JAZZ DANCE I**1 unit**

Techniques, steps, combinations and routines in jazz dance to develop muscular control, endurance and flexibility. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

DANC 015B JAZZ DANCE II**1 unit****Recommended preparation:** *DANC 015A.*

Intermediate techniques, steps, combinations and routines in jazz dance. Dance studies of the elements of movement: form, rhythm, space and expression. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

DANC 015C JAZZ DANCE III**1 unit****Prerequisite:** *DANC 015B or equivalent.*

Intermediate study of jazz dance techniques and composition. Development of muscular control, endurance and flexibility at an intermediate level. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

DANC 015D JAZZ DANCE IV**1 unit****Prerequisite:** *DANC 015C or equivalent.*

Advanced study of jazz dance techniques and composition. Development of muscular control, endurance and flexibility at an advanced level. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

DANC 020 INDEPENDENT STUDY**1 unit****Prerequisite:** *Completion of two dance courses and approval of student project.*

Individual projects relating to dance including, but not limited to research, written reports or papers, community project, choreography, demonstration, master class, recital or concert. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

DANC 021A DANCE HISTORY: CULTURAL AND SOCIAL HERITAGE**3 units**

Chronological survey of dance including analysis of styles, forms and roles of dance in diverse cultures from earliest rituals to contemporary developments in education and therapy; influences of geography, folklore, cultural aesthetics and social values on the development of folk and nationalistic forms. Total of 54 hours lecture.

Transfer Credit: CSU; UC

DANC 021B DANCE HISTORY: SPECTACLE AND PERFORMANCE ART**3 units**

Survey of dance as performance and art form in varying cultural and historical contexts, including spectacle, theater and theatricals, entertainment, performance and concert art; dance as literature, criticism, theory and choreographic design; relationship to other art forms; study of prominent and influential choreographers, productions, performers and writers and collaborative projects with composers and artists. Total of 54 hours lecture.

Transfer Credit: CSU; UC

DANC 022A DANCE PERFORMANCE I**2 units****Recommended preparation:** *Completion of one or more technique courses: DANC 009A or DANC 011A or DANC 015A; and completion of or enrollment in and DANC 008A.***Enrollment Limitation:** *Retention based on successful audition.*

Development and staging of original student dance compositions culminating dance performance/s. Emphasis is placed on development of performance skills. Cultivation of personal artistry as a performer and choreographer. Requires participation in a dance performance. **Maximum credit 4 units, 2 units each semester. Maximum of 4 enrollments in the Dance Production Family:** DANC 010, 022AB. Total of 108 hours laboratory and 36 hours by arrangement. This course may be scheduled using the “To Be Arranged” (TBA) scheduling format.

Transfer Credit: CSU; UC credit limitations. See counselor.

DANC 022B DANCE PERFORMANCE II**2 units****Prerequisite:** *DANC 022A.***Enrollment Limitation:** *Retention based on successful audition.*

Creation, development and staging of original student dance compositions presented in a culminating dance performance/s. Development and refinement of performance skills. Cultivation of personal artistry as a performer and choreographer. Requires participation in a dance performance. **Maximum credit: 4 units, 2 units each semester.**

Maximum of 4 enrollments allowed in the Dance Produc-

tion Family: DANC 010, 022AB. Total 108 hours laboratory and 36 hours by arrangement. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format. *Transfer Credit: CSU; UC credit limitations. See counselor.*

DANC 023 DANCE REPERTOIRE

1 unit

Recommended Preparation: *Previous dance experience.*

Enrollment Limitation: *Audition.*

Participate as a dancer in an original or repertoire dance piece under the direction of a professional choreographer (including guest artists and PCC dance faculty). Provides intermediate and advanced-level dance students the opportunity to engage in a variety of professional choreographic and rehearsal practices, being involved in artistic processes from inception through completion. Intermediate and advanced dancers will be expected to work as collaborators of an ensemble, practicing professionalism within rehearsals and final productions. Dance styles may include modern, postmodern, contemporary, jazz, hip hop, tap, ethnic dance styles, and more. Dancers will need to audition for each professional choreographer at the start of the semester. **Maximum credit:** 4 units, 1 unit each semester. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit under review.

DANC 025 MOVEMENT FOR CHILD DEVELOPMENT

2 units

Creative, noncompetitive movement activities, including perceptual-motor, dance and rhythmic experiences intended to promote fundamental skills. Focus on the whole child within a multicultural and non-biased program, enhancing physical, cognitive, conceptual, social and emotional development through exploration and problem solving challenges designed for individuals and groups. Emphasis on developing skills to assess and adapt activities for individual needs and stages, planning and conducting developmentally appropriate experiences, assessing and selecting materials, spaces and equipment for safe and active learning. For teachers, caregivers, recreational leaders and parents in home, community and school settings and childcare centers. Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU

DENTAL ASSISTING

(Health Sciences Division)

DA 100 DENTAL MATERIALS

3 units

Prerequisite: *Enrollment in Dental Assisting program.*

Composition, characteristics, physical properties and uses of metallic alloys and non-metallic agents such as gypsum,

cements, aesthetic restorations, impression materials and new products currently used in dentistry. Includes practical laboratory experiences and chairside procedures involved in the use of these materials. Total of 36 hours lecture and 72 hours laboratory.

DA 108 INFECTION CONTROL IN DENTISTRY

2 units

Enrollment Limitation: *Enrollment in the Dental Assisting program.*

Introduction to microbiology, infectious diseases, immunity, infection control in the dental office, agencies concerned with disease control, OSHA standards and guidelines and hazard communication management. Review of current rules and regulations as outlined by the Dental Practice Act. This course meets the eligibility requirements for the certificate in Infection Control and the California Dental Practice Act required by the state for unlicensed Dental Assistants. Total of 36 hours lecture and 9 hours laboratory.

DA 110 INTRODUCTION TO DENTAL ESSENTIALS

3 units

Enrollment Limitation: *Enrollment in the Dental Assisting program.*

Introduction to dental essentials, to include the oral cavity, bones of the face, fundamentals of preventive dentistry, vital signs, principles of professionalism, the dental health team and selected dental office lab procedures. Total of 54 hours lecture and 27 hours laboratory.

DA 111 APPLIED HUMAN BEHAVIOR

2 units

Prerequisite: *Enrollment in Dental Assisting program.*

Principles of applied human behavior, psychology and interpersonal communication in diverse settings. Total of 36 hours lecture.

DA 120 INDEPENDENT STUDY

1 unit

Enrollment Limitation: *Acceptance into the Dental Assisting Program and program director approval.*

Participation in clinical activities, projects, research, etc. including experience in clinical and preclinical or simulated practice settings, practical laboratory projects/assignment, lecture attendance, literature review and community projects. Total of 54 hours laboratory.

DA 123A CHAIRSIDE TECHNIQUES

4.5 units

Corequisite: *Enrollment in or completion of DA 100, 108, and 110.*

Enrollment Limitation: *Acceptance in the Dental Assisting Program.*

Introduction to chairside techniques to include infection control, basic medical and dental emergencies, cavity

classification and design, dental charting, rotary and hand instruments, tray set-ups and procedures, oral vacuum and triplex syringe use, instrument exchange, dental dam placement and removal, matrix retainer placement and removal, four-handed dentistry techniques, anesthetic syringe oral inspection and medical history procedures. Class also includes practical application of preclinical/clinical techniques in patient management. Total of 36 hours lecture and 144 hours laboratory.

DA 123B ADVANCED CHAIRSIDE TECHNIQUES

4 units

Prerequisite: DA 123A.

Corequisite: DA 135.

Enrollment Limitation: *Acceptance in the Dental Assisting Program.*

Application of advanced dental assisting chairside techniques, principles of anesthesiology, pharmacology and dental therapeutics, product evaluation and dental specialties. Total of 54 hours lecture and 72 hours laboratory.

DA 124 OFFICE ADMINISTRATION

3 units

Enrollment Limitation: *Enrollment in the Dental Assisting program.*

This course will develop the dental assistant's skills and abilities related to the dental office administration. Course will include but not be limited to the following didactic and laboratory instruction: Business aspects of Dentistry, Dental Team Employees, Patient management, Legal and Ethical Issues, Technology, Office Design and Equipment used in the Dentistry. Total of 54 hours lecture and 18 hours laboratory.

DA 125 CLINICAL EXPERIENCE

1 unit

Prerequisite: *Enrollment in the Dental Assisting program.*

Clinical experience(s) to include but not limited to: chairside skills and techniques, new technology, and specialty practices. Students must provide their own transportation and meet all the clinical guidelines. **Recommended** DA 123A. **Pass/no pass** grading. **Six weeks.** Total of 96 hours laboratory.

DA 127 CLINICAL EXPERIENCE

4 units

Prerequisites: *All of the following: DA 100, 108, 123A, 140; enrollment in or completion of DA 123B, 124, 135.*

This course is designed for the dental assisting student to apply knowledge learned in the formal academic program to the work environment. Clinical seminar, evaluations and related work experiences include but not limited to using basic and advanced chairside assisting skills and procedures, office administration, radiology techniques and

manipulation of dental materials. The students will be assigned to general and specialty dental offices and clinics and meet regularly to discuss experiences, work ethics and other topics related to employment. Total of 18 hours lecture and 306 hours field/clinical.

DA 135 REGISTERED DENTAL ASSISTANT TECHNIQUES

3 units

Prerequisite: DA 140.

Corequisite: *Enrollment in or completion of DA 123B.*

Enrollment Limitation: *Acceptance in the Dental Assisting Program.*

Laboratory, preclinical and, where appropriate, clinical practice in a variety of functions delegated to the dental assist and the registered dental assistant. Meets the requirements of the Dental board of California for completion of all designated Registered Dental Assisting duties in addition to coronal polish, pit and fissure sealant application and Ultrasonic scaling for orthodontic band cement removal. Emphasis is placed on the practical application and technical abilities of each task, critical thinking, communication, ethical responsibilities, competency of performance and a demonstrated concern for patient health and safety. Total of 36 hours of lecture and 72 hours of laboratory.

DA 140 ORAL RADIOLOGY

4 units

Prerequisite: *Enrollment in or completion of DA 100, 110, and 123A.*

Theory and basic principles of intraoral and extraoral radiography; characteristics and methods of controlling X-radiation; hazards of radiation; infection control and safety procedures. Laboratory and clinical experience in care and operation of dental X-ray unit; processing, mounting films. Digital and intraoral film placement and exposure techniques; use of film holders. Extraoral exposure techniques. Identification and interpretation of radiographs. Course meets and is approved by the Dental Board of California for Radiation Safety. Total of 36 hours lecture and 108 hours laboratory.

DA 142 ADVANCED ORAL RADIOLOGY TECHNIQUES

1/2 unit

Prerequisite: *Enrollment in the Dental Assisting program.*

Advance theory and specialized principles of intraoral radiography techniques to include but not limited to: digital, endodontic, pedo, film placement, processing and exposure techniques. **Recommended** DA 140. **Six weeks.** Total of 18 hours lecture and laboratory discussion.

DA 149 ORTHODONTIC ASSISTANT

2.5 units

Designed to provide advance education in orthodontic training for the Registered Dental Assistant or Dental

Assistant currently working in an Orthodontic practice setting. Meets the didactic and laboratory requirements by the Dental Board of California Orthodontic Assisting Permit course approval and is offered in conjunction with DA 150, Specialty Clinical Experience. Students must provide verification of RDA license and/or 6 months' work experience as a Dental Assistant; Hepatitis B immunization records OR HBV Refusal form; TB Test Result; CPR certification, 8 hour Infection Control and 2 hour Dental Practice Act or RDA license on the first day of class. Total of 36 hours lecture and 36 hours laboratory.

DA 150 CLINICAL EXPERIENCE IN A SPECIALTY PRACTICE

1/2 unit

Enrollment Limitation: *Enrollment in or completion of the Dental Assisting Program.*

Designed to provide students with the required clinical hours associated with working in an orthodontic office or other specialty office under the instructors' supervision. Students will be required to attend an orientation and complete assigned hours in an approved clinical site. Total of 28 hours of clinical laboratory.

DA 160 COMPREHENSIVE DENTAL ASSISTING SKILLS AND TECHNIQUES

1/2 unit

Enrollment Limitation: *Enrollment in or completion of the Dental Assisting Program.*

Prepares the dental assistant with a comprehensive review of dental assisting functions, infection control standards, radiation safety, dental assisting and registered dental assisting duties. Practice and reinforcement of technical skills include but not limited to selected DA/RDA duties and functions. Total of 28 hours laboratory.

DA 200A DENTAL ASSISTING LAB

1 unit

Enrollment Limitation: *Enrollment in the Dental Assisting program.*

Development of dental assisting skills, techniques and concepts in a laboratory or clinical setting. **Recommended** for students who need to use laboratory and require instructional assistance to facilitate learning. Total of 54 hours laboratory.

DA 200B DENTAL ASSISTING TECHNICAL SKILLS ENHANCEMENT LAB

1 unit

Enhance dental assisting skills, techniques and concepts in a laboratory, preclinical or clinical setting. **Recommended** for students who need additional laboratory experience and require instructional assistance to facilitate learning. Total of 54 hours laboratory.

DENTAL HYGIENE

(Health Sciences Division)

DH 101A FUNDAMENTALS OF DENTAL HYGIENE

5 units

Corequisites: *DH 109, DH 117, ANAT 115.*

Enrollment Limitation: *Acceptance into the Dental Hygiene program.*

Orientation and role of the dental hygienist in maintaining oral health. Introduction to dental hygiene procedures and techniques. Selected services on patients, partners and/or laboratory manikins. Emphasis on the United States Occupational Safety and Health Administration Rules and Regulations and infection control in the dental office. Total of 36 hours lecture and 162 hours laboratory.

DH 101B FUNDAMENTALS OF DENTAL HYGIENE THEORY AND PRACTICE

5 units

Corequisites: *DH 105, 116 and 141.*

Enrollment Limitation: *Acceptance into the Dental Hygiene program.*

Fundamentals of Dental Hygiene Theory and Practice including preventive, educational and therapeutic services provided by the dental hygienist. Practical application on selected patients. Total of 36 hours lecture and 162 hours laboratory.

DH 104A CLINICAL DENTAL HYGIENE THEORY AND PRACTICE: PAIN CONTROL

2 units

Prerequisite: *DH 101B.*

Enrollment Limitation: *Acceptance into the Dental Hygiene program.*

Clinical application of dental hygiene theory and practice with primary emphasis on pain control. Assessment of patient needs to determine the use of pain control methods. Total of 18 hours lecture and 54 hours laboratory.

DH 104B CLINICAL DENTAL HYGIENE THEORY AND PRACTICE

7 units

Prerequisite: *DH 104A.*

Corequisites: *DH 108, 113A, 119A.*

Enrollment Limitation: *Acceptance into the Dental Hygiene program.*

Clinical application of dental hygiene Theory and Practice including assessment of patient needs, treatment planning, pain control, oral disease control, delivery and evaluation of preventive, educational and therapeutic services, to an intermediate level of performance. Total of 36 hours lecture and 270 hours laboratory.

DH 104C CLINICAL DENTAL HYGIENE THEORY AND PRACTICE

7 units

Prerequisite: *DH 104B.*

Integration of Dental Hygiene Theory and Practice into preventive, educational and therapeutic care to clinical competency on a diverse range of patients. Advanced techniques and procedures. Total of 36 hours lecture and 270 hours laboratory.

DH 105 PATHOLOGY

3 units

Corequisites: *DH 101B, 116 and 141.*

Enrollment Limitation: *Acceptance into the Dental Hygiene program.*

Principles of general pathology, with special emphasis on oral pathology. Total of 54 hours lecture.

DH 107 INTRODUCTION TO ORAL HEALTH RESEARCH

2 units

Prerequisites: *DH 101B and 109.*

Enrollment Limitation: *Acceptance into the Dental Hygiene program.*

Designed to provide students with the skills necessary to critically evaluate current product research information and scientific literature as it relates to the practice of dental hygiene. Students will be encouraged to pose their own research questions, design and present research projects and evaluate research. Total of 36 hours lecture.

DH 108 PHARMACOLOGY

2 units

Corequisites: *DH 104B, 113A, and 119A.*

Enrollment Limitation: *Acceptance into the Dental Hygiene program.*

Basic principles of pharmacology, pharmacokinetics, toxicology and pharmacodynamics. Pharmacology of drugs used in dentistry, drug interactions and medical emergencies. Total of 36 hours lecture.

DH 109 DENTAL HEALTH EDUCATION, COMMUNICATION AND DIVERSITY

2 units

Corequisites: *ANAT 115, DH 101A, DH 117, and DH 122.*

Enrollment Limitation: *Acceptance into the Dental Hygiene program.*

Principles of communication and learning for the dental health professional. Patterns of human development, cultural pluralism and health behaviors. Health education strategies. Total of 36 hours lecture.

DH 111 CURRENT ISSUES IN DENTAL HYGIENE

2 units

Corequisites: *DH 104C, 113B and 121.*

Enrollment Limitation: *Acceptance into the Dental Hygiene program.*

Ethics and jurisprudence in dentistry, professional relations and responsibilities, dental hygiene practice management, trends and current issues in dental hygiene. Total of 36 hours lecture.

DH 113A PERIODONTICS

2 units

Corequisites: *DH 104B, 108, and 119A.*

Enrollment Limitation: *Acceptance into the Dental Hygiene program.*

Normal periodontium, gingival and periodontal diseases, types and degrees of periodontal disease, therapy and maintenance. Total of 36 hours lecture.

DH 113B PERIODONTICS

1 unit

Corequisites: *DH 104C, 111, and 121.*

Enrollment Limitation: *Acceptance into the Dental Hygiene program.*

Advanced topics in clinical periodontology. Diagnosis of and influences on disease activity, emergencies, treatment modalities, maintenance and legal aspects. Total of 18 hours lecture.

DH 116 DENTAL MATERIALS

2 1/2 units

Corequisites: *DH 101B, 105 and 141.*

Composition, characteristics, physical properties and uses of dental non-metallic and metallic agents; practical laboratory and clinical applications involved in the use of these materials. Total of 36 hours lecture and 36 hours laboratory.

DH 117 DENTAL MORPHOLOGY AND OCCLUSION

2 units.

Corequisites: *ANAT 115, DH 101A, DH 109 and DH 122.*

Enrollment Limitation: *Acceptance into the Dental Hygiene program.*

Oral terminology, dental anatomy and root morphology with emphasis on the relationships of form, function and occlusion. Includes laboratory experience in instrument adaptation to root morphology, pulp vitality testing as related to RDH duties of the California Dental Practice Act. Total of 18 hours lecture and 54 hours laboratory.

DH 119A COMMUNITY DENTAL HEALTH

2 units

Enrollment Limitation: *Acceptance into the Dental Hygiene program.*

Principles, objectives and techniques of oral disease prevention and control; oral health promotion through organized community efforts. Includes epidemiology, literature

review, planning, implementation and evaluation of a community-based oral health program. **Required** instructional trips. Total 36 of hours lecture.

DH 119B COMMUNITY DENTAL HEALTH LABORATORY

1/2 unit

Prerequisites: *All of the following: DH 101B, 109, 119A.*

Designed to deliver dental health education to the community. Field experience includes providing a variety of dental health education classes to a diverse population at a prearranged time. Total of 36 hours laboratory.

DH 120 INDEPENDENT STUDY

1 unit

Enrollment Limitation: *Enrollment in the Dental Hygiene program and Program Director approval.*

Participation in research and various clinical project including experience in clinical or simulated practice settings, practical laboratory assignment, lecture attendance, literature review and community projects. Total of 54 hours laboratory.

DH 121 CLINICAL PRACTICE IN ALTERNATIVE SETTINGS

1 unit

Prerequisite: *DH 104A.*

Enrollment Limitation: *Acceptance into the Dental Hygiene program.*

Practicum at an intermediate level in dental hygiene in non-traditional settings. Includes institutional, management and community health experiences. Emphasis on dental hygienist as educator, resource professional and provider in dental care delivery. **Maximum credit** 2 units, 1 unit each semester. Total of 85 hours field practice.

DH 122 MEDICAL EVALUATION OF DENTAL HYGIENE PATIENTS

2 units

Corequisites: *DH 101A, 109, 117, ANAT 115.*

Enrollment Limitation: *Acceptance into the Dental Hygiene program.*

Dental management of medically compromised patients. Emphasis placed on patient assessment, treatment planning, patient management, patient motivation and interpersonal communications of medically compromised patients, special needs patients, and geriatric patients. Total of 36 hours lecture.

DH 141 ORAL RADIOLOGY

3 units

Enrollment Limitation: *Acceptance into the Dental Hygiene program.*

Theory and basic principles of intraoral and extraoral radiographs; characteristics and methods of controlling X-

radiation; hazards of radiation; safety procedures. Laboratory and clinical experience in care and operation of the dental X-ray unit; processing, mounting films. Intraoral film placement and exposure techniques; use of film holders. Extraoral exposure techniques. Identification and interpretation of radiographs. Total of 36 hours lecture and 54 hours laboratory.

DH 200A DIRECTED STUDIES IN CLINICAL DENTAL HYGIENE

1 unit

Prerequisite: *Acceptance into the Dental Hygiene program.*

Development of dental hygiene clinical skills in a laboratory or clinical setting at the introductory level. **Pass/no pass** grading. Total of 54 hours laboratory.

DH 200B DIRECTED STUDIES IN CLINICAL DENTAL HYGIENE

1 unit

Prerequisite: *Acceptance into the Dental Hygiene program.*

Development of dental hygiene clinical skills at a competent level in a clinical setting. **Pass/no pass** grading. Total of 54 hours laboratory.

DH 200C CLINICAL BOARD PREPARATION

1 unit

Prerequisite: *Acceptance into the dental hygiene program.*

Development of clinical skills in a clinical setting as related to the clinical board examinations. **Pass/no pass** grading. Total of 54 laboratory.

DH 201 DENTAL HYGIENE SKILLS ENHANCEMENT LAB

1 unit

Enrollment Limitation: *Acceptance into the Dental Hygiene Program.*

Provides students enrolled in the Dental Hygiene Program the opportunity to enhance their clinical skills and provide support services required by the State Dental Practice Act and the Dental Hygiene Committee of California. Total of 54 hours laboratory.

DENTAL LABORATORY TECHNOLOGY

(Health Sciences Division)

DLT 109 DENTAL MATERIALS

2 units

Corequisites: *DLT 113B, 114B.*

The history of dentistry, its beginnings and progress to date. The composition, characteristics and uses of non-metallic agents such as gypsum products, waxes, resins, impression materials and polishing compounds; metallic

agents such as gold and chromium-cobalt alloys. A comprehensive study of the chemical, physical and biological requirements of modern day dental materials. Total of 36 hours lecture.

DLT 113A DENTURE TECHNIQUES

4 units

Corequisites: *DLT 114A, 115, 116A.*

Theory and fundamental applied techniques for constructing preliminary and master casts to include: the applications of autopolymerizing and heat cured acrylic resins, custom trays, record bases and occlusion rims; articulation utilizing semi-adjustable articulators in fabrication of balanced complete dentures (maxillary and mandibular) encompassing: tooth-set-up, working/balancing contacts, and waxing procedures. Total of 36 hours lecture and 108 hours laboratory.

DLT 113B DENTURE TECHNIQUES

4 units

Prerequisite: *DLT 113A, or the equivalent knowledge and experience.*

Corequisites: *DLT 109 and 114B.*

Theory and applied techniques for processing balanced complete dentures to include: investing, boil-out, packing, curing, recovery, remounting, selective grinding and finishing/polishing procedures. Semi-adjustable articulators will be employed during these steps. Perform procedures to repair individual teeth and denture bases utilizing cold cure techniques. Reline and rebase ill-fitting complete dentures. Fabricate a surgical splint for immediate dentures. Total of 36 hours lecture and 108 hours laboratory.

DLT 114A CROWN AND BRIDGE

4 units

Corequisites: *DLT 113A, 115, 116A.*

Professional relationships of the dental team. Theory and fundamental applied techniques for inlay and crown construction; model and die fabrication, articulation, wax up, direct spruing and investing, of single inlays, crowns and onlays. Basic study of occlusion, tooth contour and anatomy. Total of 36 hours lecture and 108 hours laboratory.

DLT 114B CROWN AND BRIDGE

4 units

Prerequisite: *DLT 114A, or the equivalent knowledge and experience.*

Corequisites: *DLT 109, 113B.*

Theory and applied techniques for crown and bridge construction. Application of procedural steps in the lost wax process, casting and finishing both single and multi-unit restorations. Principles of bridge design. Study of bridge components. Design and construction of the broken stress bridge and post crown restoration. Application of procedural steps for gold soldering. Study of tooth form and

functional occlusion utilizing a full arch model and semi adjustable articulator. Total of 36 hours lecture and 108 hours laboratory.

DLT 115 DENTAL MORPHOLOGY

1/2 unit

Corequisites: *DLT 113A, 114A and 116A.*

Fundamentals of anatomical and physiological structure affiliated with cranial, facial and intraoral anatomy in relation to construction of fixed and removable prosthetic devices. Inclusive of bone, muscle and tooth structure interrelated movements. Total of 9 hours lecture.

DLT 116A BEGINNING DENTAL ANATOMY

1 1/2 units

Corequisites: *DLT 113A, 114A and 115 and 200A.*

Relationship of tooth form and function to dental health. Basic principles of occlusion, introduction to Cusp-to-Fossa and Cusp-to-Occlusal Embrasure occlusal schemes. Related nomenclature. Wax carving exercises of 14 teeth. Total of 9 hours lecture and 54 hours laboratory.

DLT 116B INTERMEDIATE DENTAL ANATOMY

1 1/2 units

Prerequisite: *DLT 116A or the equivalent knowledge and experiences.*

Corequisite: *DLT 200B.*

Intermediate dental anatomy principles to include studies in Cusp-to-Fossa and Cusp-to-Occlusal Embrasure occlusal schemes. Emphasis shall be on maxillary and mandibular molars. Axial and occlusal features unique to the molar group of teeth. Posterior tooth nomenclature. Wax carving exercises of selected molars and mounting of study models. **Short term class.** Total of 9 hours lecture and 54 hours laboratory.

DLT 116C ADVANCED DENTAL ANATOMY

2 1/2 units

Prerequisite: *DLT 116B, or the equivalent knowledge and experiences.*

Corequisites: *DLT 109, 113B, 114B and 200C.*

An intense study of anterior and posterior tooth anatomy. Detailed sculpting of anterior and posterior teeth in wax carving blocks and on study models mounted to an articulator. Includes anatomic tooth drawings of posteriors. Special emphasis on individual tooth contour and detailed occlusal anatomy. Total of 27 hours lecture and 54 hours laboratory.

DLT 116D HIGHLY ADVANCED DENTAL ANATOMY

2 1/2 units

Prerequisite: *DLT 116C, or the equivalent knowledge and experiences.*

Corequisites: *DLT 117, 118A, 119A, and 201A.*

Knowledge and skills acquired in DLT 116A, B, and C as well as all other first year dental technology courses shall

be expanded in this course. Studies of various occlusal records such as pantographs, axiographs, check bites, transfer models and various facebows, as well as various occlusal schemes. Focus on functional movement, esthetics, and advanced instrumentation. Principles of occlusal equilibration. Gnathological principles including occlusal determinants. Related nomenclature. Precision waxing techniques. Total of 27 hours lecture and 54 hours laboratory.

DLT 117 ORTHODONTICS AND PEDODONTICS

2 units

Prerequisite: *DLT 119A; or the equivalent knowledge and experience.*

Corequisites: *DLT 118B, 119B, 124, 125.*

Basic principles and applied technical procedures in the construction of orthognathic study casts and orthodontic appliances with emphasis on design and wire contouring of various types of arch wires, clasps and springs. Autopolymerizing acrylic resin processing procedures, soldering and minor repairs. Total of 18 hours lecture and 54 hours laboratory.

DLT 118A CERAMICS

4 units

Prerequisite: *DLT 116A or the equivalent.*

Corequisites: *DLT 116B, 119A.*

Theory and fundamental applied techniques for model and die preparation and cast evaluation. Design and construction of the single unit ceramic alloy framework. Opaque procedures; porcelain manipulation; basic shade control; firing cycles; shaping and glazing single unit ceramic restorations utilizing metal ceramic technology. Total of 36 hours lecture and 108 hours laboratory.

DLT 118B ADVANCED CERAMICS

6 units

Prerequisite: *DLT 125, or the equivalent knowledge and experiences.*

Corequisites: *DLT 119B, 124, 126, and 201C.*

Theory and applied techniques for constructing metal ceramic restorations for crowns and multi-unit fixed partial dentures. Multi-unit framework design, various porcelain build-up techniques, extrinsic and intrinsic staining, corrections and additions. Fabrication of porcelain shoulder margin and porcelain laminate veneer. Instruction in both pre and post soldering, and trouble-shooting. Principles of color theory, usage of the shade guide, and esthetic considerations. Introduction of all-ceramic restorations and dental implants. Total of 45 hours lecture and 189 hours laboratory.

DLT 119A PARTIAL DENTURES

4 units

Prerequisite: *DLT 116A, or the equivalent knowledge and experience.*

Corequisites: *DLT 116B, 118A.*

Theory and fundamental applied techniques in the construction of gold and nickel-chromium partial dentures to include: elementary principles of survey and design, model preparation and refractory cast production. Technique and procedural application of preformed patterns, spruing, investing, casting and finishing metal frameworks. Total of 36 hours lecture and 108 hours laboratory.

DLT 119B PARTIAL DENTURES

2 units

Prerequisite: *DLT 119A, or the equivalent knowledge and experience.*

Corequisites: *DLT 117, 118B, 124 and 125.*

Theory and applied advanced techniques in the construction of nickel-chromium cast partial dentures. Engineering principles in the design of tooth/tissue borne and tooth borne removable partial denture prosthesis to include: repairs, arrangement of artificial teeth, wax-up, processing and finishing of partial denture bases. Total of 9 hours lecture and 81 hours laboratory.

DLT 120 INDEPENDENT STUDY

1 unit

Prerequisite: *DLT 113A.*

Research or clinical project including experience in clinical practice settings, practical laboratory assignment, lecture attendance, literature review and community projects. Total of 54 hours laboratory.

DLT 124 DENTAL LABORATORY MANAGEMENT

2 units

Corequisites: *DLT 117, 118B, 119B, 125.*

Ethics and laws governing professional relationships of dentists and dental technicians. Study of human resource management, decision making, written communication, resume and interview preparation. Organization of a new dental laboratory business; marketing and research, laboratory design, business forms, equipment, supplies, purchasing, staffing and inventory management. Development of a business plan. Introduction to the computer in a laboratory environment. Professional organizations. Certified Dental Technician (CDT), and Recognized graduate (RG) Programs. Total of 36 hours lecture.

DLT 125 CLINICAL EXPERIENCE

3¹/₂ units

Prerequisite: *DLT 116D, or the equivalent knowledge and experience.*

Corequisite: *DLT 201B.*

Advanced skills in applied dental laboratory technology. Clinical experience in a commercial dental laboratory or

dental laboratory setting where practical experience in dental laboratory techniques may be obtained. Fabrication of prostheses for patients currently under treatment, or from actual casts or impressions and occlusal records from previously fabricated prostheses. Completion of a personal portfolio to include resume, sample letters, sample projects, photographs, and letters of recommendation. Completion of the Cost-of-Living Report. Students will need to provide their own transportation to field laboratory sites. **Pass/no pass** grading. **Short term course.** Total of 27 hours lecture and 108 hours laboratory.

DLT 126 TRANSITION TO DENTAL LABORATORY INDUSTRY

2 units

Prerequisite: *DLT 125, or the equivalent knowledge and experiences.*

Corequisites: *DLT 118B, 119B, 124, and 201C or the equivalent knowledge and experiences.*

Capstone course in dental laboratory technology providing a comprehensive review of all concepts and techniques studied throughout the two-year Dental Laboratory Technology Program. Provides students with an opportunity to become proficient in needed critical thinking skills and judgments practiced in commercial dental laboratories such that students may transition from being student technicians to certified technicians. The course is also open to professional dental technicians in the industry either as a refresher or for possible job advancement. Includes development of skills essential for success specific to the dental laboratory career. **Pass/no pass** grading. Total of 36 hours lecture.

DLT 201A DIRECTED STUDIES IN BASIC DENTAL LABORATORY TECHNIQUES

1 unit

Prerequisite: *DLT 116C, or the equivalent knowledge and experiences.*

Corequisites: *DLT 116D, 117, 118A, and 119A, or the equivalent knowledge and experiences.*

Development and enhancement of basic dental laboratory techniques, skills and concepts for second year students in the Dental Laboratory Technology Program. Highly focused studies in second year content. **Pass/no pass** grading. Total of 54 hours laboratory.

DLT 201B DIRECTED STUDIES IN INTERMEDIATE DENTAL LABORATORY TECHNIQUES

1 unit

Prerequisite: *DLT 201A, or the equivalent knowledge and experiences.*

Corequisite: *DLT 125, or the equivalent knowledge and experiences.*

Development and enhancement intermediate dental laboratory techniques, skills and concepts for second year stu-

dents in the Dental Laboratory Technology Program. Highly focused studies in second year content. **Pass/no pass** grading. **Short term course.** Total of 54 hours laboratory.

DLT 201C DIRECTED STUDIES IN ADVANCED DENTAL LABORATORY TECHNIQUES

1 unit

Prerequisite: *DLT 201B, or the equivalent knowledge and experiences.*

Corequisites: *DLT 118B, 119B, 124, and 126, or the equivalent knowledge and experiences.*

Development and enhancement of advanced dental laboratory techniques, skills and concepts for second year students in the Dental Laboratory Technology Program. Highly focused studies in second year content. **Pass/no pass** grading. Total of 54 hours laboratory.

DESIGN TECHNOLOGY

(Engineering and Technology Division)

DT 008A INTRODUCTION TO DIGITAL DESIGN AND FABRICATION

3 units

Introduction to digital design and fabrication through the use of computer-aided design (CAD) and technical graphic production. Design centric projects with emphasis on problem solving, critical thinking, collaboration and communication across multiple industries, software and prototyping technologies with an emphasis sustainable production methods. Integrated workflow processes including online resources, project management, sustainability and globalization. Career skills and portfolio development. **May not be taken concurrently** with or after ENGR 002. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

DT 008B INTERMEDIATE DIGITAL DESIGN AND FABRICATION

3 units

Prerequisite: *DT 008A or ENGR 002.*

Intermediate digital design and fabrication using computer-aided design (CAD) and technical graphic production standards. Design centric projects with emphasis on problem solving, critical thinking, collaboration and communication across multiple industries, software and rapid prototyping technologies. Integrated workflow processes including online resources, project management, sustainability and globalization. Career skills and portfolio development. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

DT 008C ADVANCED SYSTEMS DESIGN AND FABRICATION

4 units

Prerequisites: *DT 008B.*

Recommended Preparation: *DT 110.*

Design, develop and manufacture of CAD parametric models and prototypes through design centric projects. Emphasis on problem solving, critical thinking, collaboration and communication in an interdisciplinary environment. Advanced material selection, product development, systems analysis and strength and motion analysis for sustainable production practices. Career skills and portfolio development. Total of 36 hours lecture and 108 hours laboratory.

Transfer Credit: CSU; UC

DT 017 BUILDING CONSTRUCTION TECHNICAL GRAPHICS

3 units

Use of Computer-Aided Drafting (CAD) in the preparation of two and three dimensional Architectural/Engineering/Construction technical graphics and prototypes. Design centric projects with emphasis on problem solving, critical thinking, collaboration and communication across multiple industries, software and prototyping technologies. Integrated workflow processes including online resources, project management, sustainability and globalized communication. Career development includes presentation skills and portfolio development. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

DT 100 DESIGN TECHNOLOGY

3 units

Introduction to design technology processes through creative problem solving. Emphasis on critical thinking, communication and collaboration in an interdisciplinary environment. Integrated Math and English skills applied to introductory design projects across a range of creative technology based careers. Production using leading edge technologies, principles and practices. Total of 36 hours lecture and 72 hours laboratory.

DT 101 FABRICATION LABORATORY

2 units

Prerequisite: *DT 100.*

Project design and development in a cross disciplinary environment integrating contextualized English and Math skills. Fabrication of projects using rapid prototyping equipment of design projects from contextualized math and design discipline course. Production using leading edge technologies, principles and practices. Total of 108 hours of laboratory.

DT 105 EMERGING APPLIED TECHNOLOGIES

2 units

Critical examination of current issues in applied technology in relation to the future of work. Research into the implications of current and future technological innovation for industry sectors, occupational clusters. Creation of adaptive strategies for long-term success in a globalized, technology-driven economy including entrepreneurship, lifelong learning, and professional development. Emphasis on sustainability, automation and equity. Total of 36 hours lecture and 18 hours laboratory.

DT 110 SUSTAINABLE TECHNOLOGIES

3 units

Introduction to the fundamentals of sustainable design and their technological application for emerging green careers using the LEED (Leadership in Energy and Environmental Design) green rating system framework. Analysis of principles, processes and materials in the built environment, manufacturing and related industries. Emphasis on collaboration, communication through design-centric problem solving. Total of 36 hours lecture and 72 hours laboratory.

DT 114 BUILDING INFORMATION MODELING DESIGN (BIM DESIGN)

4 units

Prerequisite: *DT 118.*

Introduction to parametric building information modeling (BIM) and its integration in design, construction, management, operation, and maintenance of buildings for sustainable design. Total of 36 hours lecture and 108 hours laboratory.

DT 118 A/E/C MODELING

3 units

Prerequisite: *DT 017.*

Three-dimensional computer-aided surface modeling and prototyping, with a focus on Architectural/Engineering/Construction industry applications. Coursework includes 3-D modeling, animation, material application, light studies and rendering; production of technical graphics and prototypes from 3-D models; referencing multiple technical graphics to create models and prototypes. Design centric projects with emphasis on problem solving, critical thinking, collaboration and communication across multiple industries, softwares and prototyping technologies. Integrated workflow processes including online resources, project management, sustainability and globalized communication. Career development includes presentation skills and portfolio development. Total of 36 hours lecture and 72 hours laboratory.

DT 150 READING ENGINEERING DRAWINGS

1 unit

Focus on engineering and manufacturing technical drawings. Emphasizes visualizing and interpreting detailed drawings for mechanical components. Importance placed on generating, modifying, and interpretation of title-blocks, symbols, dimensional and geometric fits and tolerances, view representation, standard fasteners, machine elements, and weldments. Total of 18 hours lecture.

DT 220 CAD TECHNICIAN INTERNSHIP

2 units

Prerequisites: All of the following: DT 140, 150, and 008B and maintain enrollment in 7 units or more including internship.

Supervised, practical experience in an industry related professional environment. **Pass/no pass** grading. Total of 108 hours field practice.

DT 230 COMPUTER-AIDED MANUFACTURING

3 units

Prerequisites: DT 008A and MACH 220A.

Production of machining operations on CAM software to produce numerical control programming (G-Code) in order to automate numerically controlled machinery (CNC). Topics include CAD, solid modeling, work piece set-up, toolpath generation, G&M Codes, machine set-up, contour, pocket and surface machining. Total of 27 hours lecture and 81 hours laboratory.

DT 240 GEOMETRIC DIMENSIONING AND TOLERANCING

1 unit

Prerequisite: DT 150.

Introduction to ANSI Geometric Dimensioning and Tolerancing through the analysis of part function and mating relationships to determine functional geometric dimensioning and tolerance. Topics covered include tolerancing, form controls, datums, orientations controls, tolerance of position, concentric, symmetry, runout and profile controls. Total of 18 hours lecture.

ECONOMICS

(Social Sciences Division)

ECON 001A PRINCIPLES OF ECONOMICS

3 units

Prerequisites: One of the following courses: MATH 125 or MATH 127B or MATH 128B or MATH 250.

Macro-economics. Introduction to concepts and tools of economic analysis. Theory of demand and supply, national income accounting, economic growth, recessions and inflation. Fiscal and monetary theories and policies. The

Federal Reserve system, tools of monetary control and international trade and finance. Total of 54 hours lecture.

Transfer Credit: CSU; UC. *C-ID: ECON 202

ECON 001B PRINCIPLES OF ECONOMICS

3 units

Prerequisites: ECON 001A and one of the following: MATH 125 or MATH 127B or MATH 128B or MATH 250.

Micro-economics. Price analysis, income distribution, comparative economic systems, international trade and economic problems of public utilities, transportation and agriculture. Total of 54 hours lecture.

Transfer Credit: CSU; UC. *C-ID: ECON 201

ECON 020 INDEPENDENT STUDY

1 unit

Prerequisites: One semester of economics and permission of department chairperson.

Individual projects; research techniques; written reports. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

ECON 110 SKILLS FOR COLLEGE SUCCESS IN ECONOMICS

1 unit

Development of essential study techniques for success in economics courses; orientation to applications of computer-based technologies in economics; time management; textbook mastery, lecture outlining, test taking, and critical analysis. Total of 18 hours lecture.

EDUCATION

(Social Sciences Division)

EDUC 013 INTRODUCTION TO ELEMENTARY CLASSROOM TEACHING

3 units

Introduce students to the concepts and issues related to teaching diverse learners in today's contemporary schools, Kindergarten through grade 12 (K-12). Topics include teaching as a profession and career, historical and philosophical foundations of the American education system, contemporary educational issues, California's content standards and frameworks, and teacher performance standards. In addition to class time, the course requires 54 hours structured field practice 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. Total of 36 hours lecture and 54 hours field experience.

Transfer Credit: CSU; UC

*Course Identification Numbering System (C-ID)

EDUC 020 INDEPENDENT STUDY

1 unit

Individual projects; research techniques; written reports.

Pass/no pass grading. Total of 54 hours laboratory.

Transfer Credit: CSU

EDUC 030 TEACHING AS A PROFESSION

3 units

For prospective teachers: professional responsibilities and duties; classroom visitation, assisting. Total of 54 hours lecture.

Transfer Credit: CSU

EDUC 100 TUTORING TECHNIQUES

1 unit

Introduction to various learning styles, tutorial strategies and techniques; selected problems encountered by those rendering tutorial service. **Recommended** tutor eligibility requirements, which include faculty referral and satisfactory score on any required department diagnostic test. Total of 18 hours lecture.

EDUC 113 SCHOOL AGE FIELD PRACTICE

4 units

Prerequisite: *Maintain enrollment in 7 or more units, including field practice; concurrent enrollment in other education courses.*

Supervised field practice in approved educational programs or relevant community agency settings for school age children. Planning, supervising and guiding the learning environment, practical application of theoretical concepts. Total of 18 hours lecture and 270 hours field practice.

EDUC 131 INTRODUCTION TO THE SCHOOL-AGE CHILD

3 units

Focus on the physical, social, emotional and cognitive development of the school-age child. Emphasis will be placed on the interaction between the child and teacher in the child care setting. Total of 54 hours lecture.

EDUC 132 CURRICULUM FOR SCHOOL-AGE CHILDREN

3 units

Preprofessional training of teacher aides and teaching assistants for elementary school. Orientation to teaching with special emphasis on extended day programs, activities both before and after school, developmental tasks for different age levels, coordination with classroom activities. Total of 54 hours lecture.

EDUC 150 EDUCATIONAL THEORY IN INTERACTIVE MULTIMEDIA

3 units

Introduction to educational theory as it applies to the design of interactive multimedia. The emphasis is on the role of the learner and his/her approach to learning, the roles of visual and sound elements, educational theory, motor skills, cultural biases, and learner motivation. Portfolio project. An interdisciplinary course. For students enrolled in the Multimedia Certificate Program, but open to all. Total of 54 hours lecture and 18 hours laboratory.

ELECTRICITY

(Engineering and Technology Division)

ELTY 012 BASIC ELECTRICITY—ELECTRONICS

2 units

Fundamental concepts, theories, laws and devices used in the technical industry. Circuit analysis using testing and measuring procedures. Troubleshooting procedures using schematic, measurement instruments and hands-on laboratory experience. **Required** instructional trips. Total of 18 hours lecture and 54 hours laboratory.

Transfer Credit: CSU

ELTY 217 ELECTRICAL INSPECTION AND CODES

2 units

Inspection using the national, state and local codes. Duties of the electrical inspector with emphasis on code enforcement, inspection procedures, plan reading, electrical symbols and terminology. Methods of performing electrical inspections and interpreting electrical systems based on the current electrical codes and standards. Emphasis on the importance of safety, asbestos abatement awareness, anchoring and supporting for earthquake mitigation. Quality workmanship, efficient and well-designed electrical systems and retrofitting. **Required** instructional trips. **Recommended** ELTY 240ABCD or 248ABCD. **No credit** if taken after ELTY 217A or B. Total of 36 hours lecture.

ELTY 218 ELECTRICAL INSPECTION AND CODES - UPDATE

1 unit

Prerequisite: *ELTY 217.*

Review of recent changes and revisions to local, state and national electrical codes and standards. Emphasis on new methods of code applications and calculations. Code reference on installation of new electrical hardware and materials. Discussion of future trends of electrical design concepts. Total of 18 hours lecture.

ELTY 240A INTRODUCTION TO ELECTRICAL TECHNOLOGY

8 units

Introduction to direct current circuits, theory, practices, applications, DC electrical systems and troubleshooting techniques. Use state-of-the-art equipment, components, devices, power sources for hands-on laboratory experiments. Identify commonly used electrical symbols, abbreviations, circuits, diagrams, wiring methods, and test measuring instruments. Formulas used in electrical theory, offering a review and application of various functions: principles of magnetism and electromagnetic applicable to electrical components, proper use and selection of tools and electrical specifications, codes and standards. **Required** instructional trips. Total of 90 hours lecture and 180 hours laboratory.

ELTY 240B ELECTRICAL POWER GENERATION AND CONTROL CIRCUITS

8 units

Prerequisite: *ELTY 240A.*

Introduction to alternating current circuits, theory, practices and applications for electrical power generation and control circuits. Fundamental theory, calculations, formulas and applications of AC and DC power generation, transmission and distribution systems, transformers, motors and generators. Study complex networks such as RC, RL and RLC circuits, motor controllers, electromagnetic circuits and Poly-Phase systems. Course will include explanation of electrical specifications, codes, standards, terms, abbreviations, components, safety and wiring requirements. Hands-on-laboratory assignments with state-of-the art test and measurement instruments will provide testing techniques and troubleshooting procedures. **Required** instructional trips. Total of 90 hours lecture and 180 hours laboratory.

ELTY 240C ELECTRICAL POWER DISTRIBUTION SYSTEMS AND MACHINERY

8 units

Prerequisite: *ELTY 240B.*

An advanced course that requires knowledge of AC and DC theory, practices and applications. Investigates the theory and applications of motors, generators, electromagnetic, systems and their interaction in power distribution systems and machinery. Covers principles of AC, installation of devices in AC circuits and response to circuits of AC excitation; concepts of electrical symbols, abbreviations, diagrams, specifications, safety procedures, codes and standards. Provides a technical, theoretical, practical and multidisciplinary approach to a broad understanding of electrical formulas, calculations for power technology and alternative energy sources. Hands-on and computer aided laboratory experiments to develop knowledge and skills in programmable controllers for electrical machinery used the

in electrical industry. **Required** instructional trips. Total of 90 hours lecture and 180 hours laboratory.

ELTY 240D PROGRAMMABLE CONTROLLERS/SOLID STATE DEVICES AND ELECTRONIC APPLICATIONS

8 units

Prerequisite: *ELTY 240C.*

Advanced course provides theoretical and practical principals concerning DC and AC circuits and systems, electric machinery and automated systems. Design of programmable logic control circuits and systems, ladder logic and diagram, systems wiring, sequencers, numbering systems, timing and counters, logic and math instruction, and program mapping. Machine control functions consisting of; relay type instructions, solid state devices, software development, programming language and diagnostic analyst, using test and measuring instruments. Applications of programmable logic controls include; wire management, management of co-generations systems, alternate energy sources, communication and sensor program management, integrated network systems and uninterrupted power systems. Hands-on laboratory provide applications for installation specifications, system wiring, systems inspection procedures for safety and related codes and standards. **Required** instructional trips. Total of 90 hours lecture and 180 hours laboratory.

ELTY 248A INTRODUCTION TO ELECTRICAL TECHNOLOGY

4 units

Fundamental theory and application of DC circuits for the electrical industry. Explanation of electrical terms, codes and components. Measuring electrical parameters with state-of-the-art measurement instruments. Hands-on laboratory assignments with instruments, test techniques, troubleshooting procedures and schematic reading. **Required** instructional trips. Total of 54 hours lecture and 54 hours laboratory.

ELTY 248B ELECTRICAL POWER GENERATION AND CONTROL CIRCUITS

4 units

Prerequisite: *ELTY 248A.*

Fundamental theory and application of AC and DC power generation, distribution and control circuits for the electrical industries. Explanation of electrical codes, standards, terms and components. Hands-on laboratory assignments with state-of-the-art measurement instruments, test techniques and troubleshooting procedures. **Required** instructional trips. Total of 54 hours lecture and 54 hours laboratory.

ELTY 248C ELECTRICAL POWER DISTRIBUTION SYSTEMS AND MACHINERY

4 units

Prerequisite: *ELTY 248B.*

Theory and application of electromagnetic interaction in power distribution systems and machinery for the electrical industry. Concepts of electrical codes and standards. Laboratory investigations of electrical and magnetic circuits, programmable controllers and state-of-the-art devices. **Required** instructional trips. Total of 54 hours lecture and 54 hours laboratory.

ELTY 248D PROGRAMMABLE CONTROLLERS/SOLID STATE DEVICES AND ELECTRONIC APPLICATION

4 units

Prerequisite: *ELTY 248C.*

Study and performance of programmable controllers for machinery, energy management, cogeneration, alternate energy and uninterrupted power source. Hands-on laboratory assignments with state-of-the-art measurement instruments and troubleshooting concepts. **Required** instructional trips. Total of 54 hours lecture and 54 hours laboratory.

ELTY 250 INTRODUCTION TO PHOTOVOLTAIC SYSTEMS

4 units

This course in solar electricity introduces students to the field of photovoltaic (PV). Introduction to photovoltaic terminology, concepts, vocabulary, techniques and safety. History, applications and benefits of the different PV systems. Basic Electrical theories related to photovoltaic. PV system sizing and cost estimating. Voltage, current, resistance and power calculation and measurements. Specification of the components such as inverter, charge controller, combiner, battery and generator. **Recommended** high school algebra MATH 125 or MATH 127B or MATH 128B. **Required** instructional trips. Total of 54 hours lecture and 54 hours laboratory.

ELTY 251 PHOTOVOLTAIC THEORY AND INSTALLATION TECHNIQUES

4 units

Prerequisite: *ELTY 250.*

This course in solar electricity will prepare students for entry level employment in photovoltaic (PV) industry. Instruction includes solar electricity fundamentals, PV safety, site analysis, PV system sizing and design, required components and equipment. Product installation, troubleshooting, net metering laws and National Electrical Code for PV requirements. Successful participants will be qualified to sit for the North American Board of Certified Energy Practitioners (NABCEP) "PV Installer Entry Level Certificate

of Knowledge" examination. **Required** instructional trips. Total of 54 hours lecture and 54 hours laboratory.

ELECTRONICS

(Engineering and Technology Division)

ELTN 015 COMPUTER AIDED ELECTRONIC DRAFTING

3 units

Prerequisites: *Enrollment in or completion of ELTN 009 and MATH 003.*

Computer aided drafting of electronic (CAED) circuits. Standards, electronic rules check, JEDEC specifications. Computer commands necessary to install and operate the CAED program. Practice in using the CAED programs with emphasis on current limitations and decoupling problems. PC board routing. Multilayer boards. Total of 36 hours lecture and 108 hours laboratory.

Transfer Credit: CSU

ELTN 025 LOGIC AND MICROCOMPUTER ELECTRONICS

4 units

Prerequisite: *ELTN 032.*

Introduction to microcomputer systems, functional elements, organization, instruction sets. Preparation of assembly language programs, elements of structure, stack operations, timing analysis of bus operations. Microprocessor system interfacing, time considerations, interrupts. Multiprocessing and bus-sharing applications. Intel microprocessors with emphasis on 8085 and 8086-type microprocessors. Introduction to embedded controllers, interface design, single-chip controllers. Software development systems and diagnostics. Development and maintenance of microcomputer-based systems. **No credit** if taken after ELTN 125. Total of 54 hours lecture and 54 hours laboratory.

Transfer Credit: CSU

ELTN 031 CIRCUIT ANALYSIS

5 units

Prerequisite: *ELTN 009.*

Recommended preparation: *MATH 008.*

Field effect and bipolar transistor theory, audio preamplifiers and power amplifiers, coupling and bias stabilization techniques. Analysis of small-signal models, application of Kirchhoff's laws to multi-mesh active circuits, matrix methods. Mathematical analysis of feedback systems, stability considerations, elementary transforms. Applications of electro-optical devices, operational amplifiers. Complex operator in frequency response measurements. Total of 72 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

ELTN 032 DIGITAL AND CONTROL ELECTRONICS

4 units

Prerequisites: *ELTN 009 and MATH 008.*

Introduction to logic circuit design and microprocessors. Design and analysis of digital, combinatorial logic, and sequential circuits. Minimization techniques using Boolean algebra and Karnaugh maps. Interfacing requirements, truth tables, multiplexers, demultiplexers, A/D converters and DAC's. Computer arithmetic and preparation of assembly language programs. Laboratory experience using digital circuits and microprocessors. Total of 54 hours lecture and 54 hours laboratory.

Transfer Credit: CSU

ELTN 109A APPLIED ALGEBRA FOR ELECTRONICS

4 units

Prerequisite: *Enrollment in or completion of ELTN 130 or ELTY 240A.*

Application of algebra to the analysis of electronic circuits. Review of measurement accuracy, precision and tolerance, and the use of scientific notation and scientific calculators. Solution of linear algebraic equations, factoring polynomials, rules of exponents, radicals, simultaneous equations and quadratic equations. Direct current network analysis using electronic laws and algebraic principles applied to problems arising in the laboratory. Use of electronic test equipment, measurements, collection of data and preparation of written reports. Recommended high school algebra or MATH 125. Total of 54 hours lecture and 54 hours laboratory.

ELTN 109B APPLIED MATHEMATICS FOR ELECTRONICS

3 units

Prerequisite: *ELTN 109A.*

Application of trigonometry, number systems and Boolean algebra in electronics. Right angle trigonometry, identities, vector algebra, imaginary operator, impedance, logarithms, solution of exponential equations and use of a scientific calculator. Number systems and theorems of Boolean algebra. Total of 54 hours lecture.

ELTN 115 PRINTED CIRCUIT & ELECTRONIC HARDWARE DESIGN

2 units

Prerequisite: *Enrollment in or completion of ELTN 130 or MIT 101.*

Introduction to Electronic Hardware and Printed Circuit Board (PCB) design and manufacturing. Design and fabrication of PCB's with CAD software. Soldering techniques. Group system design. Total of 18 hours lecture and 54 hours laboratory.

ELTN 117 INTRODUCTION TO MICROCONTROLLERS AND EMBEDDED DESIGN

3 units

Prerequisite: *ELTN 130 or MIT 101.*

Introduction to digital circuits including gates, memory circuits and microcontrollers. Introduction to structured programming concepts and computer numbering systems. Programming microcontrollers and interfacing requirements, A/D and D/A conversion, sensors, user interfaces. Writing and debugging microcontroller programs. Laboratory experiments in the application of embedded microcontrollers and interfacing with digital and analog systems. Total of 36 hours lecture and 54 hours laboratory.

ELTN 125 LOGIC AND MICROCOMPUTER ELECTRONICS

4 units

Prerequisite: *ELTN 032 or 132.*

Introduction to microcomputer systems, functional elements, organization, instruction sets. Preparation of assembly language programs, elements of structure, stack operations, timing analysis of bus operations. Microprocessor system interfacing, time considerations, interrupts. Multiprocessing and bus-sharing applications. Intel microprocessors with emphasis on 8085 and 8086-type microprocessors. Introduction to embedded controllers, interface design, single-chip controllers. Software development systems and diagnostics. Development and maintenance of microprocessor-based systems. **No credit** if taken after ELTN 025. Total of 54 hours lecture and 54 hours laboratory.

ELTN 130 INTRODUCTION TO ELECTRONICS

3 units

Recommended Preparation: *TECH 107A, MATH 125.*

Introduction to the field of Electronics. Electronics safety. Electronics and the environment. Atomic structure, electric charge, current, voltage, resistance. Battery technologies. Simple DC circuits. Ohm's law and Kirchoff's laws. Reading schematic diagrams. Use of electronics test equipment for measurement, evaluation and troubleshooting. Simple mathematical formulas, scientific notation, use of scientific calculators. Introduction to AC electricity. Introduction to DC and AC electric motors. Some uses of motors in modern vehicles including hybrid and electric vehicles. Introduction to digital circuits. Introduction to microcontrollers. Total of 36 hours lecture and 54 hours laboratory.

ELTN 131 CIRCUIT ANALYSIS

5 units

Prerequisite: *ELTN 113.*

Field effect and bipolar transistor theory, audio preamplifiers and power amplifiers, coupling and bias stabilization techniques. Analysis of small-signal models, application of Kirchoff's laws to multi-mesh active circuits, matrix

methods. Mathematical analysis of feedback systems, stability considerations, elementary transforms. Applications of electro-optical devices, operational amplifiers. Complex operator in frequency response measurements. **No credit** if taken after ELTRN 031 or 121A or 131A. Total of 72 hours lecture and 72 hours laboratory.

ELTN 132 DIGITAL AND CONTROL ELECTRONICS

4 units

Prerequisites: *ELTN 109B and 113; or ELTN 117.*

Introduction to logic circuit design and microprocessors. Design and analysis of digital, combinatorial logic, and sequential circuits. Minimization techniques using Boolean algebra and Karnaugh maps. Interfacing requirements, truth tables, multiplexers, demultiplexers, A/D converters and DAC's. Computer arithmetic and preparation of assembly language programs. Laboratory experience using digital circuits and microprocessors. **No credit** if taken after ELTN 032. Total of 54 hours lecture and 54 hours laboratory.

EMERGENCY MEDICAL TECHNOLOGY

(Health Sciences Division)

EMED 101A EMERGENCY MEDICAL TECHNOLOGY

5 units

Prerequisite: *Age 18 or older.*

Selected topics in human anatomy and physiology. Diagnostic signs and interpretations of illness and injuries. Development of skill in procedures of emergency rescue and care. Preparation for certification as Emergency Medical Technician-I (Ambulance). Scope of practice not to exceed requirements as outlined under Title 22. Minimum grade of C required for Occupational Skills Certificate. Total of 54 hours lecture and 108 hours laboratory.

ENGINEERING

(Engineering and Technology Division)

ENGR 001A SURVEYING

3 units

Prerequisite: *MATH 007A.*

Introduction to the field of surveying to fulfill engineering transfer credit and provide career exploration to entry level occupation in the field. Topics covered includes both optical and electronic instruments, distance measurements, stadia surveys, leveling and traversing using optical instruments, electronic distance measuring instruments and total stations. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC

ENGR 002 ENGINEERING GRAPHICS

3 units

Prerequisite: *MATH 007A or MATH 009.*

Introduction to principles of engineering drawings in visually communicating engineering design and an introduction to computer-aided design (CAD). Engineering design projects with emphasis on the development of visualization skills, orthographic projections, mechanical dimensioning and tolerancing practices, problem solving, critical thinking, collaboration and communication across multiple industries, software and prototyping technologies. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC

ENGR 010 INTRODUCTION TO ENGINEERING

2 units

Exploration of different branches of engineering, industries and functions of an engineer. Explains the engineering education pathways and explores effective strategies for students to reach their full academic potential. Introduction to the methods and tools of engineering problem solving and design including the interface of the engineer with society and engineering ethics. Students will practice developing communication skills pertinent to the engineering profession. Total of 18 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC

ENGR 011 STATICS

3 units

Prerequisite: *MATH 005B and PHYS 001A.*

Introduction to engineering mechanics. Topics include: properties of forces, moments, couples and resultants; two- and three-dimensional force systems acting on engineering structures in equilibrium; analysis of trusses, and beams; distributed forces, shear and moment diagrams, center of gravity, centroids, friction, and are and mass moments of inertia. **No credit** if taken after ENGR 015A. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ENGR 130*

ENGR 012 DYNAMICS

3 units

Prerequisite: *ENGR 011.*

Fundamentals of kinematics and kinetics of particles and rigid bodies. Topics include kinematics of particle motion; Newton's second law, work-energy and momentum methods; kinematics of planar motions of rigid bodies; work-energy and momentum principles for rigid body motion; introduction to mechanical vibrations which is optional for an introductory dynamics course. **No credit** if taken after ENGR 017. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ENGR 230*

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ENGR 013 STRENGTH OF MATERIALS

3 units

Prerequisite: ENGR 011.

The study of mechanics of material. Topics include stresses, strains and deformations associated with axial, torsional and flexural loading of bars, shafts and beams, as well as pressure loading of thin-walled pressure vessels. Includes stress and strain transformation, Mohr's Circle, ductile and brittle failure theories, and the buckling of columns. Statically indeterminate systems are also studied. Total of 54 hours lecture.

Transfer Credit: CSU; UC

ENGR 014 MATERIALS OF CONSTRUCTION

3 units

Prerequisites: CHEM 001A.

Physical properties of engineering materials; their reactions to conditions encountered in various uses; processes by which they are produced and treated. Total of 54 hours lecture.

Transfer Credit: CSU

ENGR 015A STATICS

3 units

Prerequisites: MATH 005B and PHYS 001A.

Composition and resolution of co-planar and non-planar force systems; equilibrium of rigid bodies; distributed forces; forces in trusses; frames and cables; shear and bending moments in beams; moments of inertia of areas and bodies. Total of 54 hours lecture.

Transfer Credit: CSU; UC

ENGR 015B APPLIED MECHANICS

3 units

Prerequisite: MATH 005B.

States of stress and strain; analysis and design of structural elements; pressure vessels, beams, torsion bars, springs, columns, riveted and welded connections; inelastic behavior; strength under combined loading; statically indeterminate structures. Total of 54 hours lecture.

Transfer Credit: CSU; UC

ENGR 016 ENGINEERING CIRCUITS

3 units

Prerequisite: MATH 005B.

Mesh and nodal analysis of electric circuits using Ohm's and Kirchhoff's Laws; Thevenin and Norton Theorems; superposition; transient analysis of RL and RC circuits; steady state analysis of AC circuits; analysis of passive two-port networks; polyphase circuits. Total of 54 hours lecture.

Transfer Credit: CSU; UC

ENGR 017 DYNAMICS

3 units

Prerequisite: ENGR 015A.

Kinematics of particles; coordinate systems; relative motion; Newton's Second Law; work and kinetic motion; linear and angular impulse and momentum; impact applications; central force motion; conservation of energy and momentum; steady and variable mass flow; rotational motion relative to rotating axis systems; central equation of motion; angular momentum. Total of 54 hours lecture.

Transfer Credit: CSU; UC

ENGR 018 INTRODUCTION TO NUMERICAL ANALYSIS

3 units

Prerequisite: MATH 005A.

Introduction to numerical analysis, computational methods, computer programming, and problem solving using MATLAB. Provides a working knowledge of the computer as a tool to solve engineering and scientific problems. Understanding of programming and problem-solving allowing use of these tools and techniques to extend MATLAB knowledge. Total of 54 hours lecture.

Transfer Credit: CSU; UC

ENGLISH

(English Division)

ENGL 001A READING AND COMPOSITION

4 units

Prerequisite: One of the following: (1) ENGL 100; (2) ESL 033B; (3) placement based on the English assessment process.

Recommended Preparation: ENGL 014.

Development of expository and argumentative essays. Instruction in writing annotated papers. Analysis of various forms of writing with emphasis on expository and argumentative essays. **No credit** if taken after ENGL 001AH or 001AS. Total of 72 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ENGL 100*

ENGL 001AH HONORS READING AND COMPOSITION

4 units

Prerequisites: One of the following: (1) ENGL 100; (2) ESL 033B; (3) placement based on the English assessment process.

Recommended Preparation: ENGL 014

Enrollment Limitation: Acceptance into the Honors Program.

Development of expository and argumentative essays. Instruction in writing annotated papers. Analysis of various forms of writing with emphasis on expository and argumentative essays. This enriched course is designed for the Honors Program allowing more student directed

*Course Identification Numbering System (C-ID)

discussions and more extensive writing assignments. **No credit** if taken after ENGL 001A or ENGL 001AS. Total of 72 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ENGL 100*

ENGL 001AS STRETCH ACCELERATED READING AND COMPOSITION

4 units

Prerequisites: *One of the following: (1) ENGL 001S; (2) ENGL 100; (3) ESL 033B; (4) placement based on the English Assessment process.*

Critical analysis of interdisciplinary texts, including literature. Composition of various written texts, including essays. Examination of the uses and significance of language in knowledge creation, community engagement, and academic success in specific disciplines. Emphasis on authentic voice, collaboration, research, student reflection, and composition for the 21st century. Equity-centered classroom and curriculum. **No credit** if taken after ENGL 001A or ENGL 001AH. Total of 72 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ENGL 100*

ENGL 001B READING AND COMPOSITION

4 units

Prerequisite: *One of the following: (1) ENGL 001A or ENGL 001AH or ENGL 001AS; (2) score of 3 on Advanced Placement Test given by the College Entrance Examination Board.* Writing of argumentative and persuasive essays about literary works. Critical analysis, interpretation, and evaluation of literary works. Elements and principles of literature as exemplified in major literary forms. **No credit** if taken after ENGL 001BH. Total of 72 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ENGL 120*

ENGL 001BH HONORS READING AND COMPOSITION

4 units

Prerequisite: *One of the following: (1) ENGL 001A or ENGL 001AH or ENGL 001AS; (2) score of 3 on Advanced Placement Test given by the College Entrance Examination Board.*

Enrollment Limitation: *Acceptance into the Honors Program.*

Writing of argumentative and persuasive essays about literary works. Critical analysis, interpretation, and evaluation of literary works. Elements and principles of literature as exemplified in major literary forms. This enriched course is designed for the Honors Program allowing more student directed discussions and more extensive writing assignments. **No credit** if taken after ENGL 001B. Total of 72 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ENGL 120*

ENGL 001C INTERMEDIATE COMPOSITION — CRITICAL THINKING AND ARGUMENT

4 units

Prerequisite: *ENGL 001A, 001AH, or 001AS.*

Principles of critical thinking applied to writing and reading on complex issues which incorporate logic, inductive and deductive reasoning, the critique of logical fallacies, persuasion, analysis and evaluation of appropriate prose models, including those employing argument, other rhetorical modes, and critical thinking strategies specific to various modes of thought; selective use of citation and documentation. **No credit** if taken after ENGL 001CH. Total of 72 hours lecture.

*Transfer credit: CSU; UC. *C-ID: ENGL 105*

ENGL 001CH HONORS INTERMEDIATE COMPOSITION-CRITICAL THINKING AND ARGUMENT

4 units

Prerequisite: *ENGL 001A, 001AH, or 001AS.*

Enrollment Limitation: *Acceptance into the Honors Program.*

Principles of critical thinking applied to writing and reading on complex issues which incorporate logic, inductive and deductive reasoning, the critique of logical fallacies, persuasion, analysis and evaluation of appropriate prose models, including those employing argument, other rhetorical modes, and critical thinking strategies specific to various modes of thought; selective use of citation and documentation. This enriched course is designed for the Honors Program allowing more student directed discussions and more extensive writing assignments. **No credit** if taken after ENGL 001C. Total of 72 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ENGL 105*

ENGL 001S STRETCH ACCELERATED COMPOSITION I

4 units

Prerequisite: *One of the following: (1) ENGL 400 or BUS 112; (2) placement based on the English assessment process.*

Corequisite: *ENGL 901.*

Critical analysis of interdisciplinary texts, including both non-fiction and literature. Composition of various written texts, including essays. Examination of the uses and significance of language in knowledge creation, community engagement, and academic success. Emphasis on authentic voice, collaboration, research, student reflection, and composition for the 21st century. Equity-centered classroom and curriculum. This is the first in a two-class sequence. **No credit** if taken after ENGL 001A, ENGL 001AH, or ENGL 001AS. Total of 72 hours lecture.

Transfer Credit: CSU

ENGL 003 TECHNICAL WRITING — ADVANCED EXPOSITION

3 units

Prerequisite: *ENGL 001A.*

Development of writing skills which can be applied to any career or profession. Emphasis on types of writing required

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to communicate facts and ideas in a technological society. Total of 54 hours lecture.

Transfer Credit: CSU

ENGL 005A CREATIVE WRITING

3 units

Prerequisite: *Eligibility for ENGL 001B.*

Creative literary expression; short story, poetry and essay. Individual experimentation with various forms; students evaluate their work and work of classmates in light of contemporary writings. Total of 54 hours lecture.

Transfer Credit: CSU; UC

ENGL 005B CREATIVE WRITING

3 units

Prerequisite: *ENGL 005A, 006, 007 or 008.*

Creative literary expression such as: short story, poetry, dramatic form and essay. The focus is on in-depth criticism of student work and professional writers. Total of 54 hours lecture.

Transfer Credit: CSU; UC

ENGL 006 SHORT STORY WRITING

3 units

Prerequisite: *Eligibility for ENGL 001B.*

Theory and practice in writing the short story. Total of 54 hours lecture.

Transfer Credit: CSU; UC

ENGL 007 INSCAPE MAGAZINE PUBLICATION

3 units

Prerequisite: *ENGL 001A, 001AH, or 001AS.*

Critical review and selection of creative material; design and layout of a literary magazine. Total of 54 hours lecture.

Transfer Credit: CSU

ENGL 008 WRITING POETRY

3 units

Prerequisite: *Eligibility for ENGL 001A.*

Writing of poetry in all forms. Reading of traditional and current work. Total of 54 hours lecture.

Transfer Credit: CSU; UC

ENGL 009 CREATIVE NONFICTION

3 units

Prerequisite: *ENGL 001A, ENGL 001AH, or ENGL 001AS.*

Writing and analysis of creative nonfiction such as memoirs, reviews, profiles, and nature writing. Total of 54 hours lecture.

Transfer Credit: CSU; UC

ENGL 010 INTRODUCTION TO LINGUISTICS

3 units

Interdisciplinary course: English, Languages

Recommended preparation: *Eligibility for ENGL 001A.*

Survey of sounds, structure and development of language in connection with its social and cultural function. Differences and relationships among languages. **No credit** if taken after LING 010. **Recommended** for English and foreign languages majors, but open to all qualified students. Total of 54 hours lecture.

Transfer Credit: CSU; UC

ENGL 011 HISTORY OF ENGLISH LANGUAGE

3 units

Interdisciplinary course: English, Languages

Recommended preparation: *Eligibility for ENGL 001A.*

Origins and development of the English language, from its Germanic ancestors to present-day American English. **No credit** if taken after LING 011. Total of 54 hours lecture.

Transfer Credit: CSU; UC

ENGL 012 INTERCULTURAL COMMUNICATION

3 units

Interdisciplinary course: English, Languages

Recommended preparation: *Eligibility for ENGL 001A.*

Linguistic and cultural patterns; how and what people communicate. Designed to aid both Americans and foreign students in the development of intercultural understanding and communication skills. **No credit** if taken after LING 012. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: COMM 150*

ENGL 014 CRITICAL READING

3 units

Prerequisite: *One of the following: (1) Eligibility for ENGL 001A; (2) ENGL 130; or (3) satisfactory reading placement assessment.*

Development of comprehension and critical thinking skills to increase ability to analyze critically and evaluate different types of writing. Analysis of writing with attention to the accuracy and adequacy of evidence, the logical structure of argument and definitions, persuasive and expressive language and common fallacies. **Cannot be taken concurrently** with ESL 460, 432, ENGL 415 or 130. Total of 54 hours lecture.

Transfer Credit: CSU

ENGL 015 THE RESEARCH PAPER

1 unit

Prerequisite: *ENGL 001A.*

Application of principles and practices introduced in ENGL 001A to a major research paper in the student's field of study, using system of documentation preferred in the student's field. Total of 18 hours lecture.

Transfer Credit: CSU

ENGL 020 INDEPENDENT STUDY**1 unit****Prerequisites:** ENGL 001A and permission of department chairperson.

Individual projects; research techniques; written reports. Total of 54 hours laboratory.

*Transfer Credit: CSU; UC credit limitations. See counselor.***ENGL 024 A LITERATURE IN TRANSLATION****3 units****Recommended preparation:** Eligibility for ENGL 001A, ENGL 001AS, or ENGL 001AH.

Reading and discussion of the literature of a specific nationality/culture, emphasizing the unique qualities of that national/cultural identity. Historical, social, cultural and geographic background. Total of 54 hours lecture.

*Transfer credit: CSU; UC***ENGL 025A INTERPRETING MODERN LITERATURE****3 units****Prerequisite:** Eligibility for ENGL 001A or 001AH or 001AS.

Reading and discussion of poetry, fiction and drama, chiefly modern. Techniques involved in these literary forms. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***ENGL 025C WOMEN IN LITERATURE****3 units****Prerequisite:** Eligibility for ENGL 001A or 001AH or 001AS.

Examination of the portrayal of women presented in prose, poetry, and drama. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***ENGL 025D SCIENCE FICTION AND FANTASY****3 units****Prerequisite:** Eligibility for ENGL 001A or 001AH or 001AS.

Genres of science fiction and fantasy, exploring their origins and contemporary expressions. Reading and discussion of representative works. Study of the techniques involved in these works. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***ENGL 025E LITERATURE OF HORROR (GOTHIC NOVEL)****3 units****Prerequisite:** Eligibility for ENGL 001A or 001AH or 001AS.

The course includes reading and discussion of recurring motifs and archetypes in the Gothic novel and short stories of horror; analysis of the psychological implications of such types as the doppelganger, the shadow, the anima. The course traces the Gothic mode from its origin in superstition and magic through the contemporary emphasis on the distorted or violated psyche. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***ENGL 025F COMEDY AND LITERATURE****3 units****Prerequisite:** Eligibility for ENGL 001A or 001AH or 001AS.

Introduction to comedy in literature and/or film. Examination of comic world view as well as comic structures, plots, characters, situations and language. Exploration of the social implications of comedy. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***ENGL 025G MYSTERY AND CRIME FICTION****3 units****Prerequisite:** Eligibility for ENGL 001A or 001AH or 001AS.

Reading and discussion of selected works from detective fiction, including the following: Poe, Doyle, Hammett, Sayers, Chandler, Christie, MacDonald. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***ENGL 025H AMERICAN JOURNEYS****3 units****Prerequisite:** Eligibility for ENGL 001A or 001AH or 001AS.

Fictional and non-fictional accounts of recent journeys in search of identity and the sights, people and meaning of America. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***ENGL 025I POST-COLONIAL LITERATURES****3 units****Prerequisite:** Eligibility for ENGL 001A or 001AH or 001AS.

Introduction to works that explore post-colonial experience and consciousness by authors primarily from the developing world, including Africa, the Middle East, Asia, and Latin America. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***ENGL 025J UTOPIAN AND DYSTOPIAN LITERATURE****3 units****Prerequisite:** Eligibility for ENGL 001A or 001AH or 001AS.

Reading and discussion of poetry, fiction, drama, and film, chiefly modern. Techniques involved in these literary forms. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***ENGL 026 INTRODUCTION TO LITERARY THEORY AND CRITICISM****3 units****Prerequisite:** ENGL 001B or ENGL 001BH.

Introduction to theory and practice of literary criticism. Application of major critical theories to selected texts. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***ENGL 030A AMERICAN LITERATURE****3 units****Prerequisite:** Eligibility for ENGL 001B or ENGL 001BH.

Significant works of American poetry and prose from the colonial period through the Civil War. Total of 54 hours lecture.

*Transfer Credit: CSU; UC; *C-ID: ENGL 130*

*Course Identification Numbering System (C-ID)

ENGL 030B AMERICAN LITERATURE**3 units****Prerequisite:** *Eligibility for ENGL 001B or ENGL 001BH.*

Significant works of American poetry and prose from the Civil War to 1945. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ENGL 135***ENGL 030C AMERICAN LITERATURE****3 units****Prerequisite:** *Eligibility for ENGL 001B or ENGL 001BH.*

Significant works of American poetry and prose from 1945 to the present. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ENGL 135***ENGL 034 MAJOR NOVELIST****1 unit****Prerequisite:** *Eligibility for ENGL 001A or 001AH or 001AS.*

Intensive study of a single novelist. Total of 18 hours lecture.

*Transfer Credit: CSU; UC credit limitations. See counselor.***ENGL 035 MAJOR DRAMATIST****1 unit****Prerequisite:** *Eligibility for ENGL 001A or 001AH or 001AS.*

Intensive study of a single dramatist. Total of 18 hours lecture.

*Transfer Credit: CSU; UC credit limitations. See counselor.***ENGL 036 MAJOR POET****1 unit****Prerequisite:** *Eligibility for ENGL 001A or 001AH or 001AS.*

Intensive study of a single poet. Total of 18 hours lecture.

*Transfer Credit: CSU; UC credit limitations. See counselor.***ENGL 037 MAJOR CRITIC****1 unit****Prerequisite:** *Eligibility for ENGL 001A or 001AH or 001AS.*

Intensive study of a single critic. Total of 18 hours lecture.

*Transfer Credit: CSU; UC credit limitations. See counselor.***ENGL 044A WORLD LITERATURE: ANTIQUITY TO 1500****3 units****Prerequisite:** *ENGL 001B or ENGL 001BH.*

Reading and discussion of Western and non-Western literature from the Ancient era through 1500 A.D. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ENGL 140***ENGL 044B WORLD LITERATURE: 1500-1800 A.D.****3 units****Prerequisite:** *ENGL 001B or ENGL 001BH.*

Reading and discussion of Western and non-Western literature written between approximately 1500-1800 A.D. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ENGL 145***ENGL 044C WORLD LITERATURE: 1800 - MID 20TH CENTURY****3 units****Prerequisite:** *ENGL 001B or ENGL 001BH.*

Reading and discussion of world literature written between 1800 A.D. and the mid 20th century. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ENGL 145***ENGL 045A LITERATURE OF THE BIBLE****3 units****Prerequisite:** *Eligibility for ENGL 001B or ENGL 001BH.*Reading and discussion of books of the Old and New Testaments selected from among the following: *Genesis, Exodus, Joshua, Ruth, I and II Samuel, I Kings, Job, Proverbs, Isaiah, Amos, Jonah; Matthew, Luke, Acts, Romans, II Corinthians*, other Letters. Religious-social-political ideas, literary qualities and textual problems. Total of 54 hours lecture.*Transfer Credit: CSU; UC***ENGL 045B LITERATURE OF THE BIBLE****3 units****Prerequisite:** *Eligibility for ENGL 001B or ENGL 001BH.*Reading and discussion of books of the Old and New Testaments selected from among the following: *Genesis, Deuteronomy, Judges, Esther, I and II Chronicles, II Kings, Psalms, Ecclesiastes, Jeremiah, Hosea, Ezekiel, Daniel; Mark, John, Acts, I Corinthians, Hebrews, Revelation*, other Letters. Religious-social-political ideas, literary qualities and textual problems. Total of 54 hours lecture.*Transfer Credit: CSU; UC***ENGL 046A ENGLISH LITERATURE****3 units****Prerequisite:** *ENGL 001B or ENGL 001BH.*

Surveys of the literature written in the British Isles from Beowulf to Johnson. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***ENGL 046B ENGLISH LITERATURE****3 units****Prerequisite:** *ENGL 001B or ENGL 001BH.*

Survey of British literature from the Romantic movement (1798) to the present. Total of 54 hours lecture.

Transfer Credit: CSU; UC

**Course Identification Numbering System (C-ID)*

ENGL 047 MEXICAN AND CHICANO LITERATURE**3 units**

Prerequisite: *Eligibility for ENGL 001A or 001AH or 001AS.* Literary, social and historical aspects of essay, novel, drama, short story and poetry in English translation written by Mexican and Chicano writers with a survey of other relevant Latin American literary works. Total of 54 hours lecture.

Transfer Credit: CSU; UC

ENGL 048 ASIAN LITERATURE**3 units**

Prerequisite: *Eligibility for ENGL 001A.*

Reading and discussion of selected works of historical and/or modern imaginative literature from one or more Asian cultures. Total of 54 hours lecture.

Transfer Credit: CSU; UC

ENGL 049A FILM AS DRAMATIC LITERATURE**3 units**

Prerequisite: *Eligibility for ENGL 001A.*

Critical analysis of film types, directors, movements, national cinemas. Close examination of films through lecture, discussion and writing. **No credit** if taken after ENGL 049. Total of 54 hours lecture.

Transfer Credit: CSU; UC

ENGL 049B FILM AS DRAMATIC LITERATURE**3 units**

Prerequisite: *Eligibility for ENGL 001A.*

Critical analysis of film types, directors, movements, national cinemas as they reflect societal issues, historical periods, ethnic and cultural views, and values systems through documentary and dramatic presentation. Close examination of films through lecture, discussion, and writing. Total of 54 hours lecture.

Transfer Credit: CSU; UC

ENGL 050 AFRO-AMERICAN LITERATURE**3 units**

Prerequisite: *Eligibility for ENGL 001A or 001AH or 001AS.* Literary, social and historical aspects of essay, novel, drama, short story, poetry and oral tradition authored by African-Americans. Total of 54 hours lecture.

Transfer Credit: CSU; UC

ENGL 051 NATIVE AMERICAN MYTHOLOGY AND LITERATURE**3 units**

Prerequisite: *Eligibility for ENGL 001A.*

Reading and discussion of selected works from mythology and literature of Native Americans; some discussion of his-

tory and art, but major emphasis on mythology, fiction, poetry and autobiography. Total of 54 hours lecture.

Transfer Credit: CSU; UC

ENGL 052 ASIAN AMERICAN LITERATURE**3 units**

Prerequisite: *Eligibility for ENGL 001A or 001AH or 001AS.* Literary, social and historical aspects of essay, novel, drama, short story and poetry written by Asian American authors. Total of 54 hours lecture.

Transfer Credit: CSU; UC

ENGL 053 INTERPRETING POETRY**3 units**

Prerequisite: *Eligibility for ENGL 001B or ENGL 001BH.*

Reading and discussion of traditional, modern and contemporary poems. Total of 54 hours lecture.

Transfer Credit: CSU; UC

ENGL 054 CALIFORNIA LITERATURE**3 units**

Prerequisite: *Eligibility for ENGL 001A.*

Literary and historical perspectives of fiction, biography, journals, and letters about California by California writers. Total of 54 hours lecture.

Transfer Credit: CSU; UC

ENGL 057 MODERN DRAMA**3 units**

Prerequisite: *Eligibility for ENGL 001B or ENGL 001BH.*

Reading and discussion of continental, British and American drama from Ibsen to the present. Representative plays by Strindberg, Chekhov, Pirandello, O'Neill, Shaw, Brecht, Beckett, Genet, Pinter, Albee. Major theatrical movements: naturalism, symbolism, expressionism. Total of 54 hours lecture.

Transfer Credit: CSU; UC

ENGL 058 QUEER STUDIES IN LITERATURE**3 units**

Prerequisite: *Eligibility for ENGL 001B or ENGL 001BH.*

Examines representations of normative and non-normative sexuality in literature. Total of 54 hours lecture.

Transfer Credit: CSU; UC

ENGL 059 CHILDREN'S LITERATURE**3 units**

Prerequisite: *Eligibility for ENGL 001A or 001AH or 001AS.*

Reading and analysis of selected stories for young children and of selected critical evaluations of children's literature. **For** Child Development students, library tech students, writers of children's literature and parents, but open to all students. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ENGL 180*

*Course Identification Numbering System (C-ID)

ENGL 060 MASTERPIECES OF DRAMA**3 units****Prerequisite:** *Eligibility for ENGL 001A.*

Representative dramatic literature from the ancient Greeks to contemporary theater. Form, content, philosophical and historical perspectives and criticism. Discussion, written analysis and instructional trips. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***ENGL 061 INTRODUCTION TO THE NOVEL****3 units****Prerequisite:** *ENGL 001A.*

Reading and analysis of selected classic and contemporary novels. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***ENGL 078A INTRODUCTION TO SHAKESPEARE****3 units****Prerequisite:** *Eligibility for ENGL 001B or ENGL 001BH.*

Reading and discussion of 12 to 16 tragedies, comedies and histories, including the following: *Love's Labor's Lost; Twelfth Night; Richard II; Henry IV, parts I and II; Henry V; Hamlet; Othello.* Selections from the Sonnets. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***ENGL 078B INTRODUCTION TO SHAKESPEARE****3 units****Prerequisite:** *Eligibility for ENGL 001B or ENGL 001BH.*

Reading and discussion of 12 to 16 tragedies, comedies and histories, including the following: *The Merchant of Venice; As You Like It; Henry VI, parts I, II, III; Richard III; King Lear; Macbeth.* Selections from the Sonnets. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***ENGL 082A INTRODUCTION TO MYTHOLOGY****3 units****Prerequisite:** *Eligibility for ENGL 001B or ENGL 001BH.*

Fertile Crescent (Egyptian, Hebrew, Mesopotamian), Classical (Greek and Roman), and Old European mythologies. Emphasis on literary texts and creative expressions, such as art, music, and artifacts. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***ENGL 082B INTRODUCTION TO MYTHOLOGY****3 units****Prerequisite:** *Eligibility for ENGL 001B or ENGL 001BH.*

Historical and thematic exploration of mythology of one major cultural or geographical area other than Fertile Crescent. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***ENGL 082C INTRODUCTION TO MYTHOLOGY****3 units****Prerequisite:** *Eligibility for ENGL 001B or ENGL 001BH.*

Intensive study of a single body of traditional narrative, such as the Arthurian cycle; double, motifs; quest motifs; folk tales; fairy tales. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***ENGL 100 READING AND WRITING SKILLS****4 units****Prerequisite:** *One of the following: (1) ENGL 400 or BUS 112; (2) placement based on the English assessment process.***Corequisite:** *ENGL 901.*

Writing expository, analytical, and argumentative essays; developing critical reading research skills. Review of sentence structure and grammar. **Required** concurrent enrollment in ENGL 901. **Recommended** enrollment in ENGL 130. **No credit** if taken after ENGL 001A. Total of 72 hours lecture.

ENGL 110 SKILLS FOR COLLEGE SUCCESS**2 units**

Development of essential study techniques and critical thinking skills related to time management, textbook mastery, test taking, and memory. Total of 36 hours lecture.

ENGL 130 ADVANCED READING FOR ACADEMIC SUCCESS**3 units****Prerequisite:** *One of the following: (1) ENGL 415; (2) eligibility for ENGL 100 or ESL 033B; or (3) satisfactory reading placement assessment.*

Development of reading skills, vocabulary and study techniques. **Recommended** enrollment in ESL 033B or ENGL 100. **No credit** if taken after ENGL 014. **Cannot be taken concurrently** with ESL 460, 432, ENGL 415 or 014. Total of 54 hours lecture and 18 hours laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

ENGL 135 FROM PAGE TO PERFORMANCE**1 unit**

Reading and viewing of plays performed in off-campus locations. Approaching the printed text; approaching the stage performance; relationship of text to performance.

Pass/no pass grading. Total of 18 hours lecture.**ENGL 400 ENGLISH ESSENTIALS****4 units****Corequisite:** *ENGL 902.*

Basic essay writing skills; reading for understanding; grammar and mechanics. **Required** concurrent enrollment in ENGL 902. **Recommended** enrollment in ENGL 415 or

130. **No credit** if taken after ENGL 100 or 001A. **For** native speakers of English whose English placement assessment does not qualify them for ENGL 100 or 001A. **Not recommended** for ESL students. Total of 72 hours lecture.

ENGL 403 READING AND WRITING

1 unit

Improvement of reading, writing, vocabulary and spelling. Individualized assessment. **Pass/no pass** grading. Total of 54 hours laboratory.

ENGL 410 BASIC GRAMMAR

1 unit

Parts of speech; sentence structure; subject-verb agreement; pronoun case and agreement. **Recommended** for students in ENGL 001A and 100 who have difficulty with grammar. **No credit** if taken after ENGL 001A. Total of 18 hours lecture.

ENGL 411 PUNCTUATION

1 unit

Standard punctuation; troublesome problems and common errors in English usage. Recommended enrollment in or completion of ENGL 410. **No credit** if taken after ENGL 001A. **For** students who have difficulty with punctuation. Total of 18 hours lecture.

ENGL 412 SPELLING

1 unit

Systematic approach to mastery of American English spelling through applied learning techniques. **No credit** if taken after ENGL 001A. Total of 18 hours lecture.

ENGL 413 VOCABULARY BUILDING

1 unit

High-frequency words essential for success in college; analysis of root words, prefixes and suffixes to assist in vocabulary development. **No credit** if taken after ENGL 001A. Total of 18 hours lecture.

ENGL 415 READING FOR ACADEMIC SUCCESS

3 unit

Introduction to word attack skills, vocabulary, study skills, and basic reading techniques. **Recommended** enrollment in ESL 033A or ENGL 400. **No credit** if taken after ENGL 130 or 014. **Cannot be taken concurrently** with ESL 460, 432, ENGL 130 or 014. Total of 54 hours lecture and 18 hours laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

ENGL 434 TECHNICAL/VOCATIONAL READING

3 units

Development of basic reading and vocabulary skills for students enrolled in occupational curricula. Individualized instruction. Total of 54 hours lecture and 18 hours laboratory.

ENGL 435 VOCATIONAL ENGLISH AND INFORMATION TECHNOLOGY (BASIC)

2 units

Job-related writing and basic research skills appropriate to the workplace. Technical vocabulary used in the student's vocational area. Library and web-based research, critical thinking and problem-solving specifically focused on workplace needs. **Recommended** concurrent enrollment in a vocational course. Total of 36 hours lecture.

ENGL 450 INTRODUCTION TO ENGLISH ESSENTIALS

3 units

Introduction to basic writing skills with emphasis on simple sentence structure, English usage, mechanics and spelling. Integrated with basic study techniques, time management, textbook introduction, test taking, problem solving and memorization. **Pass/no pass** grading. **Not recommended** for ESL students. Total of 72 hours lecture.

ENGL 901 WRITING CENTER LAB

.30 units

Corequisite: ENGL 100 or 001S.

Development of writing skills for students in English 100 through the use of the Writing Center. Individualized instruction with Writing Center tutors and computer software. **Pass/no pass** grading. Total of 18 hours laboratory.

ENGL 902 WRITING CENTER LAB

.30 units

Corequisite: ENGL 400.

Development of writing skills for students in English 400 through the use of the Writing Center. Individualized instruction with Writing Center tutors and computer software. **Pass/no pass** grading. Total of 18 hours laboratory.

ENGLISH AS A SECOND LANGUAGE

(Languages Division)

The English as a Second Language curriculum has been developed sequentially for students to achieve the reading and writing skills necessary for academic success. Placement within the sequence depends upon multiple measures.

The recommended sequence is:

ESL 420
ESL 422
ESL 122
ESL 033A
ESL 033B

No credit will be given for the higher level English as a Second Language course if a student is concurrently enrolled in two different levels of this sequence. **No credit**

will be given for a lower level course in this sequence if a student has successfully completed a higher level course or an English composition course (English 100, 001A, 001B, 001C).

ESL 033A ESL READING AND WRITING — LEVEL 4

4 units

Prerequisite: *ESL 122, or satisfactory ESL placement assessment.*

Reading and composition to prepare students for college classes. Practice in advanced sentence structure; methods of paragraph and essay development; reading of college-level material. **Recommended** enrollment in ENGL 415. **No credit** if taken after ESL 033B, ENGL 001A, 001B, 001C or 100. **Cannot be taken concurrently** with ESL 033B, 122, 422, 420, ENGL 001A, 001B, 001C, 100, 400. Total of 90 hours lecture.

Transfer Credit: CSU; UC

ESL 033B READING AND WRITING — LEVEL 5

4 units

Prerequisite: *ESL 033A or satisfactory ESL placement assessment.*

Readings in college-level texts including fiction and non-fiction; methods of essay and annotated paper development. Designed to prepare students for success in English composition classes. **Recommended** enrollment in ENGL 130. **No credit** if taken after ENGL 001A, 001B, 001C, 100. **Cannot be taken concurrently** with ESL 033A, 122, 422, 420, ENGL 001A, 001B, 001C, 100, 400. Total of 90 hours lecture.

Transfer Credit: CSU; UC

ESL 040 LITERATURE IN A SECOND LANGUAGE

1 unit

Prerequisite: *Enrollment in or completion of ESL 033A.*

Introduction to the diversity of fiction, poetry and drama in English and other languages. Designed for cultural expression and the development of reading skills in English. Total of 18 hours lecture.

Transfer Credit: CSU

ESL 106 SPEAKING AND LISTENING FOR ACADEMIC SUCCESS

4 units

Recommended Preparation: *ESL 136 or 146, and eligibility for ESL 033B or ENGL 100.*

Development of advanced speaking and listening skills for achieving academic goals. Task activities include group discussion, individual presentations, evaluation of lectures and media broadcasts. Attention will be given to building college-level skills. Total of 72 hours lecture.

ESL 111 ACADEMIC READING FOR ESL

3 units

Prerequisite: *One of the following: (1) Eligibility for ESL 033A; or (2) satisfactory reading placement assessment.*

Essential college reading skills and strategies with an emphasis on comprehension, academic vocabulary, and reading fluency. Focus on literal and interpretive levels of narrative and expository texts. Attention to the relationship between cultural references and textual meaning. Total of 54 hours lecture.

ESL 113 ADVANCED ESL VOCABULARY

2 units

Prerequisites: *Eligibility for ESL 033A or ENGL 100.*

Recommended for advanced ESL students needing to increase their academic vocabulary words and phrases in order to comprehend and use advanced academic English, increasing their confidence in comprehending and using high-level vocabulary for academic and non-academic situations. Focus on advanced prefixes, roots, suffixes; two- and three-word verbs, collocations/idioms, word families, and dictionary use. Total of 36 hours of lecture.

ESL 122 GRAMMAR AND WRITING — LEVEL 3

4 units

Prerequisite: *ESL 422, 490B, SPSV 490B or placement based on the ESL assessment process.*

Development of grammar and writing skills for academic purposes. Reading of low-intermediate fiction and non-fiction; written practice in sentence patterns and compositions. **Recommended** enrollment in ESL 432. **No credit** if taken after ESL 033A, 033B, ENGL 001A, 001B, 001C, 100. **Cannot enroll concurrently** in ESL 033A, 033B, 420, 422, ENGL 001A, 001B, 001C, 100 or 400. Total of 90 hours lecture.

ESL 132 READING – LEVEL 3

3 units

Prerequisite: *ESL 432 or placement based on the ESL reading assessment process.*

Development of word attack skills, vocabulary, study skills, and intermediate reading techniques. **Recommended** enrollment in ESL 122. **No credit** if taken after ENGL 415, 130, 114. Cannot be taken concurrently with ESL 460, ESL 432, ENGL 415, 130, 014. Total of 54 hours lecture and 18 hours laboratory.

ESL 133 ADVANCED ESL GRAMMAR WORKSHOP

2 units

Review of advanced grammar structures, including adverb, adjective, and noun clauses, and conditional forms. **Recommended** for ESL students in ESL 033B who need to review grammar. Total of 36 hours lecture.

**ESL 136 AMERICAN CULTURE THROUGH
SPEAKING AND LISTENING**

3 units

Recommended preparation: *ESL 446 or 442, and enrollment in ESL 033A or ENGL 415.*

Development of high intermediate to advanced speaking and listening skills through the discussion of current events and American cultural and social issues as well as the study of regionalisms. Movies, songs, TV and radio programs will be used to enhance cultural competency and to build fluency in aural comprehension and spoken communications skills. Activities include oral reports, group and panel discussions, in-class and out-of-class interviews. Some library research and reading assignments. Total of 54 hours lecture.

**ESL 146 PRONUNCIATION OF AMERICAN ENGLISH -
LEVEL 2**

3 units

Recommended preparation: *Completion of ESL 246 (Level 1) or equivalent, current enrollment in ESL 152 for eligibility for ESL 033A.*

Further development of pronunciation skills through practice of American consonant blends and advanced stress and intonation patterns. Use of phonetic alphabet reduced forms and advanced features of vowel and consonant sounds. Total of 54 hours lecture.

ESL 171A EXPLORING TOPICS IN ESL

3 units

Exploratory course: *Specific topic identified in Schedule of Classes.*

Lecture focusing on topics of current and general interest. Total of 54 hours lecture.

ESL 171B EXPLORING TOPICS IN ESL

2 units

Exploratory course: *Specific topic identified in Schedule of Classes.*

Lecture focusing on topics of current and general interest. Total of 36 hours lecture.

ESL 171C EXPLORING TOPICS IN ESL

1 unit

Exploratory course: *Specific topic identified in Schedule of Classes.*

Lecture focusing on topics of current and general interest. Total of 18 hours lecture.

ESL 172 ESL FOR THE WORKPLACE

3 units

Prerequisite: *Required eligibility for ESL 122 or above.*

English communication skills appropriate to a workplace setting, including workplace terminology, safety issues,

reports and memos, job search skills, communicating with coworkers, and an understanding of workplace ethics. Total of 54 hours lecture.

ESL 176 EFFECTIVE SPEAKING AND LISTENING II

3 units

Continuing development of conversation skills in a variety of social situations. Practice and use of intermediate language skills. Listening activities to help students understand natural speech. Vocabulary, idiomatic expressions, and grammatical patterns common to spoken English. **Recommended** for students who have completed ESL 446 and/or are enrolled in ESL 122 and/or ESL 132. Total of 54 hours lecture.

**ESL 246 PRONUNCIATION OF AMERICAN ENGLISH -
LEVEL 1**

3 units

Recommended preparation: *ESL 442 or 446; or enrollment in ESL 446, or eligibility for ESL 422.*

Introduction to American speech sounds, basic stress and intonation patterns. Study of selected suffix endings, speech mechanism and phonetic alphabet. Total of 54 hours lecture.

ESL 403 ESL SKILLS WORKSHOP

1 unit

Individualized instruction in writing, vocabulary, and spelling to assist non-native speakers of English concurrently enrolled in a core ESL course. Total of 18 hours lecture.

ESL 410A BASIC ESL GRAMMAR REVIEW

1 unit

Review parts of speech and basic sentence structure. **Recommended** for students who need review of beginning level grammar. Total of 18 hours lecture.

ESL 410B INTERMEDIATE GRAMMAR REVIEW

1 unit

Review of the English verb system: verb tenses, active/passive, infinitives and gerunds. **Recommended** for ESL students who need review of verbs. Total of 18 hours lecture.

ESL 413 ESL VOCABULARY DEVELOPMENT

1 unit

Word families, idioms, prefixes and suffixes, dictionary use. **Recommended** for ESL students who need basic vocabulary development. Total of 18 hours lecture.

ESL 420 GRAMMAR AND WRITING — LEVEL 1

4 units

Intensive practice in basic English sentence structure for students who wish to prepare for college-level work. In-

Introduction to spelling, punctuation, vocabulary development and English writing conventions. **Recommended** enrollment in ESL 460 and 456. **No credit** if taken after ESL 033A, 033B, 122, 422, ENGL 001A, 001B, 001C, 100 or 400. **Cannot enroll concurrently** in ESL 033A, 033B, 122, 422, ENGL 001A, 001B, 001C, 100 or 400. Total of 90 hours lecture and 18 hours laboratory.

ESL 422 GRAMMAR AND WRITING — LEVEL 2

4 units

Prerequisite: *ESL 420 or satisfactory ESL placement assessment.*

Development of reading and writing skills for academic purposes. Readings in short essays and fiction; written practice in sentence patterns, paragraphs, and short essays. **Recommended** enrollment in ESL 432. **No credit** if taken after ESL 033A, 033B, 122, ENGL 001A, 001B, 001C, or 100. **Cannot enroll concurrently** in ESL 033A, 033B, 122, 420, ENGL 001A, 001B, 001C, 100, or 400. Total of 90 hours lecture.

ESL 432 ESL READING - LEVEL 2

3 units

Prerequisite: *ESL 460 or satisfactory reading placement assessment.*

Development of vocabulary and reading strategies used in academic and personal contexts. **Recommended** enrollment in ESL 422 and 446. **No credit** if taken after ESL 132, 111, ENGL 415, 130, or 014. **Cannot be taken concurrently** with ESL 460, 132, 111 ENGL 415, 130 or 014. Total of 54 hours lecture and 18 hours laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

ESL 446 EFFECTIVE SPEAKING AND LISTENING

3 units

Recommended preparation: *ESL 456, 420 or 460; and enrollment in ESL 432, 422, 246 or 122.*

Practice of casual and formal dialogues in commonplace situations. Everyday language functions and conversation management skills. Listening activities to enhance comprehension of daily topics. Idiomatic expressions and grammatical patterns common to spoken English. Total of 54 hours lecture.

ESL 456 BASIC SPEAKING AND LISTENING

6 units

An introductory course in spoken English to develop basic communication skills for everyday life in the U.S. Listening and conversation practice around daily topics, extensive vocabulary building and practice of basic grammatical structures. **Recommended:** Concurrent enrollment in ESL 420 and ESL 460. **Pass/no pass** grading. Total of 108 hours lecture.

ESL 459 COMPUTER LITERACY FOR ESL STUDENTS

1 unit

Development of English skills through use of technology, such as basic word processing, professional/ academic email messages, and creation of an ePortfolio. Total of 18 hours lecture.

ESL 460 ESL READING - LEVEL 1

3 units

Introduction to vocabulary building, word attack skills, and basic reading techniques. **Recommended** enrollment in ESL 420 and 421. **No credit** if taken after ESL 432, ENGL 415, 130 or 014. **Cannot be taken concurrently** with ESL 432, ENGL 415, 130 or 014. Total of 54 hours lecture and 18 hours laboratory. Lab may be scheduled using the "To Be Arranged" (TBA) scheduling format.

ESL 472 ESL IN THE WORKPLACE

3 units

English communication skills appropriate to a workplace setting, including workplace terminology, instructions and procedures, safety issues, telephone and email skills, and an understanding of workplace ethics. **No credit** if taken after ESL 172. Total of 54 hours lecture.

ENVIRONMENTAL STUDIES

(Natural Sciences Division)

ENVS 001 INTRODUCTION TO ENVIRONMENTAL SCIENCE

4 units

Relationship of living organisms to the environment, including human impact on the atmosphere, hydrosphere, lithosphere and biosphere. Emphasis is placed on understanding of biological and physical science issues currently faced by society. Includes laboratory and field investigation of ecosystems and the environment. **No credit** if taken after BIOL 037, BIOL 040 or PHSC 037. Total of 54 hours lecture and 54 hours laboratory.

Transfer credit: CSU; UC

ENVS 002 HUMAN IMPACT ON THE ENVIRONMENT

3 units

Interaction of human populations with local and global environments. Interrelationships of ecosystem and biosphere components. **No credit** if taken after ENVS 001, BIOL 036 or GEOG 010. Total of 54 hours lecture.

Transfer Credit: CSU; UC

ENVS 003 CHEMISTRY AND THE ENVIRONMENT

4 units

Prerequisite: One of the following: MATH 125, 127B, 128B, or 150.

Introduction to basic chemistry and environmental science for the non-science major with an emphasis on how chemical principles relate to everyday life. Topics include: indigenous practices, natural resources, water usage, pollution, healthy food, chemical additives to food, common organic chemicals, pesticides, drugs, household products, redox, soap-making, nuclear issues and composting. **Required** field trips. **No credit** if taken after CHEM 010. Total of 54 hours lecture and 54 hours laboratory. *Transfer Credit: CSU; UC*

ENVS 020 INDEPENDENT STUDY

1 unit

Recommended Preparation: Enrollment in or completion of any college-level (1-99) course in the Natural Sciences. **Enrollment Limitation:** Permission of the Dean.

Independent, faculty-guided student inquiry, project, research, laboratory experiment and/or field investigation. Total of 54 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*

ENVS 030 ENVIRONMENTAL FIELD INVESTIGATIONS

2 units

Prerequisite: Enrollment in or completion of ENVS 001 or ENVS 002.

Field investigation of the environment in an area of selected interest. **Required** instructional trips (an average of two hours each week). Total of 36 hours lecture and 18 hours laboratory. *Transfer Credit: CSU; UC*

ENVS 040 ENVIRONMENTAL FIELD LABORATORY

1 unit

Prerequisite: Enrollment in or completion of ENVS 001, 002, or 003.

Observation and interpretation of environmental phenomena in the field. **Required** instructional trips. **Recommended** enrollment in or completion of any Environmental Studies lecture or lecture/lab course. Total of 18 hours lecture and 18 hours laboratory. *Transfer Credit: CSU; UC*

FASHION

(Visual Arts and Media Studies Division)

FASH 001A FASHION SURVEY

3 units

Introduction to clothing construction. Orientation to fashion careers, aptitude to fashion, life skills, time manage-

ment, and education planning. Industrial sewing equipment, tools, and materials will be used to produce samples of elementary level garment construction as foundation to the understanding of pattern construction, fashion design, manufacturing and production. Industry research will include orientation to online research. Preparation of a tech pack. **Recommended** FASH 002. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

FASH 001B INTERMEDIATE CLOTHING CONSTRUCTION

3 units

Prerequisites: FASH 001A and FASH 005.

Apparel construction using industrial sewing techniques. Samples and garments demonstrating intermediate apparel construction skills for womenswear, sportswear, and knits. Total of 36 hours lecture and 72 hours laboratory. *Transfer Credit: CSU*

FASH 001C ADVANCED CLOTHING CONSTRUCTION

3 units

Prerequisites: FASH 001B and FASH 108.

Advanced construction methods and techniques. Evaluation and implementation of solutions to advanced clothing construction problems in tailoring, couture and alterations. Total of 36 hours lecture and 72 hours laboratory. *Transfer Credit: CSU*

FASH 002 INTRODUCTION TO FASHION INDUSTRY

3 units

Factors and concepts that affect fashion development, design, apparel production, marketing, distribution, retail merchandising, promotion and the consumer. Understanding nomenclature and forms of communication specific to the fashion industry. Survey of career opportunities in the apparel industry. **No credit** if taken after FASH 101. Total of 54 hours lecture. *Transfer Credit: CSU*

FASH 005 PATTERN DRAFTING

3 units

Prerequisites: FASH 001A and FASH 002.

Drafting basic patterns. Flat pattern manipulation for a variety of designs. Construction of basic sloper and selected samples. Introduction to the application of computer patternmaking. **Recommended** FASH 021 and FASH 110. **No credit** if taken after FASH 107A. Total of 36 hours lecture and 72 hours laboratory. *Transfer Credit: CSU*

FASH 009 BEGINNING TEXTILES

3 units

Textile identification, methods, production, historical background, investigation of new fibers, fabric constructions and finishes. Total of 54 hours lecture.

Transfer Credit: CSU; UC

FASH 021 PRINCIPLES OF FASHION

3 units

Analysis of apparel, color selection, design principles and concepts. The study of trend development, fashion influences, image and design applications for the target customer. The interrelationships among social, psychological, cultural, economic, aesthetic and physical factors in apparel with also be part of this study. Total of 54 hours lecture.

Transfer Credit: CSU

FASH 105 INTERMEDIATE FASHION DRAFTING AND DRAPING

3 units

Prerequisites: *All of the following: FASH 001B, 005, 108, 111A.*

Intermediate patternmaking by drafting, flat pattern manipulation, and draping on dress forms. Development of pant and tailoring slopers. Construction of pants and tailored samples of intermediate difficulty. Computer concepts relating to the development of sleeve slopers and tech packs. **No credit** if taken after FASH 107B. Total of 36 hours lecture and 72 hours laboratory.

FASH 106 ADVANCED PATTERN DRAFTING AND DRAPING

3 units

Prerequisites: *All of the following: FASH 001B, FASH 005, FASH 108, FASH 111A*

Patternmaking by flat pattern manipulation and draping on dress forms. Development of production patterns. Construction of samples with an emphasis on knitwear. Computer applications in grading the pattern size. **No credit** if taken after FASH 107C. Total of 36 hours lecture and 72 hours laboratory.

FASH 108 PATTERNMAKING BY DRAPING

3 units

Prerequisite: *FASH 001A and either FASH 005 or FASH 107A.*

Designs created by draping on dress forms. Patternmaking from completed drapes. Construction of basic slopers and samples. Preparation of tech packs and design room documents. Total of 36 hours lecture and 72 hours laboratory.

FASH 109 COMPUTER AIDED FASHION DESIGN

3 units

Prerequisite: *FASH 005.*

Beginning study of computer applications in patternmaking grading, pattern development, flat pattern manipulation and the sizing of patterns. Pre-production technologies and production documents will be prepared utilizing computer applications current to the industry. Total of 36 hours lecture and 72 hours laboratory.

FASH 110 FASHION ILLUSTRATION

3 units

Prerequisite: *Enrollment in or completion of FASH 002.*

Recommended preparation: *FASH 001A, FASH 021.*

Digital and manual drawing techniques for the fashion industry. Emphasis on the rendering of apparel, texture and color of fabric. Digital color media will be explored to recreate accurate textile representations. Production flat drafting and accurate garment sketches showing exact proportions and measurements. Presentation materials and portfolio techniques will be explored. Total of 36 hours lecture and 72 hours laboratory.

FASH 111A INTRODUCTION TO FASHION DESIGN

3 units

Prerequisites: *All of the following: FASH 001A, 002, 021, FASH 110.*

Fashion design concepts involving research. Trend prediction, fashion influences, target customer buying trends and trade publications will be utilized in the production of fashion designs that focus on a specific category, season, price range and target customer. Influences such as historical costume, ethnic clothing and textiles, military uniforms and fine art will be researched and the results applied to create original fashion designs. Artwork will take several forms suitable for inclusion in final portfolio: full color renderings, presentation boards, line pages, and sales portfolios. Emphasis will be on women's and junior's apparel, with some discussion on men's, children's and boy's apparel. Total of 36 hours lecture and 72 hours laboratory.

FASH 111B INTERMEDIATE FASHION DESIGN

3 units

Prerequisites: *FASH 111A and FASH 005.*

Study of design applications related to category, target customer, and commercial producers of fashion apparel. Creation of apparel lines, using CAD technology to create tech packs, line pages and full-color illustrations. Additional work may include sample garments and patterns. All projects are suitable for inclusion in final portfolio, both digital and hard copy. Total of 36 hours lecture and 72 hours laboratory.

FASH 111C ADVANCED FASHION DESIGN

3 units

Prerequisite: *FASH 111B and FASH 108.*

Development of a professional-quality portfolio. Preparation of a resume. Design and create sample garments as shown in the portfolio. Attend an internship to observe and experience on-the-job practices creating a term project as a result of this experience. Total of 36 hours lecture and 72 hours laboratory.

FASH 115 INTERMEDIATE COMPUTER-ASSISTED FASHION GRAPHICS

2.5 units

Prerequisite: *FASH 110.*

Intermediate fashion drawing, production flats, colorization, and scanning of images using the computer. Exploration of computer techniques and methods suitable for use in the apparel industry design room. Processes will apply to design courses and will utilize skills learned in previous Fashion department courses. Adobe Illustrator and Photoshop will be used as the vehicle for these processes. Total of 36 hours lecture and 36 hours laboratory.

FASH 124 HISTORY OF COSTUME

3 units

Historic study and research of dress from prehistoric to present period; relationships of related arts in evolution of garments. Total of 54 hours lecture.

FASH 126 HISTORICAL COSTUME MAKING

3 units

Prerequisite: *FASH 001A.*

Historical costume construction using industrial sewing techniques suitable for costume shop and wardrobe. Samples demonstrating theatrical construction skills for historical costume periods. Analysis of script needs and historical research. Preparation of a sample costume and notebook. **Recommended** FASH 005, FASH 124. Total of 36 hours lecture and 72 hours laboratory.

FASH 130 FASHION WORKSHOP

3 units

Prerequisite: *All of the following: FASH 108, FASH 005, FASH 111B.*

Creation of a fashion line for design through pattern making, construction and finishing. Pattern charts, costing, and spec sheets will be part of the process, as well as portfolio preparation. Total of 36 hours lecture and 72 hours laboratory.

FIRE TECHNOLOGY

(Business Division)

FIRE 110 INTRODUCTION TO FIRE TECHNOLOGY

3 units

Provides an introduction to fire protection; career opportunities in fire protection and related fields; history of fire protection; fire loss analysis; public, quasi-public and private fire protection services; specific fire protection functions; basic fire chemistry and physics. Total of 54 hours lecture.

FIRE 112 FUNDAMENTALS OF FIRE BEHAVIOR AND CONTROL

3 units

Theories and fundamentals of how fires start, spread and are controlled. In depth study of fire chemistry and physics, fire characteristics of materials, extinguishing agents and fire control techniques. Total of 54 hours lecture.

FIRE 114 FUNDAMENTALS OF FIRE PREVENTION

3 units

Prerequisite: *Enrollment in or completion of FIRE 110 or 112.*

Organization and function of fire prevention agencies; inspection, surveying and mapping procedures; recognition of fire hazards; engineering a solution to hazards; enforcement of solution; public relations. Total of 54 hours lecture.

FIRE 115 FUNDAMENTALS OF PERSONAL SAFETY AND EMERGENCY ACTION

3 units

Provides basic skills in assessing fire dangers, handling common fire situations in the home and/or industry, basic CPR and standard first aid education. Study and investigate a lifestyle that promotes health, fitness, mental and physical preparation for and in an emergency profession. Does not meet CPR certification. Total of 54 hours lecture.

FIRE 116 FIRE FIGHTING TACTICS AND STRATEGY

3 units

Prerequisite: *FIRE 110 or 112.*

Review of fire chemistry, equipment and manpower, basic fire fighting tactics and strategy; methods of attack; pre-planning fire problems. Total of 54 hours lecture.

FIRE 120A HAZARDOUS MATERIALS

3 units

Review of basic chemistry; storage, handling, laws, standards and fire fighting practices pertaining to hazardous materials. Total of 54 hours lecture.

FIRE 120B HAZARDOUS MATERIALS

3 units

Prerequisite: FIRE 120A.

Flammable metals, hazardous plastics, explosives, exotic fuels and oxidizers, radiation hazards, organic phosphate insecticides. Total of 54 hours lecture.

FIRE 124 APPLIED CHEMISTRY

3 units

Applied chemistry for fire fighting and arson investigation. Atomic and molecular structure of materials; characteristics of chemical compounds; types of chemical reactions; nature of gaseous materials; organic chemicals and fuels, nuclear activity of atoms and atomic radiation; chemistry of fire prevention and suppression and human physiology and survival. Total of 54 hours lecture.

FIRE 128 FUNDAMENTALS OF FIRE PROTECTION EQUIPMENT AND DETECTION

3 units

Prerequisite: Enrollment in or completion of FIRE 110 or 112.

This course covers the basic knowledge of fire protection within occupancies and applicable fire protection laws. Student will gain understanding in occupancy fire detection and alarms systems, heat and smoke controls, special protection systems, fire sprinklers, water supply, and portable fire extinguishers. Student will understand the installation, maintenance, operation and testing of fire protection systems. **Required** instructional trips. Total of 54 hours lecture.

FIRE 142 BUILDING CONSTRUCTION FOR FIRE PROTECTION

3 units

Fundamental building construction and design, fire protection features, special considerations. Total of 54 hours lecture.

FIRE 146 FIRE INVESTIGATION

3 units

Introduction to arson and incendiarism, arson laws and types of incendiary fires. Methods of determining fire causes, recognizing and preserving evidence, interviewing and detaining witnesses. Procedures in handling juveniles, court procedures and giving court testimony. Total of 54 hours lecture.

FOREIGN LANGUAGE STUDY

(Languages Division)

FLNG 020 INDEPENDENT STUDY

1 unit

Prerequisites: Level 4 of a foreign language or permission of department chairperson.

Individual projects such as readings in literature, theater, history, philosophy; written reports. Total of 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

FLNG 021A-M FOREIGN LANGUAGE DEVELOPMENT 13 units

Prerequisite: Enrollment in or completion of Level 1 of the foreign language or placement based on the foreign language assessment process.

Development of the foreign language skills for teacher preparation through listening, speaking, and reading in a practical laboratory setting related to the foreign language course enrolled in or previously completed. This course is applicable toward the state requirement for CLAD (Cross-cultural Language Academic Development) for the multiple subject teaching credential. **For** teacher preparation majors but open to all qualified students. **Each** course 1 unit, and a total of 54 hours laboratory.

Transfer Credit: CSU

FLNG 021A	ARMENIAN
FLNG 021B	ARABIC
FLNG 021C	CHINESE
FLNG 021D	FRENCH
FLNG 021E	GERMAN
FLNG 021H	ITALIAN
FLNG 021I	JAPANESE
FLNG 021J	LATIN
FLNG 021K	RUSSIAN
FLNG 021L	SPANISH
FLNG 021M	PORTUGUESE

FRENCH

(Languages Division)

FRNC 001 ELEMENTARY FRENCH

5 units

Pronunciation, speaking, reading and writing. Introduction to French culture. Corresponds to first year of high school French. Total of 90 hours lecture.

Transfer Credit: CSU; UC

FRNC 002 ELEMENTARY FRENCH

5 units

Prerequisite: *FRNC 001, or the first year of high school French, or placement based on the foreign language assessment process.*

Conversational and written French: grammar essentials; introduction to modern France and the Francophone world. Total of 90 hours lecture.

Transfer Credit: CSU; UC

FRNC 003 INTERMEDIATE FRENCH

5 units

Prerequisite: *FRNC 002 or two years of high school French or placement based on the foreign language assessment process.*

Development of oral and written communication skills based on 19th and 20th century French and Francophone readings; review of basic structure of French; customs and culture. Total of 90 hours lecture.

Transfer Credit: CSU; UC

FRNC 004 INTERMEDIATE FRENCH

5 units

Prerequisite: *FRNC 003 or three years of high school French or placement based on the foreign language assessment process.*

Further development of written and oral communication skills based on 19th and 20th century French readings; finish review of basic structure of French; French and Francophone culture. Total of 90 hours lecture.

Transfer Credit: CSU; UC

FRNC 006 INTRODUCTION TO THE STUDY OF FRENCH AND FRANCOPHONE LITERATURE

4 units

Prerequisite: *FRNC 004 or placement based on the foreign language assessment process.*

Selected readings in French from major Francophone authors that illustrate the French literary tradition from the Middle Ages to the present in both France and other French-speaking countries. Total of 72 hours lecture.

Transfer Credit: CSU; UC

FRNC 008A FRENCH CONVERSATION

2 units

Prerequisite: *FRNC 002 or placement based on the foreign language assessment process.*

Practice in oral expression and comprehension of spoken French. Total of 36 hours lecture.

Transfer Credit: CSU

FRNC 008B FRENCH CONVERSATION

2 units

Prerequisite: *FRNC 002 or placement based on the foreign language assessment process.*

Practice in oral self-expression and understanding spoken French. Total of 36 hours lecture.

Transfer Credit: CSU

FRNC 009A-B FRENCH CONVERSATION

4 units

Prerequisite: *FRNC 003 or three years of high school French or placement based on the foreign language assessment process.*

Intensive practice at an advanced level in oral expression and comprehension of spoken French. **Each course** 2 units, and a total of 36 hours lecture.

Transfer Credit: CSU; UC

FRNC 010 FRENCH CIVILIZATION

3 units

Customs, language, literature, geography, arts and sciences; contributions of France to civilization. French institutions from earliest to modern times. (Course conducted in English.) Total of 54 hours lecture.

Transfer Credit: CSU; UC

FRNC 011 TRANSLATING FROM FRENCH TO ENGLISH

2 units

Prerequisite: *FRNC 002 or two years of high school French, or placement based on the foreign language assessment process.*

Grammar and structure of French; vocabulary building, acquisition of basic translation skills through reading authentic text selections from the Humanities, the Arts and Sciences. This course is designed for students in many disciplines. (Course conducted in English.) Total of 36 hours lecture.

Transfer Credit: CSU

FRNC 012 FRENCH LITERATURE IN TRANSLATION

3 units

Prerequisite: *Placement based on the foreign language assessment process.*

Readings in English translation of key works of French and Francophone literature from the Middle Ages to the present. (Course conducted in English). Total of 54 hours lecture.

Transfer Credit: CSU; UC

FRNC 014 WRITING IN FRENCH

3 units

Prerequisite: *FRNC 002 or two years of high school French or placement based on the foreign language assessment process.*

Intensive practice in French writing. Students acquire the techniques and strategies necessary to write French at an intermediate level. Total of 54 hours lecture.
Transfer Credit: CSU; UC

FRNC 015 READING IN FRENCH

3 units

Prerequisite: FRNC 002 or placement based on the foreign language assessment process.

Intensive training in reading authentic texts of a broad variety of genres in French. Reading of varied short texts; establishing a steadily increasing vocabulary. Introduction to literary texts. Total of 54 hours lecture.

Transfer Credit: CSU; UC

FRNC 016 FRENCH CULTURE AND COMMUNICATION

3 units

Prerequisite: FRNC 002 or placement based on the foreign language assessment process.

A second year course to build proficiency in listening, speaking, reading and writing while exploring the culture of France and the Francophone world. (Course conducted in French.) Total of 54 hours lecture.

Transfer Credit: CSU; UC

FRNC 050 FRENCH CINEMA

3 units

Introduction to French cinema. The historical evolution of French cinema as an art form, with emphasis on major themes and directors including recent developments in French and Francophone film. (Course conducted in English.) Total of 54 hours lecture.

Transfer Credit: CSU; UC

FRNC 140 FRENCH PRONUNCIATION

2 units

Sounds of French; imitation of good pronunciation and intonation; reading of French texts. For those wishing to gain additional proficiency in pronunciation. Total of 36 hours lecture.

GEOGRAPHY

(Natural Sciences Division)

Students planning to take more than six units of Geography should consult counselors. Some colleges allow full credit for the first six units only.

GEOG 001 PHYSICAL GEOGRAPHY

3 units

Introduction to the natural environment from a geographical perspective. Topics include geographic techniques, and

their use to study air, water, land and life forms, with emphasis on their interconnections, interactions and world location patterns. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: GEOG 110*

GEOG 001L PHYSICAL GEOGRAPHY LABORATORY

1 unit

Prerequisite: Enrollment in or completion of GEOG 001.

Observation and interpretation of meteorological phenomena including statistical analysis of climatic data. Cartographic techniques and map interpretation. Global patterns of the biosphere, hydrosphere and lithosphere, showing their regional interrelationships. **Required** instructional trips. Total of 54 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: GEOG 111*

GEOG 002 CULTURAL GEOGRAPHY

3 units

Study of diverse human populations, their cultural origins, diffusion and contemporary spatial expressions. Topics include: demography, languages and religions, urbanization and landscape modification, political units and nationalism, and economic systems and development. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: GEOG 120*

GEOG 003 WORLD REGIONAL GEOGRAPHY

3 units

Introductory study of the world's countries, cultures and cultural regions from a geographic perspective. Focus on individual countries, with topics including history, culture, society, economy, government, environment, and current issues. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: GEOG 125*

GEOG 004 WEATHER AND CLIMATE

3 units

Introduction to weather and climate, the science of weather, weather forecasting and interpretation of meteorological information available over the internet. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: GEOG 130*

GEOG 011 INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS AND TECHNIQUES, WITH LAB

3 units

Introduction to the fundamentals of geospatial technology including Geographic Information Systems (GIS) science and its applications to spatial data management. Participants will learn how to identify and acquire GIS data, assess vector and raster systems, and apply scale, resolution, map projections, coordinate systems, use georeferencing, spatial analysis, modeling and Global Positioning Systems (GPS). This course is designed to

**Course Identification Numbering System (C-ID)*

complement other disciplines or as an entry level course into a geospatial program. Total of 36 hours lecture and 54 hours of laboratory.

*Transfer Credit: CSU; UC. *C-ID: GEOG 155*

GEOG 012 MAP INTERPRETATION AND SPATIAL ANALYSIS

3 units

Prerequisite: *GEOG 011.*

Introduction to maps, images and geographic techniques. Develop skills through technologies such as map and aerial photograph interpretation, tabular data, spatial statistics, cartography, Global Positioning Systems (GPS), Internet mapping, remote sensing and Geographic Information Systems (GIS) that aid in data collection, analysis and presentation. Solve problems using geographic methods. Total 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC credit under review.

GEOG 013 DATA ACQUISITION AND MANAGEMENT

3 units

Prerequisite: *GEOG 011.*

Introduces fundamental concepts of primary GIS data creation. Topics include quantitative techniques for collection, classification, management of geographical data, and interpretation of a variety of data formats in GIS. Total of 36 hours lecture and 54 hours laboratory

Transfer Credit: CSU; UC

GEOG 014 CARTOGRAPHIC DESIGNS

3 units

Prerequisite: *GEOG 011.*

Introduction to fundamental cartographic concepts. Design principles and creation of effective visual representations of data in different formats. Topics include ethical and appropriate application of map scale, map projections, generalization and symbolization. Total of 36 hours lecture and 54 hours laboratory

Transfer Credit: CSU; UC

GEOG 020 INDEPENDENT STUDY

1 unit

Recommended Preparation: *Enrollment in or completion of any college-level (1-99) course in the Natural Sciences.*

Enrollment Limitation: *Permission of the Dean.*

Independent, faculty-guided student inquiry, project, research, laboratory experiment and/or field investigation. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

GEOG 030 FIELD STUDIES AND METHODS IN GEOGRAPHY

1 unit

Recommended preparation: *GEOG 001.*

Field studies of the geography of selected regions. Physical and cultural processes, characteristics and landscapes will be observed and analyzed. Specific physical and cultural content will vary by geographic region. **Required** instructional trips. Total of 18 hours lecture and 18 hours laboratory.

*Transfer Credit: CSU. *C-ID: GEOG 160*

GEOLOGY

(Natural Sciences Division)

GEOL 001 PHYSICAL GEOLOGY

4 units

Dynamic processes governing the origin and development of the features of the earth's surface and interior. Identification of common rocks and minerals; introduction to topographic maps. **Recommended** enrollment in GEOL 001F. Total of 54 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

**C-ID: GEOL 100*

GEOL 001F PHYSICAL GEOLOGY FIELD STUDIES

1 unit

Prerequisite: *Enrollment in or completion of GEOL 001.*

Observation and interpretation of geological phenomena with emphasis on the origin and development of the geology of Southern California. **Required** four days of instructional trips (equal to an average of two hours of trips each week). Total of 18 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

GEOL 002 HISTORICAL GEOLOGY

4 units

Prerequisite: *GEOL 001 or GEOL 003.*

History of earth and evolution of animals and plants including fossil specimens; emphasis on geology of North America. Total of 54 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC

GEOL 002F HISTORICAL GEOLOGY FIELD STUDIES

1 unit

Prerequisite: *Enrollment in or completion of GEOL 002.*

Observation and interpretation of geologic phenomena with emphasis on the geologic history of North America. Required instructional trips (an average of two hours each week). Total of 18 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC

GEOL 003 EARTH AND SPACE SCIENCE

4 units

Introduction to the principles and processes of earth and space sciences emphasizing the structure and composition of the solid earth, oceans and atmosphere and Earth's place

**Course Identification Numbering System (C-ID)*

within the solar system. **For** students planning on becoming K-12 teachers, but open to all qualified students. **No credit** if taken after GEOL 001 or GEOL 012. Total of 54 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

*C-ID: GEOL 121

GEOL 003F EARTH AND SPACE SCIENCE FIELD LABORATORY

1 unit

Prerequisite: *Enrollment in or completion of GEOL 003.*

Field observation and interpretation of Geologic, Oceanographic, Atmospheric and Astronomic phenomena. **Required** four days of instructional trips (equal to 2 hours of trips each week). Total of 18 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

GEOL 004 GEOLOGY OF CALIFORNIA

3 units

Prerequisite: *GEOL 001 or 003.*

An introduction to the geology of California, including tectonic processes, geologic structures, physiographic provinces, local rocks and minerals, landforms, natural resources, geologic history, and natural hazards in the state. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: GEOL 200*

GEOL 005 GEOLOGIC MAPS

2 units

Prerequisite: *GEOL 001 or GEOL 003.*

The making of and use of geologic maps. Topics covered include analysis of topographic maps and geologic maps, measurement of thickness of sedimentary rocks, use of a Brunton Pocket Transit, and field analysis of stratigraphy, geologic structures, unconformities, and cross cutting relationships in the preparation of geologic maps.

Required: five days of instructional trips. Total of 18 hours lecture and 36 hours laboratory.

Transfer Credit: CSU; UC

GEOL 006 MINERALOGY

4 units

Prerequisite: *GEOL 001 and CHEM 001A.*

Identification of minerals by physical and optical properties. Introduction to crystallography, and crystal chemistry and techniques of quantitative chemical analysis of minerals. Total of 54 hours lecture and 90 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: GEOL 280*

GEOL 012 PHYSICAL OCEANOGRAPHY

3 units

Principles and practices of marine geology and physical oceanography. Plate tectonics and sea-floor spreading;

oceanic volcanism and earthquakes. Study of man's use and misuse of the ocean: human needs vs. ecological limits. Total of 54 hours lecture.

Transfer Credit: CSU; UC

GEOL 012F PHYSICAL OCEANOGRAPHY FIELD STUDIES

1 unit

Prerequisite: *Enrollment in or completion of GEOL 012.*

Observation and interpretation of oceanographic phenomena with emphasis on the marine environment of the Southern California area. **Required** four days of instructional trips (equal to an average of two hours each week). Total of 18 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

GEOL 012L PHYSICAL OCEANOGRAPHY LABORATORY

1 unit

Prerequisite: *Enrollment in or completion of GEOL 012.*

Laboratory investigations of oceans, ocean basins and ocean margins. Oceanographic map and chart interpretation, rates of marine processes, ocean-atmosphere interactions, ocean structure and dynamics and coastal hazards. Total of 54 hours laboratory.

Transfer Credit: CSU; UC

GEOL 020 INDEPENDENT STUDY

1 unit

Recommended Preparation: *Enrollment in or completion of any college-level (1-99) course in the Natural Sciences.*

Enrollment Limitation: *Permission of the Dean.*

Faculty-guided student research; laboratory experiments and field investigations. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

GEOL 021 HISTORY OF LIFE

3 units

Survey course that considers major biologic and geologic events from the formation of the Earth 4.6 billion years ago to the present day. Topics include origin and evolution of life, mass extinction and explosions in diversity, phylogenetic systematics, and orientation of major clades in the Tree of Life. Total of 54 hours lecture.

Transfer Credit: CSU; UC

GEOL 021L HISTORY OF LIFE LABORATORY

1 unit

Corequisite: *GEOL 021.*

Laboratory investigations and identification of fossil groups with emphasis on major clades and their position on the Tree of Life. Topics include patterns in the fossil record, extinctions, diversification, geologic time, and

*Course Identification Numbering System (C-ID)

character diagnosis leading to the building of a cladogram. Total of 54 hours laboratory.

Transfer Credit: CSU; UC

GEOL 022 THE AGE OF DINOSAURS

3 units

The historical geology and paleobiology of the Mesozoic Era. Topics covered include dinosaur origins, evolution, lifestyles, extinctions, and phylogenetic systematics. Total of 54 hours lecture.

Transfer Credit: CSU; UC

GEOL 023 NATURAL DISASTERS

3 units

The geologic origin and human impact of natural disasters. **No credit** if taken after GEOL 001 or 003. Total of 54 hours lecture.

Transfer Credit: CSU.

GEOL 030A CHANNEL ISLANDS - COASTAL CALIFORNIA

2 units

Prerequisite: Enrollment in or completion of GEOL 001 or 003.

Field investigation of the regional geology in a national or international area of selected interest. **Required** instructional trips (an average of two hours each week). Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

GEOL 030B PENINSULAR RANGES - SALTON DEPRESSION

2 units

Prerequisite: Enrollment in or completion of GEOL 001 or 003.

Field investigation of the regional geology in a national or international area of selected interest. **Required** instructional trips (an average of two hours each week). Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

GEOL 030C COAST RANGES - SAN ANDREAS FAULT

2 units

Prerequisite: Enrollment in or completion of GEOL 001 or 003.

Field investigation of the regional geology in a national or international area of selected interest. **Required** instructional trips (an average of two hours each week). Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor

GEOL 030D SIERRA NEVADA

2 units

Prerequisite: Enrollment in or completion of GEOL 001 or 003.

Field investigation of the regional geology in a national or international area of selected interest. **Required** instructional trips (an average of two hours each week). Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor

GEOL 030E OWENS VALLEY - DEATH VALLEY

2 units

Prerequisite: Enrollment in or completion of GEOL 001 or 003.

Field investigation of the regional geology in a national or international area of selected interest. **Required** instructional trips (an average of two hours each week). Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

GEOL 030F ROCKY MOUNTAINS

2 units

Prerequisite: Enrollment in or completion of GEOL 001.

Observation and interpretation of geologic phenomena with emphasis on the geologic history of western Cordillera. **Required** instructional trips (an average of two hours each week). Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor

GEOL 030G KLAMATH MOUNTAINS - NORTHERN CALIFORNIA

2 units

Prerequisite: Enrollment in or completion of GEOL 001 or 003.

Field investigation of the regional geology in a national or international area of selected interest. **Required** instructional trips (an average of two hours each week). Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

GEOL 030H INTERNATIONAL STUDY AREAS

2 units

Prerequisite: Enrollment in or completion of GEOL 001 or 003.

Field investigation of the regional geology in a national or international area of selected interest. **Required** instructional trips (an average of two hours each week). Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor

GEOL 030I PROBLEMS IN STRUCTURAL GEOLOGY

2 units

Prerequisite: GEOL 001.

Field investigation of the structural geology in a region of selected interest. Observation and interpretation of geologic phenomena with emphasis on the geologic history of western Cordillera. **Required** instructional trips (an average of two hours each week). Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

GEOL 030J COLORADO PLATEAU

2 units

Prerequisite: Enrollment in or completion of GEOL 001 or 003.

Field investigation of the regional geology in a national or international area of selected interest. **Required** instructional trips (an average of two hours each week). Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor

GEOL 030K PROBLEMS IN REGIONAL STRATIGRAPHY

2 units

Prerequisite: Enrollment in or completion of GEOL 001 or 003.

Field investigation of the regional geology in a national or international area of selected interest. **Required** instructional trips (an average of two hours each week). Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor

GEOL 030L APPLICATIONS OF GLOBAL POSITIONING SYSTEM

2 units

Prerequisite: Enrollment in or completion of GEOL 001 or 003.

Field investigation of the regional geology in a national or international area of selected interest. **Required** instructional trips (an average of two hours each week). Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor

GEOL 030M PACIFIC RIM/PACIFIC ISLANDS

2 units

Prerequisite: Enrollment in or completion of GEOL 001 or 003.

Field investigation of the regional geology in a national or international area of selected interest. **Required** instructional trips (an average of two hours each week). Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor

GEOL 040 GEOLOGICAL FIELD LABORATORY

1 unit

Observation and interpretation of geological phenomena in the field. **Required** four days of instructional trips. **Recommended** a 001-099 lab science course. Total of 18 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

GERMAN

(Languages Division)

GRMN 001 ELEMENTARY GERMAN

5 units

Pronunciation, reading, speaking and writing German; customs and culture. Corresponds to first year of high school German. Total of 90 hours lecture.

Transfer Credit: CSU; UC

GRMN 002 ELEMENTARY GERMAN

5 units

Prerequisite: GRMN 001, or the first year of high school German, or placement based on the foreign language assessment process.

Continuation of grammar essentials; practice in reading, speaking and writing German; customs and culture. Total of 90 hours lecture.

Transfer Credit: CSU; UC

GRMN 003 INTERMEDIATE GERMAN

5 units

Prerequisite: GRMN 002 or two years of high school German or placement based on the foreign language assessment process.

Development of communication skills based on 19th and 20th century German readings; review of basic structure of German: customs and culture. Total of 90 hours lecture.

Transfer Credit: CSU; UC

GRMN 004 INTERMEDIATE GERMAN

5 units

Prerequisite: GRMN 003 or three years of high school German or placement based on the foreign language assessment process.

Further development of communication skills based on 19th and 20th century German readings; finish review of basic structure of German; customs and culture. Total of 90 hours lecture.

Transfer Credit: CSU; UC

GRMN 005 INTRODUCTION TO GERMAN LITERATURE

3 units

Prerequisite: GRMN 004 or placement based on the foreign language assessment process.

German drama, prose and poetry. Total of 54 hours lecture.

Transfer Credit: CSU; UC

GRMN 008A-C INTRODUCTION TO GERMAN CONVERSATION

6 units

Prerequisite: GRMN 002 or two years of high school German or placement based on the foreign language assessment process.

Practice in oral self-expression and understanding spoken German. **Each course** 2 units, and a total of 36 hours lecture.

Transfer Credit: CSU

GRMN 009A-C GERMAN CONVERSATION

6 units

Prerequisite: *GRMN 003 or three years of high school German or placement based on the foreign language assessment process.*

Intensive practice at an advanced level in oral expression of spoken German. **Each course** 2 units, and a total of 36 hours lecture.

Transfer Credit: CSU; UC

GRMN 010 GERMAN CIVILIZATION

3 units

Geography, history and institutions; customs, language, literature, arts and sciences; German contributions to civilization. (Course conducted in English.) Total of 54 hours lecture.

Transfer Credit: CSU; UC

GRMN 012 GERMAN LITERATURE IN TRANSLATION

3 units

Reading and discussion of representative works of German literature in translation from different historical periods. Analysis of major themes and literary movements. Selected readings will be made from different genres, including poetry, drama, and prose. (Course conducted in English.) Total of 54 hours lecture.

Transfer Credit: CSU; UC

GRMN 140 GERMAN PRONUNCIATION

2 units

Introduction to the German sound system, basic stress and intonation patterns. Imitation and practice of proper pronunciation; reading of German texts. For beginners and those wishing to gain additional proficiency in pronunciation. Total of 36 hours lecture.

GRMN 150A GERMAN FOR BUSINESS AND TRAVEL

2 units

Practical conversational German for business and travel. Contemporary culture in German-speaking countries. Total of 36 hours lecture.

GRMN 150B GERMAN FOR BUSINESS AND TRAVEL

2 units

Prerequisite: *GRMN 150A or placement based on the foreign language assessment process.*

Further practice in practical conversational German for business and travel. Contemporary culture in German-speaking areas. Total of 36 hours lecture.

GERONTOLOGY

(Health Sciences Division)

GERO 001 INTRODUCTION TO GERONTOLOGY

3 units

Overview of the field of gerontology. Includes a multidisciplinary examination of how human aging is understood, including demographic trends, basic theories, concepts and philosophic ideas, social policies, planning issues, and services available to meet the needs and problems of older adults. **Recommended** ENGL 001A. Total of 54 hours of lecture.

Transfer Credit: CSU; UC

GERO 022 DIRECTED STUDIES IN GERONTOLOGY

3 units

Prerequisite: *GERO 001.*

The Directed Studies course is a grouping of short seminars designed to provide students with the latest ideas in a specific area of concentration. The course content is thematic in nature and each seminar within the course differs from other offerings in the same course. Total of 54 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

GERO 140 APPLIED HEALTH CARE MANAGEMENT IN GERONTOLOGY

3 units

Prerequisite: *GERO 001.*

Analysis of issues, services, methods, and interventions related to gerontologic practice and application of strategies for identifying and accessing services targeted for older adults and their families. Topics include the unique characteristics and needs of elders, the systems approach to working with elders, and issues affecting service delivery to this population (including diversity, gender, ethics, special health and mental health needs). Practice of the skills for effective service delivery to elders, families and caregivers with an emphasis on students' attitudes and roles when working with this population. Total of 54 hours lecture.

GRAPHIC COMMUNICATIONS TECHNOLOGY

(Visual Arts and Media Studies Division)

GRFX 010 INTRODUCTION TO GRAPHIC COMMUNICATIONS TECHNOLOGY

2 units

Introduction to printing and graphic arts. History of printing. Orientation to typesetting, camera, stripping and

plates, presswork and bindery operations. Evaluation of printing processes: letterpress, gravure, screen printing, flexography, plateless printing and lithography. **Required** instructional trips. Total of 36 hours lecture.

Transfer Credit: CSU

GRFX 013 SCREEN PRINTING PLASTICS

3 units

Hands-on training in screen meshes, tensioning and selection; direct emulsion stencil and exposure; printing and registration techniques for one, two and three color graphics for a variety of decal and adhesive materials. Right-reading, wrong-reading and front/back reading decals on a variety of substrates. Safety issues for water-based and solvent-based inks. Planning and organization of production-- individually and in teams. High-quality graphic printing and techniques for small business sales and marketing. **Required** instructional trips. Total of 27 hours lecture and 81 hours laboratory.

Transfer Credit: CSU

GRFX 021 PRINTING MANAGEMENT — PRODUCTION

3 units

Prerequisite: *GRFX 105.*

Theory and practical experience in production and quality control methods in a printing plant manufacturing situation. Projects in plant and department layout and organization. Maintenance and inventory control systems. Safety procedures. Applied organizational and management theory. New developments in the graphics arts industry. **Required** instructional trips. Total of 54 hours lecture.

Transfer Credit: CSU

GRFX 030 BASIC COMPOSITION AND IMAGING

6 units

Introduction to document production methods and digital imaging techniques required in the graphic communications technology industry. Introduction to system operations and typographic principles. Graphic computer systems operation, terminology, system components, and principles. Emphasis on document production using text and image components. Use of industry standard Postscript electronic publishing systems. **Required** instructional trips. Total of 54 hours lecture and 162 hours laboratory.

Transfer Credit: CSU

GRFX 031 ADVANCED COMPOSITION AND IMAGING

6 units

Prerequisite: *GRFX 030 or 220.*

Advanced document production methods and digital imaging techniques. Use of electronic publishing systems and software applications for image capture and manipulation as practiced in the graphic communications technology in-

dustry. Advanced system operation and typographic principles. Emphasis on document development using image processing systems. **Required** instructional trips. Total of 54 hours lecture and 162 hours laboratory.

Transfer Credit: CSU

GRFX 035 INTRODUCTION TO ELECTRONIC PREPRESS

2 units

Recommended preparation: *GRFX 199.*

Proper use of document layout, illustration and image-editing software necessary to prepare files for transfer or digital imaging. Terminology, materials, and methods used in electronic prepress. Introduction to preflighting, imposing, trapping, and correcting files used in electronic prepress operation. Strategies for font and color management, re-purposing images for the production of plates and proofs suitable for use in various printing operations. **Required** instructional trips. Total of 27 hours lecture and 36 hours laboratory.

Transfer Credit: CSU

GRFX 036 ELECTRONIC IMAGE ASSEMBLY

1 unit

Prerequisite: *GRFX 035.*

Procedures using electronic prepress applications to eliminate or repair errors in digital files. Skills in multiple page document construction, imposition and trapping required in modern digital workflows. Advanced study in Postscript imaging requirements for document output or transfer required in the graphic communications field. **Required** instructional trips. Total of 18 hours lecture and 36 hours laboratory.

Transfer Credit: CSU

GRFX 080 GRAPHIC REPRODUCTION FUNDAMENTALS

2 units

Graphic art skills, design, composition, printing and photographic processes. Total of 18 hours lecture and 54 hours laboratory.

Transfer Credit: CSU

GRFX 102 TYPOGRAPHY

2 units

Terminologies of the typesetting/typography of the lithographic trade; exchange values and appropriate applications of numerical systems. Basic characteristics of type: styles, classifications, compatibilities, uses for emphasis, copyfitting, proofreading, spacing and design considerations. **Required** instructional trips. Total of 36 hours lecture.

GRFX 103 INK, PAPER AND QUALITY CONTROL

2 units

Classification of papers, common paper terms and calculation of press sheet cuts. Manufacture and uses of lithographic inks. Common quality control devices. **Required** instructional trips. Total of 36 hours lecture.

GRFX 104 BINDERY AND FINISHING OPERATIONS

2 units

Theory and demonstration of bindery and finishing operations: paper cutting, folding devices, assembling processes, including gathering, collating and inserting. Common binding processes: adhesive binding, side binding, saddle binding, self covers, soft covers and case bound covers. **Required** instructional trips. Total of 36 hours lecture.

GRFX 105 INTRODUCTION TO PRINTING MANAGEMENT

2 units

Printing plant supervision and management techniques. Principles of sales, manufacturing, finance, trade customs, organizational patterns, personnel practices and estimating procedures. Safety procedures, quality control, production scheduling, computer applications and technical developments. **Required** instructional trips. **Recommended** enrollment in or completion of GRFX 010. Total of 36 hours lecture.

GRFX 113 INTERMEDIATE SCREEN PRINTING

3 units

Prerequisite: *GRFX 013*.

History and industry overview. Safe use of inks, solvents and equipment. Process camera operation and photographic techniques for screen printing. Preparation of mechanicals using tight registration and printing on standard and unusual surfaces. **Required** instructional trips. **No credit** if taken after GRFX 132B or 134B. Total of 27 hours lecture and 81 hours laboratory.

GRFX 114A PRODUCTION SCREEN PRINTING

3 units

Prerequisite: *GRFX 113*.

Advanced work with color and design for commercial screen printing. Halftones and other advanced camera projects. Posters and ads. **Required** instructional trips. Total of 27 hours lecture and 81 hours laboratory.

GRFX 114B ADVANCED SCREEN PRINTING

3 units

Prerequisite: *GRFX 114A*.

Production of screen printing using the semi-automatic press and one-arm squeegee. Advanced work incorporating several stencil and/or ink systems. Principles of setup and

operation of the small screen printing business. **Required** instructional trips. Total of 27 hours lecture and 81 hours laboratory.

GRFX 115 BEGINNING SCREEN PRINTING FOR TEXTILE APPLICATIONS

2 units

A basic course for the beginning screen printing student. Emphasis on artwork preparation, registration systems for multiple colors, screen selection and preparation for simple textile applications. Use of four-color rotary press, flash and belt dryers, pin systems for accuracy of registration. Safe use of materials and equipment. **Required** instructional trips. Total of 18 hours lecture and 54 hours laboratory.

GRFX 116 ADVANCED SCREEN PRINTING FOR TEXTILE APPLICATIONS

2 units

Prerequisite: *GRFX 115*.

Advanced screen printing. Mesh selection, press set-up, registration and printing of exceedingly complex graphics, with four-color process on textiles; four-to six-color spot and index printing; special effects inks and sublimation dyes. Advanced use of heat press, dye sub printer. Planning and organization of all aspects of production individually and in teams. High-end and commercial printing on textile substrates. **Required** instructional trips. Total of 18 hours lecture and 54 hours laboratory.

GRFX 132A INTRODUCTORY SCREEN PRINTING

4 units

Basic commercial production skills: hands-on training in screen meshes, tensioning and selection; direct emulsion stencil techniques and exposure; printing and registration techniques for one, two and three color graphics; single color halftone printing with water-based inks on paper and board substrates, some plastics. Planning and organization of all aspects of production individually and in teams. Point-of-purchase graphics, posters, flyers for advertising. **Required** instructional trips. Total of 36 hours lecture and 108 hours laboratory.

GRFX 132B INTERMEDIATE SCREEN PRINTING

4 units

Prerequisite: *GRFX 132A*.

Advanced production skills: in-depth work with halftone printing, including duotones and four-color process printing; four- to six- color spot printing; use of water-based and solvent-based vinyl and enamel inks. Emphasis on registration techniques for more complex printing work, including set-up and use of semi-automatic press. Planning and organization of all aspects of production individually

and in teams. Point-of-purchase graphics, posters, flyers for advertising. **Required** instructional trips. Total of 36 hours lecture and 108 hours laboratory.

GRFX 133A ADVANCED SCREEN PRINTING FOR PLASTICS AND RIGID SUBSTRATES

4 units

Prerequisite: *GRFX 132B*.

Advanced printing techniques for plastics, including electrostatic vinyl, adhesive vinyl, rigid plastics, glass and wood. Four-color process, sublimation dye printing, subsurface printing, etching for commercial signage and graphics; table printing and use of semi-automatic press. Safety issues for use of water-based and solvent-based inks. Planning and organization of all aspects of production individually and in teams. **Required** instructional trips. Total of 36 hours lecture and 108 hours laboratory.

GRFX 133B PRODUCTION SCREEN PRINTING

5 units

Prerequisite: *GRFX 133A*.

Production, using the semi-automatic press and one-arm squeegee. Printing modular design advanced work incorporating several stencil and/or ink systems. Discussions on setting up and operation of a small screen printing business. **Required** instructional trips. Total of 54 hours lecture and 108 hours laboratory.

GRFX 134A SCREEN PRINTING FUNDAMENTALS FOR SALES AND MARKETING

3 units

Basic entrepreneur/printing class: hands-on training in screen meshes, tension and selection; conventional and non-conventional techniques for stencil application and exposure; printing and registration of one-, two- and three-color graphics; single-color halftone printing. Water-based and solvent-based inks on traditional and non-traditional two- and three-dimensional surfaces. Planning and organization of all aspects of production individually and in teams. Graphic printing for commercial sales and marketing. **Required** instructional trips. Total of 27 hours lecture and 81 hours laboratory.

GRFX 134B SCREEN PRINTING FOR SALES AND MARKETING

3 units

Prerequisite: *GRFX 134A*.

Advanced entrepreneurial: high-end printing of duotones and four-color process printing; four-to six- spot color printing; wide variety of substrates using water-based, vinyl and enamel inks. Establishing a web sales presence. Planning and organization of all aspects of production individually and in teams. High-quality graphic printing and techniques for small business sales and marketing. **Required** instructional trips. Total of 27 hours lecture and 81 hours laboratory.

GRFX 134C SCREEN PRINTING - TWO AND THREE COLORS

2 units

Prerequisite: *GRFX 134B*.

Design, layout and preparation of film and mechanicals for production printing. Correct selection and preparation of screens for commercial work. Establish proper printing procedures for a variety of substrates and ink systems used in the fine arts or industrial setting. Emphasis on proper registration of multiple colors and quality of printed goods. Safe use of materials and equipment. **Required** instructional trips. Total of 18 hours lecture and 54 hours laboratory.

GRFX 134D SCREEN PRINTING - FOUR AND SIX COLORS

2 units

Prerequisite: *GRFX 134C*.

Advanced concepts of layout and design as applied to preparation of mechanicals and screens for advanced production printing. Emphasis on precise registration of multiple colors, quality of ink application to substrate and printing of fine detail. Discussion of current trends in the industry. Use of the 4-color rotary textile printer, belt dryer and semi-automatic press for high quality production. Safe use of materials and equipment. **Required** instructional trips. Total of 18 hours lecture and 54 hours laboratory.

GRFX 135 INTRODUCTION TO ELECTRONIC PREPRESS TECHNIQUES FOR SCREEN PRINTING

2 units

Prerequisite: *One of the following: GRFX 013, GRFX 115, GRFX 132A, or GRFX 134A.*

Beginning computer techniques class: evaluation, importing, scanning and correction of images for screen printing. Line art; basic single color halftones in positive and negative; making and trapping of spot colors; appropriate use of lettering and fonts for textile and flatstock printing applications. Effective use of output devices and substrates for screen transfer. **Required** instructional trips. Total of 18 hours lecture and 54 hours laboratory.

GRFX 137 SCREEN PRINTING TECHNIQUES FOR FLAT STOCK

2 units

Recommended Preparation: *GRFX 135.*

A specialized course designed to prepare students for screen printing careers in the production of posters, signs, and other flat stock. Techniques and procedures for printing by hand on tables and on a semi-automatic press. Use of letterpress equipment for poster production. Advanced techniques in design for impact, volume production and accurate registration of multiple color work. Safe use of materials and equipment. **Required** instructional trips. Total of 27 hours lecture and 45 hours laboratory.

GRFX 161 INTRODUCTION TO OFFSET PRESS TECHNIQUES

2 units

Prerequisite: GRFX 010.

Evaluation of photo offset lithography from press to bindery. History of printing, types of sheet-fed duplicators/presses and configurations of web-fed equipment. Characteristics of fountain solutions, feeding, dampening, inking and delivery systems. Paper and ink considerations for offset lithography. Common bindery procedures related to offset printing. **Required** interviews, demonstrations and instructional trips. **No credit** if taken after PRINT 162 or 260. Total of 36 hours lecture.

GRFX 165 ON-DEMAND PRINTING AND PUBLISHING SYSTEMS

1 unit

The proper use and functions of on-demand printing systems. Operation, programming and running of the DocuTech and digital color publishing systems. Overview of the size, scope and career opportunities found in the printing and publishing industry. Use and selection of papers, bindery methods, computers, safety practices and finishing operations required in the on-demand publishing field. Training in customer service techniques, job planning and quality aspects used in this segment of the printing field. **Required** instructional trips. Total of 18 hours lecture and 18 hours laboratory.

GRFX 190 IMAGING TECHNIQUES FOR LARGE FORMAT PRINTING

2 units

Prerequisite: GRFX 030 or GRFX 220.

Digital imaging techniques for production of large format graphics, including banners and vehicle wraps. File preparation, troubleshooting, Raster Imaging Processor issues, work flow concepts. Estimating, production planning, and material selection are also covered. **Maximum credit** 4 units, 2 units each semester. **Required** field trips. Total of 18 hours lecture and 54 hours laboratory.

GRFX 199 INTRODUCTION TO DESKTOP PUBLISHING

3 units

Introduction to desktop publishing. Basic DTP components. Written, visual and computer skills used to create and produce original documents specific to the student's major. Overview of career opportunities by faculty from various disciplines. **May not be taken concurrently** with or after JOUR 199. Total of 36 hours lecture and 54 hours laboratory.

GRFX 202 PRINTING MANAGEMENT — ESTIMATING

5 units

Theory and practice in planning for print production. Estimating for printing including art preparation, photographic procedures, image assembly, press selection and finishing methods. Analysis of printing orders from sales through invoicing, use of trade customs, computers in estimating and sales management for the printing industry. Proper uses of forms, pricing books and estimating standards for the printing industry. Total of 90 hours lecture.

GRFX 220 BASIC DIGITAL IMAGING

3 units

Introduction to document creation for print, web, or other final product. Image acquisition, assessment, editing, correction using programs such as Adobe Photoshop. Creation of digital documents using programs such as Adobe InDesign and Dreamweaver. Exposure to client, production team, and outside vendor relationships. **Required** instructional trips. Total of 36 hours lecture and 54 hours laboratory.

GRFX 221 ADVANCED DIGITAL IMAGING - WEB

3 units

Prerequisite: GRFX 220.

Intermediate digital document production. Image acquisition, assessment, editing and correction using programs such as Adobe Photoshop. Automated photo processing and editing techniques. Creation of digital documents using programs such as Adobe InDesign for print and e-publication, including interactive documents. Exposure to client, production team and outside vendor issues. **Required** instructional trips. Total of 36 hours lecture and 54 hours laboratory.

GRFX 222 INTERMEDIATE DIGITAL IMAGING - PRINT

3 units

Prerequisite: GRFX 220.

Intermediate digital document production. Image acquisition, assessment, editing and correction using programs such as Adobe Photoshop. Automated photo processing and editing techniques. Creation of digital documents using programs such as Adobe InDesign for print and e-publication, including interactive documents. Exposure to client, production team and outside vendor issues. **Required** instructional trips. Total of 36 hours lecture and 54 hours laboratory.-

GRFX 244 COLOR SEPARATION THEORY AND PRINTING PRODUCTION

3 units

Prerequisite: GRFX 240 or 146.

An introduction to color theory, separation methods and productions techniques using the electronic scanner, desk-

top technology and photo-manipulation software. Principles of analog and digital color proofing. Examination of color vision, color calibration, evaluation, color originals, correction methods and printing production standards employed in the printing field. Review of scanner formats, digital color systems, and imagesetting for the color service bureau and printing industry. **Required** instructional trips. Total of 54 hours lecture.

GRFX 245A BASIC PHOTOSHOP TECHNIQUES FOR GRAPHIC COMMUNICATIONS TECHNOLOGY

3 units

Prerequisite: GRFX 030 or 035 or 220.

Recommended preparation: GRFX 244.

Training in the proper techniques to adjust and modify images based upon the workflow and output requirements using PhotoShop software tools. Study of color theory models, separation requirements, resolution issues, proofing methods and file formats necessary in a digital workflow. Correct techniques in the operation of both the hardware and software of a flatbed scanners. Practice in the correction for quality reproduction of scanned images. Instruction in the electronic masking techniques in conjunction with the use of channels, masks and layers for image-editing, special effects and color correction as required in the printing industry. **Required** instructional trips. Total of 18 hours lecture and 108 hours laboratory.

GRFX 245B ADVANCED PHOTOSHOP TECHNIQUES FOR GRAPHIC COMMUNICATIONS COMMUNICATIONS

3 units

Prerequisite: GRFX 245A.

Advanced techniques focusing on color correction, image editing and image preparation using PhotoShop application software. Instruction on digital editing methods to achieve color enhancements required in the production of printing images. Training in advanced PhotoShop applications for masking, the use of channels or layers as required by various digital-imaging systems. Use of color management systems and the evaluation of digital color proofing systems. **Required** instructional trips. Total of 18 hours lecture and 108 hours laboratory.

GRFX 300A-G PRODUCTION PRINTING

14 units

Prerequisite: One of the following: GRFX 113, 121, 132B, 134B, or 163.

Production experience working with a wide variety of jobs. Individualized production training on live printing jobs. Deadlines, quality levels and production responsibilities expected from employees outside of the educational environment. **Each course** 2 units, 4 hours. Total of 18 hours lecture and 54 hours laboratory.

HEALTH EDUCATION

(Kinesiology, Health and Athletics Division)

HED 002A, E HEALTH EDUCATION-CONTEMPORARY HEALTH ISSUES

2 units

General aspects of personal and community health issues. **No credit** if taken after HED 044. **Each course** 2 units and a total of 36 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

HED 002A CONTEMPORARY HEALTH ISSUES

Includes drug education and the effects of the use of tobacco, alcohol, narcotics and other drugs, and sex education.

HED 002E HUMAN SEXUALITY; SELF-ESTEEM

Transfer Credit: CSU

HED 020 INDEPENDENT STUDY

1 unit

Prerequisites: One semester in health education and permission of department chairperson.

Student project on topics in health; emphasis on research techniques, written reports. Total of 54 hours laboratory.

Transfer Credit: CSU

HED 044 HEALTH EDUCATION

3 units

Physical and mental health factors; individual, community and school health concepts; the effects of the use of tobacco, alcohol, narcotics and other drugs and dangerous substances; effects of sexually transmitted diseases and the importance of health and nutrition. **Recommended** for majors in physical education, health education, and elementary education, and for students seeking a teaching credential but open to all qualified students. Total of 54 hours lecture.

Transfer credit: CSU; UC credit limitations. See counselor.

HISTORY

(Social Sciences Division)

HIST 001A HISTORY OF EUROPEAN CIVILIZATION TO 1715

3 units

Prehistoric man; ancient Near Eastern civilizations; Greeks and Hellenization; the Roman Empire. Emergence of European, Byzantine and Islamic civilizations; manorialism and feudalism. Crusades, cities, medieval kingdoms. Humanism

and Reformation. **No credit** if taken after HIST 003A or 003B. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: HIST 170*

HIST 001B HISTORY OF EUROPEAN CIVILIZATION FROM 1715

3 units

Survey of European history from 1715. Course includes the Enlightenment, Scientific Revolution, French Revolution, Napoleon, Western Imperialism, two World Wars, Cold War and the political, social and economic consequences of each. **No credit** if taken after HIST 003C or 003D. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: HIST 180*

HIST 002A HISTORY OF WORLD CIVILIZATIONS TO 1500

3 units

Survey of emerging regional cultures and societies from the earliest civilizations to 1500. Consideration given to comparative and integrative analysis of their contributions to the fabric of world civilization. Particular focus on cultural evolutionary parallels and the diffusion of ideas through migration and trade on a global scale. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: HIST 150*

HIST 002B HISTORY OF WORLD CIVILIZATIONS FROM 1500

3 units

Survey of world history from 1500's regional isolation to modern day globalism and its issues and problems. Consideration given to the political, economic, social, and intellectual forces present in the rise of the modern world. Particular focus on the interrelatedness of historical events and on the comparisons of cultures and societies in a historical perspective. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: HIST 160*

HIST 005A HISTORY OF GREAT BRITAIN TO 1714

3 units

Formation and expansion of early English governmental institutions, social systems and economic organizations; relations with continental Europe. Total of 54 hours lecture.

Transfer Credit: CSU; UC

HIST 005B HISTORY OF GREAT BRITAIN FROM 1714

3 units

Development of British political institutions, formation of the empire, social and economic progress, relations with other nations, influence of English law and literature on American institutions. Total of 54 hours lecture.

Transfer Credit: CSU; UC

HIST 007A UNITED STATES HISTORY TO 1876

3 units

Chronological, thematic, and analytical study of the political, economic, social, cultural, and diplomatic history of the United States to Reconstruction. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: HIST 130*

HIST 007B UNITED STATES HISTORY FROM 1876

3 units

Chronological, thematic, and analytical study of the political, economic, social, cultural, and diplomatic history of the United States from the end of Reconstruction to the present. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: HIST 140*

HIST 008 HISTORY OF CALIFORNIA

3 units

California's history from its beginnings to the modern era. Explores the multicultural and multifaceted "Golden State" and its political, economic, and sociocultural development on the west coast of the United States. Total of 54 hours lecture.

Transfer Credit: CSU; UC

HIST 009A LATIN AMERICA: PRE-COLUMBIAN TO 1825

3 units

Latin American history from pre-Columbian times to the independence of Latin American lands; emphasis on institutions of the past which have shaped conditions of the present; relations between Latin America and the United States. Total of 54 hours lecture.

Transfer Credit: CSU; UC

HIST 009B LATIN AMERICA: 1825 TO THE PRESENT

3 units

The social, economic and political history of Latin America from independence to the present. The legacy of colonialism; the development of cultural, political, and economic institutions; relations between Latin America and the United States foreign policies. Total of 54 hours lecture.

Transfer Credit: CSU; UC

HIST 012 THE NORTH AMERICAN INDIAN

3 units

Ethnic history of North American Indians; major native groups; social and cultural organizations; political and economic systems; U.S. government policies; reservation status; contemporary issues and problems. Total of 54 hours lecture.

Transfer Credit: CSU; UC

*Course Identification Numbering System (C-ID)

HIST 016 HISTORY OF THE MIDDLE EAST**3 units**

The Middle East from pre-historic times to the present; the geographic characteristics of the region; emphasis on the cultural, religious and social development of the various peoples of this area. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***HIST 018 HISTORY OF SOUTH ASIA, SOUTHEAST ASIA AND THE PACIFIC****3 units**

An examination of South Asia, Southeast Asia and the Pacific from pre-historic times to the present; the geopolitical importance of these areas; emphasis on the cultural, religious and social development of the peoples in history. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***HIST 019 HISTORY OF CHINA, JAPAN AND KOREA****3 units**

Civilizations of China, Japan and Korea from prehistoric times to the present; emphasis on cultural, religious and social developments. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***HIST 020 INDEPENDENT STUDY****1 unit**

Prerequisite: *One semester of history and permission of department chairperson.*

Individual projects; research techniques; written reports. Total of 54 hours laboratory.

*Transfer Credit: CSU; UC credit limitations. See counselor.***HIST 024A-G SPECIAL TOPICS IN HISTORY****3 units**

Readings, discussions, and papers focusing on topics of current and general interest in history. Each special topics course will emphasize critical thinking and analytical skills. **Each course** 3 units and a total of 54 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

<i>HIST 024A</i>	<i>AFRICA</i>
<i>HIST 024B</i>	<i>ASIA</i>
<i>HIST 024C</i>	<i>EUROPE</i>
<i>HIST 024D</i>	<i>LATIN AMERICA</i>
<i>HIST 024E</i>	<i>MIDDLE EAST</i>
<i>HIST 024F</i>	<i>UNITED STATES</i>
<i>HIST 024G</i>	<i>WORLD</i>

HIST 025B WOMEN IN AMERICAN SOCIETY**3 units**

Selected themes, problems, and personalities which have been associated with the creation of American democratic institutions. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***HIST 025D AMERICA'S RELATIONS WITH OTHER NATIONS****3 units**

Selected themes, problems, and personalities which have been associated with the creation of American democratic institutions. How U.S. involvements with nations in Europe, Latin America, the Middle East, Africa, and Asia have been associated with the creation of American democratic institutions. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***HIST 025F AMERICA AND THE TWO WORLD WARS****3 units**

Selected themes, problems, and personalities which have been associated with the creation of American democratic institutions. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***HIST 025I ISSUES OF THE VIETNAM ERA****3 units**

Identification and analysis of key issues and events of the Vietnam era emphasizing the Vietnam War, the civil rights movement, the anti-war protests, and the space exploration programs. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***HIST 027A TRADITIONAL AFRICA****3 units**

The history of Africa from scientific origins of humans through the 19th century with focus on the Nile Valley civilizations, the Agekoyo and Maasai of East Africa, Angola, the kingdoms of the Western Sudan, Uganda, the Swahili city states, and the Zulu empire; influence of Islam and Christianity on Africa. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***HIST 027B MODERN AFRICA****3 units**

The history of Africa from partition to colonialism in the 19th century to modern day developments; nationalistic movements, independence, and nation building; development of Pan-Africanism; African relations with the United States and in the global arena. Total of 54 hours lecture.

Transfer Credit: CSU; UC

HIST 029A AFRICAN AMERICAN HISTORY TO 1865

3 units

Legacy of African Americans from origins in Africa through the Civil War; African heritage; slave trade and slavery in colonial America; African Americans and the American Revolution, the new nation, and westward expansion, slave revolts, abolition, and the Civil War. Total of 54 hours lecture.

Transfer Credit: CSU; UC

HIST 029B AFRICAN AMERICAN HISTORY FROM 1865

3 units

African American experience from Reconstruction to modern days; end of Reconstruction and beginning of Black Codes and Jim Crow policies; Washington, DuBois, and the Harlem Renaissance; pan-Africanism; African Americans and the world wars; civil rights movement and nationalistic movements. Total of 54 hours lecture.

Transfer Credit: CSU; UC

HIST 030 HISTORY OF MEXICO

3 units

Mexico from pre-Columbian times to the early national period; political, economic, social and cultural developments; inter-American relations. Total of 54 hours lecture.

Transfer Credit: CSU; UC

HIST 031 HISTORY OF MEXICAN AMERICANS IN THE UNITED STATES

3 units

A survey of U.S. history from the Mexican American perspective covering historical periods from pre-European settlements to 21st century. Emphasis is placed on the experiences, problems, and contributions of Mexican Americans and the formation of Mexican American societies within the context of U.S. history. Total of 54 hours lecture.

Transfer Credit: CSU; UC

HIST 041 HISTORY OF ASIAN PACIFIC AMERICANS

3 units

Asian Pacific American experiences and contributions to United States history spanning the years from the pioneering 49ers through the Japanese American internment camp experience to the post-1965 immigration waves and refugees in an era of globalization. Total of 54 hours lecture.

Transfer Credit: CSU; UC

HIST 110 SKILLS FOR COLLEGE SUCCESS IN HISTORY

1 unit

Development of essential study techniques for success in history courses; orientation to applications of computer-based technologies in history; time management; textbook mastery, lecture outlining, test taking, and critical analysis. Total of 18 hours lecture.

HOSPITALITY

(Business Division)

HOSP 001 INTRODUCTION TO THE HOSPITALITY INDUSTRY

3 units

Overview of the structure and operation of the hospitality industry with an emphasis on hotels, restaurants, casinos, and resorts. History of the industry; relationship between various components of the hospitality industry. Career search and resume preparation. Total of 54 hours lecture.

Transfer Credit: CSU

HOSP 002 HOSPITALITY SUPERVISION AND HUMAN RESOURCES MANAGEMENT

3 units

Supervision of hospitality personnel through the application of management concepts and techniques, including planning, organizing, staffing, directing, controlling, delegation, and decision-making. Total of 54 hours lecture.

Transfer Credit: CSU

HOSP 004 HOSPITALITY SANITATION, SAFETY AND ENVIRONMENTAL ISSUES MANAGEMENT

3 units

Introduction to food service sanitation and safety as it relates to hospitality management. Food-borne illness identification and its prevention, OSHA's current regulations, safety maintenance and prevention, basic first aid, fire control, safety and prevention. Total of 54 hours lecture.

Transfer Credit: CSU

HOSP 101 HOSPITALITY INTERNSHIP

3 units

Prerequisite: *Maintain enrollment in 7 units or more, including field practice and enrollment in one or more required courses in the Hospitality Management program.*

Approved professional broad-based work experience in the hospitality industry. Experience can be either paid or unpaid internship. Total of 270 hours field practice.

HOSP 130 HOSPITALITY MARKETING, SALES AND ADVERTISING

3 units

Application of marketing principles and techniques in the hospitality industry. Emphasis on developing and understanding of consumers. Using consumer knowledge to provide value and create customer satisfaction while meeting financial goals, a focus on practical sales techniques proven approaches to selling to targeted markets and advertising's role in sales. Total of 54 hours lecture.

HUMANITIES

(Social Sciences Division)

HUM 001 INTRODUCTION TO THE HUMANITIES

3 units

How present-day ideas, beliefs, values and practices are grounded in the artistic, literary, philosophical and religious contributions to modern living from the most creative epochs and individuals of various cultures; an interdisciplinary course. Total of 54 hours lecture.

Transfer Credit: CSU; UC

HUM 002 HUMANITIES, SCIENCE AND TECHNOLOGY

3 units

Interrelationships between the humanities, the sciences and technology in modern society; an interdisciplinary course. Total of 54 hours lecture.

Transfer Credit: CSU; UC

HUM 003 HUMANITIES AND THE SOCIAL SCIENCES

3 units

Interdisciplinary approach to major economic, political and social forces which have influenced the interrelationships between the individual and society. Total of 54 hours lecture.

Transfer Credit: CSU; UC

HUM 004 HUMANITIES THROUGH THE ARTS

3 units

Survey of the development of concepts of self and human values through film, drama, music, literature, painting, sculpture and architecture. Total of 54 hours lecture.

Transfer Credit: CSU; UC

HUM 020 INDEPENDENT STUDY

1 unit

Prerequisites: Enrollment in or completion of HUM 001, 002, or 003 and permission of department chairperson.

Individual projects; research techniques; written reports. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

ITALIAN

(Languages Division)

ITAL 001 ELEMENTARY ITALIAN

5 units

Pronunciation and grammar. Speaking, reading and writing. Introduction to Italian geography, history, culture and music. Corresponds to first year of high school Italian. Total of 90 hours lecture.

Transfer Credit: CSU; UC

ITAL 002 ELEMENTARY ITALIAN

5 units

Prerequisite: ITAL 001, or the first year of high school Italian, or placement based on the foreign language assessment process.

Grammar essentials, especially irregular verbs; reading of simple prose stories; practice in conversation. Institutions, customs, culture, songs and poems of Italy. Total of 90 hours lecture.

Transfer Credit: CSU; UC

ITAL 003 INTERMEDIATE ITALIAN

5 units

Prerequisite: ITAL 002, or two years of high school Italian, or placement based on the foreign language assessment process.

Development of communication skills based on 19th and 20th century Italian readings; review of basic structure of Italian; customs and culture. Corresponds to the third year of High School Italian. Total of 90 hours lecture.

Transfer Credit: CSU; UC

ITAL 004 INTERMEDIATE ITALIAN

5 units

Prerequisite: ITAL 003, or three years of high school Italian, or placement based on the foreign language assessment process.

Further development of communication skills based on 19th and 20th century Italian readings; finish review of basic structure of Italian; customs and culture. Total of 90 hours lecture.

Transfer Credit: CSU; UC

ITAL 008A INTRODUCTION TO ITALIAN CONVERSATION

2 units

Prerequisite: ITAL 002 or two years of high school Italian or placement based on the foreign language assessment process.

Practice in oral self-expression and understanding spoken Italian. **For** majors in music, fine arts and humanities, but open to all qualified students. Total of 36 hours lecture.

Transfer Credit: CSU

ITAL 008B INTRODUCTION TO ITALIAN CONVERSATION

2 units

Prerequisite: ITAL 008A.

Further practice in oral self-expression and understanding spoken Italian. Emphasis on culture and history. **For** majors in music, fine arts and humanities, but open to all qualified students. Total of 36 hours lecture.

Transfer Credit: CSU

ITAL 009A-C ITALIAN CONVERSATION

6 units

Prerequisite: *ITAL 003 or three years of high school Italian or placement based on the foreign language assessment process.*

Intensive practice at an advanced level in oral expression and comprehension of spoken Italian. **Each course** 2 units, and a total of 36 hours lecture.

Transfer Credit: CSU; UC

ITAL 010 ITALIAN CIVILIZATION

3 units

Customs, language, literature, geography, arts and sciences; contributions of Italy to civilization, from earliest to modern times. (Course conducted in English.) Total of 54 hours lecture.

Transfer Credit: CSU; UC

ITAL 012 INTRODUCTION TO ITALIAN LITERATURE

3 units

Prerequisite: *Eligibility for ENGL 001A.*

Investigation of main topics, genres, and authors of Italian Literature. Cultural, social and historical background of significant works in Italian fiction, poetry, prose. (Course conducted in English.) Total of 54 hours lecture.

Transfer Credit: CSU; UC

ITAL 050 ITALIAN FILM AS DRAMATIC LITERATURE

3 units

Prerequisite: *Eligibility for ENGL 001A.*

Italian culture, society, politics and historical periods through the viewing and discussion of Italian films from Neorealism to contemporary cinema. Critical analysis of film types, directors, movements through lecture, discussion, and writing. (Course conducted in English.) Total of 54 hours lecture.

Transfer Credit: CSU; UC

JAPANESE

(Languages Division)

JAPN 001 ELEMENTARY JAPANESE

5 units

Basic vocabulary, useful phrases; reading, writing and speaking. Introduction to geography, customs and culture. Corresponds to first year of high school Japanese. Total of 90 hours lecture.

Transfer Credit: CSU; UC

JAPN 002 ELEMENTARY JAPANESE

5 units

Prerequisite: *JAPN 001, or the first year of high school Japanese, or placement based on the foreign language assessment process.*

Grammar; oral and written composition; reading of elementary texts; customs and culture. Total of 90 hours lecture.

Transfer Credit: CSU; UC

JAPN 003 INTERMEDIATE JAPANESE

5 units

Prerequisite: *JAPN 002 or two years of high school Japanese or placement based on the foreign language assessment process.*

Grammar; oral and written composition; reading of intermediate texts; customs and culture. Total of 90 hours lecture.

Transfer Credit: CSU; UC

JAPN 004 INTERMEDIATE JAPANESE

5 units

Prerequisite: *JAPN 003 or three years of high school Japanese or placement based on the foreign language assessment process.*

Continuation of grammar, oral and written composition; reading of texts of moderate difficulty; customs and culture. Total of 90 hours lecture.

Transfer Credit: CSU; UC

JAPN 005 ADVANCED READING AND COMPOSITION

3 units

Prerequisite: *JAPN 004 or placement based on the foreign language assessment process.*

Reading and discussion of Japanese fictional and non-fictional texts. Total of 54 hours lecture.

Transfer Credit: CSU; UC

JAPN 008A INTRODUCTION TO JAPANESE CONVERSATION

2 units

Prerequisite: *JAPN 002 or two years of high school Japanese or placement based on the foreign language assessment process.*

Practice in oral self-expression and understanding spoken Japanese. Total of 36 hours lecture.

Transfer Credit: CSU

JAPN 008B INTRODUCTION TO JAPANESE CONVERSATION

2 units

Prerequisite: *JAPN 002 or two years of high school Japanese or placement based on the foreign language assessment process.*

Practice in oral self-expression and understanding spoken Japanese with emphasis on personal interactions and conversation. Total of 36 hours lecture.

Transfer Credit: CSU

JAPN 009A JAPANESE CONVERSATION

2 units

Prerequisite: JAPN 003, 008A-B, three years of high school Japanese, or placement based on the foreign language assessment process.

Intensive practice in oral expression and comprehension of spoken Japanese. Total of 36 hours lecture.

Transfer Credit: CSU; UC

JAPN 009B JAPANESE CONVERSATION

2 units

Prerequisite: JAPN 003 or three years of high school Japanese or placement based on the foreign language assessment process.

Intensive practice in oral expression and comprehension of spoken Japanese with focus on socio-historic aspects of Japanese life. Total of 36 hours lecture.

Transfer Credit: CSU; UC

JAPN 009C JAPANESE CONVERSATION

2 units

Prerequisite: JAPN 003 or three years of high school Japanese, or placement based on the foreign language assessment process.

Intensive practice in oral expression and comprehension of spoken Japanese with focus on the specialized vocabulary related to social events and discussion of on-going political issues. Total of 36 hours lecture.

Transfer Credit: CSU; UC

JAPN 010 JAPANESE CIVILIZATION

3 units

Geography, history and institutions; customs, language, literature, arts and sciences; Japanese contributions to civilization. (Course conducted in English.) Total of 54 hours lecture.

Transfer Credit: CSU; UC

JAPN 011 INSIDE JAPAN

1 unit

Modern Japan; the culture, business and industry, education, politics, foreign affairs. (Course conducted in English.) Total of 18 hours lecture.

Transfer Credit: CSU

JAPN 012 JAPANESE LITERATURE IN TRANSLATION

3 units

Reading and discussion of Japanese literature and its traditions from the 9th century to the present. The empha-

sis is placed on the unique qualities of its cultural identity. Selected readings will reveal both the stereotypes and anti-stereotypical Japanese characters. A comparative analysis is applied to many genres such as oral traditions, performing arts, films, comics, and animation (anime). Total of 54 hours lecture.

Transfer Credit: CSU; UC

JOURNALISM

(Visual Arts and Media Studies Division)

JOUR 002 BEGINNING JOURNALISM

3 units

Fundamental principles and practices of newswriting. Standards, ethics, rights, responsibilities and laws of libel. Media literacy. New media. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: JOUR 110*

JOUR 004A REPORTING AND NEWSWRITING

3 units

Prerequisite: JOUR 002.

Recommended Preparation: JOUR 007A; keyboarding ability.

Fundamentals of newswriting and reporting: language, style, organization and structure. Total of 54 hours lecture.

*Transfer Credit: CSU. *C-ID: JOUR 210*

JOUR 005 MAGAZINE AND SMALL PUBLICATIONS

3 units

Introduction to magazine and small publication production with emphasis on developing, researching, interviewing and writing non-fiction articles. Includes complete presentation of stories, photos, design and layout. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU

JOUR 007A NEWSWRITING AND MAKE-UP

4 units

Prerequisite: JOUR 002.

Opportunity to work on the campus newspaper, the Courier. Interviewing, writing copy and mastering the processes connected with the publication of a newspaper. **Required** of all members of newspaper staff. Total of 54 hours lecture and 54 hours laboratory.

*Transfer Credit: CSU. *C-ID: JOUR 130*

JOUR 007B NEWSWRITING AND MAKE-UP

4 units

Prerequisite: JOUR 007A.

Opportunity to work as an editor on the campus newspaper, the Courier, and its online edition. Writing and editing copy and headlines, laying out pages for publication, and

*Course Identification Numbering System (C-ID)

mastering the editing processes connected with the publication of a weekly newspaper and its online edition. **Required** of all members of the newspaper's editorial board. Total of 54 hours lecture and 54 hours laboratory. *Transfer Credit: CSU. *C-ID: JOUR 131*

JOUR 009 PUBLIC RELATIONS AND ORGANIZATIONAL COMMUNICATION

3 units

Basic aspects of public relations and organizational communication for corporate, entertainment, non-profit, and other targeted organizations. Total of 54 hours lecture. *Transfer Credit: CSU. *C-ID: JOUR 150*

JOUR 022 ADVANCED PRESS PHOTOGRAPHY

3 units

Prerequisite: *JOUR 021 or PHOT 021.*

News, feature and sports photography, with introduction to picture scanning and digital manipulation techniques. Assignments on all college publications. Total of 36 hours lecture and 72 hours laboratory. *Transfer Credit: CSU*

JOUR 023 PHOTOJOURNALISM

3 units

Prerequisite: *JOUR 021 or PHOT 021.*

Picture series, essays and stories with assignments on various college publications. Historic and current trends in photojournalism and contemporary publications. Total of 36 hours lecture and 72 hours laboratory. *Transfer Credit: CSU. *C-ID: JOUR 160*

JOUR 107A ONLINE JOURNALISM

4 units

Prerequisite: *JOUR 007A or placement based on the Journalism assessment process.*

Opportunity to work on the campus newspaper, the Courier, and its online edition. Reporting and writing news and feature stories. Navigating software used for online publishing. Mastering the skills of online journalism, including blogs, bulletins, breaking news, multimedia and social media. Total of 54 hours lecture and 54 hours laboratory.

JOUR 107B NEWS LEADERSHIP

4 units

Prerequisite: *JOUR 007A or placement based on the Journalism assessment process.*

Opportunity to work as a manager on the campus newspaper, the Courier, and its online edition. Reporting, writing and editing news and feature stories. News judgment. Online publishing. Leadership managing peers in their roles in the newsroom as reporters, photographers and editors. Total of 54 hours lecture and 54 hours laboratory.

JOUR 110 JOURNALISM FIELD PRACTICE

3 units

Prerequisites: *Maintain enrollment in 7 units or more including field practice.*

Supervised field experience in selected public and private journalism enterprises. **Minimum** of 15 hours of field practice each week. Total of 270 hours field practice.

KINESIOLOGY - ACTIVITY

(Kinesiology, Health and Athletics Division)

Scope

The program consists of movement-based physical education activity courses.

Credit Toward Associate Degrees

In addition to the two units of physical education activity required for the Associate in Arts or Associate in Science degree, a student may elect additional courses.

Lockers and Towels

Locker room and shower facilities are provided. Students must bring their own towels.

Attire

Students will be expected to change into clothes which allow freedom of movement and are appropriate to the activity. Athletic shoes are required for most classes.

KINA 003A BEGINNING SWIMMING I

1 unit

Basic swimming and safety skills for non-swimmers. Instruction to include orientation to the water, floating and kicking on front and back, arm stroking for front and back, and rhythmic breathing. Safety skills to include treading water, survival float, reaching techniques and pool safety rules. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINA 003B ADVANCED BEGINNING SWIMMING II

1 unit

Recommended preparation: *KINA 003A or American Red Cross Level III Lifesaving certificate.*

Build on the foundations established in Beginning Swimming I. More emphasis will be placed on stroke development and breathing coordination. Underwater swimming, jumping into the pool, and basic rescue. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

*Course Identification Numbering System (C-ID)

KINA 003C INTERMEDIATE SWIMMING

1 unit

Recommended preparation: *KINA 003B or American Red Cross Level IV Lifesaving certificate.*

Strokes included will be elementary backstroke, breaststroke, and sidestroke. Front crawl and back crawl for increased distances. Diving from the side of the pool, turns, and CPR are introduced. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINA 003D ADVANCED SWIMMING AND DIVING

1 unit

Recommended preparation: *KINA 003C or American Red Cross Level IV Lifesaving certificate.*

All strokes taught in beginning, advanced beginning, and intermediate will be perfected. Diving from the board and the butterfly stroke will be taught. Introductory life guarding and rescue skills will be introduced. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINA 003E DISTANCE SWIMMING FOR FITNESS

1 unit

Recommended preparation: *KINA 003C or 003D.*

A physical fitness program based on progressive distance swims using the front crawl. **For** students with the ability to swim 500 yards in 12 minutes or less. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINA 027 ADAPTED FITNESS ACTIVITIES

1 unit

Prerequisite: *Recommendation by Disabled Students Programs and Services or Student Health Services.*

Emphasis on exercises to increase level of physical, motor and postural fitness through training with weights, stretching exercises and relaxation techniques. **For** students unable to participate in regular physical education activities because of temporary or permanent limitations.

Maximum credit 4 units, 1 unit each semester. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINA 028A BEGINNING AQUATIC FITNESS ACTIVITIES

1 unit

Physical fitness activities in the pool. Swimming skill not necessary. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINA 028B INTERMEDIATE AQUATIC FITNESS ACTIVITIES

1 unit

Recommended preparation: *KINA 028A.*

Intermediate physical fitness activities in the pool. Swimming skills not necessary. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINA 029A BEGINNING STRENGTH TRAINING

1 unit

Improvement of muscular development and physical fitness through use of resistive exercises; training with barbells and dumbbells. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINA 029B INTERMEDIATE STRENGTH TRAINING

1 unit

Improvement of muscular development and physical fitness through the use of weight lifting and physical conditioning exercises. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINA 029C ADVANCED STRENGTH TRAINING

1 unit

Improvement of muscular development and physical fitness through use of resistive and isometric exercises and through circuit training. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINA 030 FITNESS TESTING AND INDEPENDENT EXERCISE

1 unit

Testing to determine individual fitness level. Goals established and fitness program designed for each individual. Periodic retesting after independent exercise to determine if goals are being met. Total of 54 hours laboratory.

Transfer Credit: CSU

KINA 032A BEGINNING FITNESS ACTIVITIES

1 unit

Emphasis on achieving an improved level of physical performance through basic training with weights, circuits, aerobics and stretching programs. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINA 032B INTERMEDIATE FITNESS ACTIVITIES

1 unit

Emphasis on improving individual performance in the areas of strength and muscle tone, cardiovascular endurance, flexibility, relaxation and body composition. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINA 032C ADVANCED FITNESS ACTIVITIES

1 unit

Improvement in individual fitness levels through advanced activities. Emphasis on a well balanced program of physi-

cal activities designed to enhance endurance, flexibility, strength, cardiovascular efficiency, and weight distribution based on a selected exercise program, aerobic work, nutritional information, circuit training, stretching and relaxation. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINA 033 STRETCHING FITNESS ACTIVITY

1 unit

Emphasis on achieving and improving level of flexibility through basic stretching exercises. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINA 034A SELF DEFENSE

1 unit

Techniques to develop the basic knowledge, attitudes and skills of self defense. Total of 54 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*

KINA 034B INTERMEDIATE SELF-DEFENSE

1 unit

Intermediate techniques to increase the knowledge, attitudes, body movements and skills used in self-defense. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINA 036 AEROBIC FITNESS

1 unit

An introduction to the basic principles and techniques of cardiovascular fitness by using a combination of rhythmic movement and low impact aerobics. Students will also work to improve their muscular strength and tone through the use of calisthenics and/or hand weight circuits. Proper nutrition and a healthy diet for peak performance are emphasized. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINA 037 POLICE-FIRE AGILITY TRAINING

1 unit

Instruction and practice in the skills required to complete police and fire departments' physical agility tests. Techniques on how to scale a six foot smooth wall, an eight foot chain link fence, drag a 165 pound dummy from behind the steering wheel of a vehicle; unwind, drag and coil 150 pounds of fire hose. Weight lifting for upper body strength and general physical conditioning. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINA 038 CARDIOVASCULAR CONDITIONING

1 unit

Achievement of physical fitness and efficiency of the cardiovascular system by utilizing aerobic point system, fartlek training, interval training, parcourse, obstacle

course and various exercise techniques. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINA 039A CYCLING FOR FITNESS - OUTDOOR

1 unit

Basic cardiovascular fitness through cycling: general cycling, fast cycling, sprints, intervals and hill climbing. Cycling safety, bike fit, minor repair instruction and cycling etiquette. Student must provide own bicycle. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINA 039B BEGINNING CYCLING FOR FITNESS - STATIONARY, INDOOR

1 unit

Basic cardiovascular fitness is achieved through: general cycling, fast cycling, sprints, intervals and hill climbing. Cycling safety, bike fit, heart rate training. Incorporates a choreographed workout on a specially designed stationary bicycle, using music and fundamental cycling techniques for a beginning rider. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINA 039C INTERMEDIATE CYCLING FOR FITNESS

1 unit

Intermediate cardiovascular fitness achieved through: general cycling, fast cycling, sprints, intervals and hill climbing. Cycling safety, bike fit, heart rate training. Incorporates a choreographed workout on a specially designed stationary bicycle, using music and fundamental cycling techniques for an intermediate rider. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINA 039D ADVANCED CYCLING FOR FITNESS - STATIONARY, INDOOR

1 unit

Advanced cardiovascular fitness is achieved through: general cycling, fast cycling, sprints, intervals and hill climbing. Cycling safety, bike fit, heart rate training. Incorporates a choreographed workout on a specially designed stationary bicycle, using music and fundamental cycling techniques at an advanced level. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINA 040A BEGINNING YOGA

1 unit

Introductory course exploring the principles of hatha yoga. Fundamental skills of the ancient techniques of yoga to enhance wellness and well-being. Development of body alignment, posture, balance, and flexibility through a series of yoga poses and routines. Meditational tools and practices to improve stress reduction and personal growth. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit under review.

KINA 046A BEGINNING BADMINTON**1 unit**

Instruction in the basic strokes of badminton: clears, drops, smash, around the head clear shot, short and long serves. Rules, strategy, playing terms and etiquette for singles and doubles play. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINA 046B INTERMEDIATE BADMINTON**1 unit**

Review of the basic skills presented in the beginning class: the overhead and underhand clears, the drop, the smash, and short and long serves. Introducing the flick serve, drive serve, the backhand serve, cross court net drops, half smash, the forehand and backhand drives and the round head smash and drop. Emphasis will be placed on conditioning and skill development. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINA 046C ADVANCED BADMINTON**1 unit**

Review previous strokes from beginning and intermediate levels of badminton. The backhand cross court drop, the fast drop, net brush shots and advanced service returns. Emphasis will be on deception in holding shots, execution and placement. Conditioning and on-court drills will be stressed. Court strategy for the game of mixed doubles and advanced strategy for singles and doubles play. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINA 048A BEGINNING FENCING**1 unit**

Basic foil fencing fundamentals and techniques. Conditioning for fencing. Emphasis on beginning bouting, strategy, etiquette, tournament fencing, directing, judging and scoring. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINA 048B INTERMEDIATE FENCING**1 unit**

Introduction to electric foil. Principles of strength and endurance. Intermediate foil skills: footwork, bladework and body mechanics. Emphasis on intermediate bouting strategy, etiquette, tournament fencing, directing, judging and scoring. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINA 048C ADVANCED FENCING**1 unit**

Advanced foil skills, techniques and conditioning. Introduction to electric epee and sabre. Emphasis on advanced electric and beginning epee bouting strategy, etiquette, tournament fencing, directing, judging and scoring. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINA 050A BEGINNING WEIGHT TRAINING FOR WOMEN**1 unit**

Orientation to the basic weight training machines available in gyms/clubs and proper gym etiquette, a study of the basic musculoskeletal anatomy and kinesiology of the female body, present the fundamental tenets of weight training, discussion of how to maintain healthy body composition and information on designing a weight training program to achieve attainable personal goals. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit under review.

KINA 050B INTERMEDIATE WEIGHT TRAINING FOR WOMEN**1 unit**

Study of the musculoskeletal anatomy and kinesiology of the female body, present the fundamental tenets of weight training at an intermediate level, discussion of how to maintain healthy body composition and information on designing a weight training program to achieve attainable personal goals. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit under review.

KINA 050C ADVANCED WEIGHT TRAINING FOR WOMEN**1 unit**

Study of the musculoskeletal anatomy and kinesiology of the female body, present the fundamental tenets of weight training at an advanced level, discussion of how to maintain healthy body composition and information on designing a weight training program to achieve attainable personal goals. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit under review.

KINA 054A BEGINNING TENNIS**1 unit**

Development of basic ground strokes: forehand and backhand drives; basic volley and serve; rules and scoring; court etiquette. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINA 054B INTERMEDIATE TENNIS**1 unit**

Recommended preparation: KINA 054A.

Development of strokes: forehand and backhand drives, spin serves, overhead strokes; ball, top and back spins; rules; strategy at the intermediate level. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINA 054C ADVANCED TENNIS**1 unit**

Recommended preparation: KINA 054B.

Development of strokes; lob, smash, spin; approach to net; advanced game strategy. Total of 54 hours laboratory.
Transfer Credit: CSU; UC credit limitations. See counselor.

KINA 065A BEGINNING BASKETBALL

1 unit

Rules; techniques; passing, dribbling, pivoting, footwork and various types of shots; team play and strategy of game. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINA 065B INTERMEDIATE BASKETBALL

1 unit

Recommended preparation: *KINA 065A.*

Rules; skills and techniques; passing, dribbling and shooting; strategy of team play. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINA 065C ADVANCED BASKETBALL

1 unit

Recommended preparation: *KINA 065B.*

Rules; skills and techniques; passing, dribbling and shooting; zone, man to man, and pressing defense; high and low post and motion offense. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINA 069 SOCCER

1 unit

Rules; techniques; passing, dribbling, footwork and various types of shots; team play and strategy of game. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINA 081A BEGINNING VOLLEYBALL

1 unit

Basic techniques, rules and simple strategies. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINA 081B INTERMEDIATE VOLLEYBALL

1 unit

Recommended preparation: *KINA 081A.*

Review of fundamental skills; strategies and techniques. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINA 081C ADVANCED VOLLEYBALL

1 unit

Recommended preparation: *KINA 081B.*

Advanced skills: techniques, positions and strategies. High level of competition through tournament play. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINESIOLOGY – INTERCOLLEGIATE ATHLETICS

(Kinesiology, Health and Athletics Division)

Scope

The program consists of intercollegiate activities courses.

Requirements for registration in Intercollegiate Sports

Any student desiring to compete in any intercollegiate sport should enroll in one of the sections of the intercollegiate sport in which he or she intends to participate.

Athletic Eligibility — Men and Women

A student participating in intercollegiate athletic competition must present a certificate from the College physician stating that he or she is physically fit to participate in the activity for which he or she is a candidate. To be eligible for competition, a student must meet the rules and regulations of the Mission and South Coast Conferences and the Athletic Code of the California Association of Community Colleges. The Athletic Director and the Assistant Dean of Student Affairs maintain copies of the code in their respective offices.

Scope

The program consists of movement-based physical activity courses.

Credit Toward Associate Degrees

In addition to the two units of physical education activity required for the Associate in Arts or Associate in Science degree, a student may elect to take additional courses.

Lockers and Towels

Locker room and shower facilities are available. Students must bring their own towels.

Attire

Students will be expected to attend class in clothes that allow for freedom of movement and are appropriate to the activity. Athletic shoes are required for most classes.

KATH 070 OFF-SEASON CONDITIONING INTERCOLLEGIATE - BADMINTON

1 unit

Designed to provide a physical, mental, nutritional and instructional conditioning program for the student preparing for and/or interested in being evaluated for the intercollegiate sport of badminton. **Maximum credit 4 units, 1 unit each semester.** Total of 54 hours laboratory.
Transfer Credit: CSU; UC credit limitations. See counselor.

**KATH 071 OFF-SEASON CONDITIONING
INTERCOLLEGIATE - BASEBALL**

1 unit

Designed to provide a physical, mental, nutritional and instructional conditioning program for the student preparing for and/or interested in being evaluated for the intercollegiate sport of baseball. **Maximum credit** 4 units, 1 unit each semester. Total of 54 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*

**KATH 072 OFF-SEASON CONDITIONING
INTERCOLLEGIATE - BASKETBALL**

1 unit

Designed to provide a physical, mental, nutritional and instructional conditioning program for the student preparing for and/or interested in being evaluated for the intercollegiate basketball program. **Maximum credit** 4 units, 1 unit each semester. Total of 54 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*

**KATH 073 OFF-SEASON CONDITIONING
INTERCOLLEGIATE - CROSS COUNTRY**

1 unit

Designed to provide a physical, mental, nutritional and instructional conditioning program for the student preparing for and/or interested in being evaluated for the intercollegiate sport of cross country. **Maximum credit** 4 units, 1 unit each semester. Total of 54 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*

**KATH 074 OFF-SEASON CONDITIONING
INTERCOLLEGIATE - FOOTBALL**

1 unit

Designed to provide a physical, mental, nutritional and instructional conditioning program for the student preparing for and/or interested in being evaluated for the intercollegiate sport of football. **Maximum credit** 4 units, 1 unit each semester. Total of 54 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*

**KATH 075 OFF-SEASON CONDITIONING
INTERCOLLEGIATE - SOCCER**

1 unit

Designed to provide a physical, mental, nutritional and instructional conditioning program for the student preparing for and/or interested in being evaluated for the intercollegiate sport of soccer. **Maximum credit** 4 units, 1 unit each semester. Total of 54 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*

**KATH 076 OFF-SEASON CONDITIONING
INTERCOLLEGIATE - SOFTBALL**

1 unit

Designed to provide a physical, mental, nutritional and instructional conditioning program for the student preparing for and/or interested in being evaluated for the

intercollegiate sport of softball. **Maximum credit** 4 units, 1 unit each semester. Total of 54 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*

**KATH 077 OFF-SEASON CONDITIONING
INTERCOLLEGIATE - SWIMMING AND
DIVING**

1 unit

Designed to provide a physical, mental, nutritional and instructional conditioning program for the student preparing for and/or interested in being evaluated for the intercollegiate sport of swimming. **Maximum credit** 4 units, 1 unit each semester. Total of 54 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*

**KATH 078 OFF-SEASON CONDITIONING
INTERCOLLEGIATE - TRACK AND FIELD**

1 unit

Designed to provide a physical, mental, nutritional and instructional conditioning program for the student preparing for and/or interested in being evaluated for the intercollegiate sport of track and field. **Maximum credit** 4 units, 1 unit each semester. Total of 54 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*

**KATH 079 OFF-SEASON CONDITIONING
INTERCOLLEGIATE - VOLLEYBALL**

1 unit

Designed to provide a physical, mental, nutritional and instructional conditioning program for the student preparing for and/or interested in being evaluated for the intercollegiate sport of volleyball. **Maximum credit** 4 units, 1 unit each semester. Total of 54 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*

**KATH 080 OFF-SEASON CONDITIONING
INTERCOLLEGIATE - WATER POLO**

1 unit

Designed to provide a physical, mental, nutritional and instructional conditioning program for the student preparing for and/or interested in being evaluated for the intercollegiate sport of water polo. **Maximum credit** 4 units, 1 unit each semester. Total of 54 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*

**KATH 083 INTERCOLLEGIATE SPORTS - BASEBALL
3 units**

Intercollegiate competition for baseball. **Required** instructional trips. **Maximum credit** 12 units, 3 units each semester. Total of 162 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*

**KATH 084 INTERCOLLEGIATE SPORTS - BASKETBALL
1¹/₂ units**

Intercollegiate competition for men's and women's Basketball. **Required** instructional trips. **Maximum credit** 6 units, 1.5 units each semester. Total of 81 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*

KATH 085 INTERCOLLEGIATE SPORTS - CROSS COUNTRY

3 units

Intercollegiate competition for men's and women's cross country. **Required** instructional trips. **Maximum credit** 12 units, 3 units each semester. Total of 162 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*

KATH 086 INTERCOLLEGIATE SPORTS - FOOTBALL

3 units

Intercollegiate competition for Football. **Required** instructional trips. **Maximum credit** 12 units, 3 units each semester. Total of 162 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*

KATH 089 INTERCOLLEGIATE SPORTS - SOCCER

3 units

Intercollegiate competition for men's and women's soccer. **Required** instructional trips. **Maximum credit** 12 units, 3 units each semester. Total of 162 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*

KATH 090 INTERCOLLEGIATE SPORTS - SOFTBALL

3 units

Intercollegiate competition for softball. **Required** instructional trips. **Maximum credit** 12 units, 3 units each semester. Total of 162 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*

KATH 091 INTERCOLLEGIATE SPORTS - SWIMMING

3 units

Intercollegiate competition for men's and women's swimming and diving. **Required** instructional trips. **Maximum credit** 12 units, 3 units each semester. Total of 162 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*

KATH 093 INTERCOLLEGIATE SPORTS - TRACK AND FIELD

3 units

Intercollegiate competition for men's and women's track and field. **Required** instructional trips. **Maximum credit** 12 units, 3 units each semester. Total of 162 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*

KATH 094 INTERCOLLEGIATE SPORTS - VOLLEYBALL

3 units

Intercollegiate competition for volleyball. **Required** instructional trips. **Maximum credit** 12 units, 3 units each semester. Total of 162 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*

KATH 095 INTERCOLLEGIATE SPORTS - WATER POLO

3 units

Intercollegiate competition for water polo. **Required** instructional trips. **Maximum credit** 12 units, 3 units each semester. Total of 162 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*

KATH 096 INTERCOLLEGIATE SPORTS - BADMINTON

3 units

Intercollegiate competition for badminton. **Required** instructional trips. **Maximum credit** 12 units, 3 units each semester. Total of 162 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*

KINESIOLOGY - THEORY

(Kinesiology, Health and Athletics Division)

KINT 002 INTRODUCTION TO ATHLETIC TRAINING

3 units

The history of the athletic training profession, the role of the athletic trainer as part of the sports medicine team, nutrition, emergency management, risk management and injury assessment domains will be introduced. Lab: injury prevention principles and techniques for the application of protective taping/bracing, stretching, therapeutic exercise and testing, and environmental conditions/illnesses. Total 54 hours lecture and 18 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*

KINT 003 INTRODUCTION TO KINESIOLOGY

3 units

Introduction to interdisciplinary approach to the study of human movement. An overview of the importance of the sub-disciplines in kinesiology will be discussed along with career opportunities in the areas of teaching, coaching, allied health, and fitness professions. Total of 54 hours lecture. *Transfer Credit: CSU; UC credit limitations. See counselor.*
**C-ID: KIN 100*

KINT 005 FIRST AID - RESPONDING TO EMERGENCIES

3 units

Theory and detailed demonstration of the first aid care of the injured. The student will learn to assess a victim's condition and incorporate proper treatment. Standard first aid, CPR, and AED certification(s) will be granted upon successful completion of requirements. Total of 54 hours lecture. *Transfer Credit: CSU; UC credit limitations. See counselor.*
**C-ID: KIN 101*

*Course Identification Numbering System (C-ID)

KINT 006 AQUATIC CERTIFICATION**4 units**

Prerequisites: *Swimming skills equivalent to the ARC Swimmers Certificate, ability to swim 500 yards continuously, and ARC Basic or Emergency Water Safety Certificate or ARC Safety training for swim coaches.*

Theory and practice of swimming strokes, diving, lifesaving, teaching methods and emergency procedures. Preparation for and completion of tests for American Red Cross Lifeguarding, Water Safety Instructor, First Aid, Community CPR, CPR/BLS and Instructor Candidate Training Certificates. Total of 54 hours lecture and 54 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*

KINT 014 WELLNESS FOR LIFE**3 units**

Emphasis on wellness through the lens of reduced obesity and body fat percentage, nutrition, personal responsibility, healthy lifestyle choices and positive behavioral change. Physical, emotional, psychological, spiritual, social, occupational and environmental influences. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU

KINT 020 INDEPENDENT STUDY**1 unit**

Prerequisite: *Completion of any KINT course and approval of student project on topics in physical education.*

Student project on topics in physical education; emphasis on research techniques; written reports. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINT 027C EARLY CHILDHOOD PHYSICAL EDUCATION**2 units**

Creative movement, perceptual motor and rhythmic experiences suitable for preschool children; ideas for equipment; evaluating and individualizing activities, assessing and selecting equipment and creating a safe and active learning environment. Total of 36 hours lecture.

Transfer Credit: CSU

KINT 031A PROFESSIONAL ACTIVITIES – OFFICIATING**2 units**

Rules and advanced techniques of games in season: basketball, football, minor sports. **Fall** semester. Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINT 031B PROFESSIONAL ACTIVITIES – OFFICIATING**2 units**

Rules and advanced techniques of games in season: baseball, track, minor sports. **Spring** semester. Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINT 046A PROFESSIONAL ACTIVITIES – BASEBALL**2 units**

Analysis of advanced and basic fundamentals; theory and philosophy of offensive and defensive strategy. Principles of practice and score keeping in baseball. Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINT 046B PROFESSIONAL ACTIVITIES – BASEBALL**2 units**

Prerequisite: *KINT 046A.*

Analysis of advanced theory and teaching of offensive and defensive strategy. Principles of practice and score keeping in baseball. Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINT 048 PROFESSIONAL ACTIVITIES – PHYSICAL FITNESS**2 units**

Implementation of basic concepts of physical fitness. A wide variety of conditioning programs and techniques utilized in designing individual fitness programs. Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINT 051 PROFESSIONAL ACTIVITIES – TRACK AND FIELD**2 units**

Basic and advanced skills, rules and strategy in track and field events. Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINT 052A PROFESSIONAL ACTIVITIES – BASKETBALL**2 units**

Analysis of the fundamental skills of men's and women's basketball. Offensive and defensive strategy. Principles of scoring. Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINT 052B PROFESSIONAL ACTIVITIES – BASKETBALL**2 units**

Prerequisite: *KINT 052A.*

Analysis of advanced skills of men's and women's basketball. Offensive and defensive strategy. Principles of scoring. Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINT 053A PROFESSIONAL ACTIVITIES – FOOTBALL**2 units**

Analysis of basic football fundamentals, theory and phi-

philosophy of offensive and defensive strategy, principles of the kicking game. Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINT 053B PROFESSIONAL ACTIVITIES – FOOTBALL

2 units

Prerequisite: KINT 053A.

Analysis of advanced football fundamentals, theory and philosophy of offensive and defensive strategy, principles of the kicking game. Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINT 054 PROFESSIONAL ACTIVITIES – VOLLEYBALL

2 units

Analysis of basic and advanced volleyball fundamentals, theory and philosophy of offensive and defensive strategy. Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU

KINT 055A PROFESSIONAL ACTIVITIES – SOCCER

2 units

Analysis of soccer fundamentals; theory and teaching of offensive and defensive strategy. Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINT 055B PROFESSIONAL ACTIVITIES – SOCCER

2 units

Prerequisite: KINT 055A.

Analysis of advanced soccer fundamentals; theory and teaching of offensive and defensive strategies. Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINT 056A PROFESSIONAL ACTIVITIES – SOFTBALL

2 units

Analysis of softball fundamentals, theory, philosophy, and teaching these activities. Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINT 056B PROFESSIONAL ACTIVITIES – SOFTBALL

2 units

Prerequisite: KINT 056A.

Analysis of advanced softball, theory, philosophy, and teaching these activities. Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINT 061 THEORY OF COACHING

3 units

Designed for coaches at varying levels from youth league to high school varsity. Focuses on coaching issues and problems and includes the philosophy, theory, and principles of developing and maintaining an athletic program. Total of 54 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

KINT 097 THEORY AND DEVELOPMENT OF FITNESS AND WELLNESS

3 units

Mastering core skills in health and wellness, fitness, kinesiology of physical activity, goal setting, decision making, leadership, time management, achievement skills, education, attitudes and habits, and cognitive style preferences. Total of 54 hours lecture and 18 hours laboratory.

Transfer Credit: CSU

LATIN

(Languages Division)

LATN 001 ELEMENTARY LATIN

5 units

Basic vocabulary and grammatical forms for reading simple Latin prose. Introduction of linguistic foundation for further study of European languages; brief survey of philosophy and life of ancient Rome. Corresponds to first year of high school Latin. Total of 90 hours lecture.

Transfer Credit: CSU; UC

LATN 002 ELEMENTARY LATIN

5 units

Prerequisite: LATN 001 or the first year of high school Latin or satisfactory score on placement test.

Intensive study of vocabulary, grammar and syntax. Translation from English into Latin; reading from Roman authors. Customs and culture. Total of 90 hours lecture.

Transfer Credit: CSU; UC

LIBRARY

LIB 001 COLLEGE RESEARCH SKILLS

1 unit

Development of effective research skills using library resources and other research tools. Focus on research planning, search strategies, critical evaluation of information, and documentation of sources following standard citation styles. Total of 18 hours lecture.

Transfer Credit: CSU; UC

**LIB 010A INTERNET AND WEB-BASED
INFORMATION RESOURCES**

1 unit

Use of the Internet and online resources for academic research. Focus on effective search strategies, resource selection and critical analysis. Includes basic e-mail techniques and creation of a basic web page. Overview of the organization the Internet, web browsers and discussion of the ethical, social, and legal issues of the Internet. **Recommended** Basic computer skills including familiarity with Windows, a keyboard and mouse. Total of 18 hours lecture. *Transfer Credit: CSU*

LIB 020 INDEPENDENT STUDY

1 unit

Prerequisites: *Completion of LIB 001 and approval of student project.*

Individual research projects on library-related topics. Regular periodic faculty conferences and written report are required. Total of 54 hours laboratory.

Transfer Credit: CSU

**LIB 101 INTRODUCTION TO LIBRARY SERVICES FOR
PARAPROFESSIONALS**

3 units

Introduction and overview of library missions, services, operations and personnel. Emphasis on the tools and terminology of library services, the library technicians' role in the delivery of services, and strategies for successful job placement. Exploration of library issues, trends and the relationship of libraries to the communities they serve. Total of 54 hours lecture.

LIB 102 INTRODUCTION TO REFERENCE SERVICES

3 units

Prerequisite: *Enrollment in or completion of LIB 001.*

Recommended Preparation: *LIB 101.*

Introduction to library reference services and basic reference tools and information resources to support basic research/reference inquiries. Focus on philosophy of reference service; reference interview techniques; print and online reference tools; search techniques; service to diverse populations and criteria for the evaluation of quality services and resources. Total of 54 hours lecture.

LIB 103 INTRODUCTION TO CIRCULATION SERVICES

3 units

Principles and practices of library access services, including customer service, online circulation systems, policies, collection maintenance, training and supervision of staff, interlibrary loan, reserve collections, legal and ethical issues relating to library access services and patron privacy. Total of 54 hours lecture.

**LIB 104 LIBRARY TECHNICAL SERVICES:
ACQUISITIONS AND COLLECTION
DEVELOPMENT**

3 units

Recommended Preparation: *LIB 101.*

Principles, terminology and practices of library acquisitions and technical services, including: selection, locating bibliographic data, choosing vendors, ordering, receiving, processing, subscriptions, budget accounting and preserving library materials. Total of 54 hours lecture.

**LIB 105A DESCRIPTIVE CATALOGING PROCEDURES
IN ONLINE ENVIRONMENTS**

3 units

Prerequisite: *LIB 104.*

Study of the basic principles of descriptive cataloging, Machine Readable Cataloging (MARC) formats, introduction to bibliographic control, and authority control. Emphasis on online copy cataloging using national standards for cataloging. Focus on the OCLC system and local cataloging modules. Introduction to basic principles of classification and subject headings. Total of 54 hours lecture.

LIB 106 LIBRARY TECHNOLOGY INTERNSHIP

1 unit

Prerequisites: *LIB 101 and 104.*

Enrollment Limitation: *Instructor approval.*

Supervised on-the-job experience in an approved library setting information. **Pass/no pass** grading. Total of 60 hours work experience.

**LIB 121 INTRODUCTION TO TECHNOLOGIES FOR
DIGITAL COLLECTIONS**

3 units

Prerequisite: *BIT 025.*

Introduction to the basic processes of digital repositories including assessing collection materials, scanning, managing files for preservation, quality control and the use of digital asset management systems. Total of 54 hours lecture.

**LIB 122 INTRODUCTION TO METADATA FOR DIGITAL
OBJECTS**

3 units

Prerequisites: *LIB 121.*

Recommended Preparation: *LIB 105A.*

Study of the basic principles of metadata development for digital repositories. Includes a survey of the most commonly adopted metadata schemas and controlled vocabularies with an emphasis on using the Dublin Core schema to create shareable metadata records. Students will gain practical experience in applying a selected metadata standard to a collection of digital objects. Total of 54 hours lecture.

LIB 123 INTRODUCTION TO COPYRIGHT ISSUES FOR DIGITAL COLLECTIONS

1 unit

Prerequisites: LIB 121.

Introduction to copyright and privacy issues relating to digital projects. Includes an overview of public domain, fair-use, licensing, copyright status as selection criteria, and rights metadata. Total of 18 hours lecture.

LIB 126 DIGITIZATION INTERNSHIP

1 unit

Prerequisite: LIB 121 and 122.

Supervised practical experience working on an approved digital project in a library or cultural heritage institution or other type of digitization project. Occupational Work Experience Education—This work experience course of supervised employment is designed to assist students to acquire career awareness, work habits, attitudes and skills related to the student's college major. Credit may be accrued at the rate of 1 to 8 units per semester for a total of 16 units. Additionally, students must work 75 paid hours or 60 non-paid hours per unit earned. Total of 60 hours work experience.

LINGUISTICS

(Languages Division)

LING 010 INTRODUCTION TO LINGUISTICS

3 units

Interdisciplinary course: English, Languages

Recommended Preparation: Eligibility for ENGL 001A.

Survey of sounds, structure and development of language in connection with its social and cultural function. Differences and relationships among languages. Recommended for English and foreign language majors, but open to all qualified students. **No credit** if taken after ENGL 010. Total of 54 hours lecture.

Transfer Credit: CSU; UC

LING 011 HISTORY OF ENGLISH LANGUAGE

3 units

Interdisciplinary course: English, Languages

Recommended Preparation: Eligibility for ENGL 001A.

Origins and development of the English language, from its Germanic ancestors to present-day American English. **No credit** if taken after ENGL 011. Total of 54 hours lecture.

Transfer Credit: CSU; UC

LING 012 INTERCULTURAL COMMUNICATION

3 units

Interdisciplinary course: English, Languages

Recommended Preparation: Eligibility for ENGL 001A.

Linguistic and cultural patterns; how and what people communicate. Designed to aid both Americans and foreign students in the development of intercultural understanding and communication skills. **No credit** if taken after ENGL 012. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: COMM 150*

LING 014 LANGUAGE IN SOCIETY

3 units

Recommended preparation: Eligibility for ENGL 001A.

Language in culture and society. Focus on the role of language in power, ethnic, gender, generational, and ideological relationships. Analyses of regional differences, language change and loss, and multilingualism. Total of 54 hours lecture.

Transfer Credit: CSU; UC

LING 016 PSYCHOLINGUISTICS: LANGUAGE AND THE MIND

3 units

Recommended Preparation: Eligibility for ENGL 001A.

Mental processes in production and comprehension of language. First and second language acquisition. Language breakdown due to neurological disease. **Recommended** for Psychology, English, Linguistics, and Foreign Language majors but open to all qualified students. Total of 54 hours lecture.

Transfer Credit: CSU; UC

LING 017 LANGUAGE ACQUISITION

3 units

Recommended Preparation: Eligibility for ENGL 001A.

Introduces students to first language acquisition, including the early perception and production of speech sounds, early word acquisition, the development of rules for sentence production and comprehension, and the acquisition of communicative skills. Topics include children with bilingual children and atypical language development. Total of 54 hours of lecture.

Transfer Credit: CSU; UC

LING 020 INDEPENDENT STUDY

1 unit

Individual linguistics projects, such as portfolios, written reports, and research papers. Total of 54 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*

*Course Identification Numbering System (C-ID)

MACHINE SHOP

(Engineering and Technology Division)

MACH 101 BEGINNING METALWORKING SKILLS

3 units

Beginning machine shop course focusing on operation, inspection, safety, and developing process plans for optimal metal removal. Introductory mill and lathe operations with layout work. Student lab fee may be applicable towards necessary materials. Total 36 hours lecture and 72 hours laboratory.

MACH 102 INTERMEDIATE METALWORKING

3 units

Prerequisite: MACH 101.

Intermediate machine shop course focusing on operation, inspection, safety, and developing process plans for optimal metal removal. Intermediate mill and lathe operations with basic Computer Numerical Control and Computer-Aided Manufacturing. Total 36 hours lecture and 72 hours laboratory.

MACH 220 MACHINE SHOP TECHNOLOGY

9 units

Theory and operations on equipment such as drill presses, lathes, mills, grinders, numerical control mills and electrical discharge machines. **No credit** if taken after MACH 220A, B or C. Total of 81 hours lecture and 243 hours laboratory.

MACH 220A INTRODUCTION TO MANUFACTURING TECHNOLOGY

3 units

Use of basic shop hand tools, theory of tool sharpening, tool grinding on the pedestal grinder. Introduction to lathe and mill operations. Lathe operations to include: facing, grooving, tapers using the compound, deep drilling, single point threading, chucking of rectangular material and use of the boring bar. Use of the slitting saw on the mill. Precision layout. Shop safety. Total of 27 hours lecture and 81 hours laboratory.

MACH 220B INTERMEDIATE MACHINE TECHNOLOGY I

3 units

Prerequisite: Enrollment in or completion of MACH 220A.

Operation of the power hacksaw and band saw. Pocket milling on the vertical milling machine. Study of threaded fasteners: thread form, nomenclature and classification of thread fit. Produce threads with dies and inspect with thread measuring tools. Review of math skills. Use of shop measurement tools. Total of 27 hours lecture and 81 hours laboratory.

MACH 220C INTERMEDIATE MACHINE TECHNOLOGY II

3 units

Prerequisite: Enrollment in or completion of MACH 220B.

Lathe operation including roughing and the use of a form tool to cut an internal and external radius. Pattern mill-work using a 60-degree form cutter. Theory and practice of non-ferrous metal machining. Performance of multiple operations on the band saw, mill and lathe to produce and assemble a complete part. Application of Digital Read Outs (DRO) on the lathe and mill. Total of 27 hours lecture and 81 hours laboratory.

MACH 220D ADVANCED MILLING OPERATIONS I

3 units

Prerequisite: Enrollment in or completion of MACH 220C.

Milling machine operation using ball end mills and corner rounding cutters. Combined drilling, slotting and threading to complete a part. Perform knurling, threading and cross drilling of small components on the lathe. Bending and heat treatment of tool steel from round stock. Total of 27 hours lecture and 81 hours laboratory.

MACH 220E ADVANCED MILLING OPERATIONS II

3 units

Prerequisite: Enrollment in or completion of MACH 220D.

Theory and technique on the use of slotting and single angle cutters on the horizontal milling machine. Use of T-slot cutters and the rotary table on the vertical mill. Production drilling; working with multiple parts. Surface grinding theory and wheel selection. Total of 27 hours lecture and 81 hours laboratory.

MACH 220F ADVANCED LATHE OPERATIONS

3 units

Prerequisite: Enrollment in or completion of MACH 220E.

Production of long tapers on the lathe with an offset tailstock. Knurling a thin wall part. Use of a lathe radius attachment to cut inside and outside radii. Lathe deep drilling, cross drilling and threading of a round part. Total of 27 hours lecture and 81 hours laboratory.

MACH 220G PRODUCTION TECHNOLOGY I

3 units

Prerequisite: Enrollment in or completion of MACH 220F.

Lathe techniques for multiple parts. Production line lathe roughing, tapering; threading; counter boring; stepping in diameter; and knurling. Production milling of angles, cross drilling and swedging. Total of 27 hours lecture and 81 hours laboratory.

MACH 220H PRODUCTION TECHNOLOGY II

3 units

Prerequisite: Enrollment in or completion of MACH 220G.

Use of the milling machine in the preparation of stock for surface grinding. Production drilling techniques. Advanced

milling to produce parallel and square parts. Develop surface grinder skills to produce multiple parts to parallel and a specific size. Verification of square with a high precision dial indicator. Total of 27 hours lecture and 81 hours laboratory.

MACH 220I PRODUCTION TECHNOLOGY III

3 units

Prerequisite: *Enrollment in or completion of MACH 220H.* Use of fixtures and the rotary table on the milling machine to produce multiple parts. Milling grooves, counter bores and swedging. Theory of production threading. Practical threading with a die. Use of gauges to inspect threads. Sine bar inspection methods. Total of 27 hours lecture and 81 hours laboratory.

MACH 220J TOOL MAKING I

3 units

Prerequisite: *Enrollment in or completion of MACH 220I.* Advanced lathe turning: radius, single point, internal and external threading. Milling a dovetail to size and the use of reamers. Milling machine engraving. Theory and operation of the electro discharge machine. Total of 27 hours lecture and 81 hours laboratory.

MACH 220K TOOL MAKING II

3 units

Prerequisite: *Enrollment in or completion of MACH 220J.* Advanced milling machine roughing and fly cutting. Milling parallel and square to close tolerances. Surface grinding: parallel, square and to size. Advanced part inspection. Total of 27 hours lecture and 81 hours laboratory.

MACH 220L ADVANCED PROTOTYPE MACHINING

3 units

Prerequisite: *Enrollment in or completion of MACH 220K.* Special projects to be selected by the student and presented to the instructor for approval. Student must provide a sketch of the project and a complete order of operations sheet. Total of 27 hours lecture and 81 hours laboratory.

MACH 230 COMPUTER NUMERICAL CONTROL

3 units

Recommended preparation: *Experience on lathe and vertical mill.*

Lathe programming and operation of a CNC bandit control; program editing, tool offsets and cutter radius compensation, subroutines and nesting. CNC mill programming using standard G, M, F and T codes. Basic programming, tape preparation, practice setup and part making. Total of 27 hours lecture and 81 hours laboratory.

MANUFACTURING AND INDUSTRIAL TECHNOLOGY

(Engineering and Technology Division)

MIT 101 INTRODUCTION TO ROBOTICS

4 units

Production of a complete electro-mechanical solution using industrial fabrication, Computer-Aided Design, electronics and programming to achieve an autonomous solution. Introduction to the field of manufacturing and industrial technologies for career exploration to entry level Industrial Technology Certificates of Achievement or Occupational Skills Certificates in the School of Career Technical Education. Total 27 hours lecture 144 hours laboratory.

MIT 131 PROFESSIONAL SKILLS FOR CAREER SUCCESS

3 units

Navigating technology at work; creativity and innovation; interpersonal communications; time management; organization skills; effective listening; valuing diversity; and value-added service. Includes role playing and critical thinking activities to teach these valuable skills in an integrated manner. Total of 54 hours lecture.

MARKETING

(Business Division)

MRKT 020 PRINCIPLES OF MARKETING

3 units

Introductory course in marketing with the prime objective of understanding the marketing philosophy and how to improve an organization's performance through strategic marketing activities. Total of 54 hours lecture.

Transfer Credit: CSU

MRKT 123 PROMOTIONS AND MARKETING COMMUNICATIONS

3 units

Principles and practices of promotions and marketing communications used by marketers to inform and persuade consumers. Introduction to the field of promotions and its role in the marketing mix. Total of 54 hours lecture.

MRKT 125 MERCHANDISING

3 units

Types of retail outlets, store organizations, store location, selling and retail advertising. Basic principles of retailing introduced in student projects. Total of 54 hours lecture.

MRKT 128 MARKETING FIELD PRACTICE

3 units

Prerequisites: Maintain enrollment in 7 units or more including field practice and one or more course in a Business Management curriculum.

Supervised work experience in any firm engaged in the distribution of goods and/or services. Minimum of 15 hours of related work. Total of 270 hours field practice.

MRKT 132 RETAIL MANAGEMENT

3 units

Principles and practices in the management and merchandising of retail stores. Includes critical buying function, merchandising, promotional techniques, site selection, layout, staffing, market positioning and customer service. Total of 54 hours of lecture.

MRKT 150 SOCIAL MEDIA MARKETING FOR BUSINESS

3 units

Foundation of what social media is and how it can be used to grow a business. Focus on developing a social media strategy and how to leverage social media platforms to promote a brand and/or business to prospective customers. Total of 54 hours lecture.

MATHEMATICS

(Mathematics Division)

A student taking his/her first mathematics course at Pasadena City College must meet the course prerequisites. Once placed in the proper mathematics course, students advance in the sequence according to PCC class prerequisites. Initial math course placement is based on multiple measures of students' readiness, including a placement exam, and the level, age and quality of their prior mathematics academic experience. If more than one year has elapsed since a student qualified for a course, it is recommended that the student see a counselor before enrolling into a math course.

MATH 003 COLLEGE ALGEBRA

4 units

Prerequisite: MATH 131 or 132C or 133B or 134B or placement based on the Math assessment process.

Recommended preparation: MATH 139.

Functions, relations and graphs; inverse functions; inequalities; theory of equations; introduction to matrices; determinants; binomial theorem; sequences and series; permutations and combinations; probability. **For** mathematics and science majors, but open to all qualified students. Total of 90 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

MATH 005A SINGLE VARIABLE CALCULUS I

5 units

Prerequisites: MATH 007B, MATH 009 or placement based on the Math assessment process.

Limits and continuity; differentiation and integration of algebraic functions; applications. Total of 90 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

**C-ID: MATH 211; MATH SEQ 900S (WITH MATH 005B)*

MATH 005B SINGLE VARIABLE CALCULUS II

5 units

Prerequisite: MATH 005A or placement based on the Math assessment process.

Differentiation and integration of trigonometric, exponential, logarithmic, hyperbolic functions, polar, and parametric equations; applications and techniques of integration; indeterminate forms and infinite sequences and series. Total of 90 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: MATH 221; MATH SEQ 900S (WITH MATH 005A)*

MATH 005C MULTIVARIABLE CALCULUS

5 units

Prerequisite: MATH 005B or placement based on the Math assessment process.

Parametric equations, polar coordinates, vectors and vector calculus, partial differentiation, multiple integration, Green's theorem, divergence theorem of Gauss, Stokes' theorem. Total of 90 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: MATH 230*

MATH 007A MATHEMATICAL ANALYSIS 1

4 units

Prerequisite: MATH 131 or MATH 133B or MATH 134B, and MATH 139; or placement based on the assessment process.

Algebraic, exponential, logarithmic and trigonometric functions; inverses of functions; equations and inequalities involving transcendental functions; zeros of polynomials; graphing techniques; angle measure; mathematical modeling. **For** mathematics and science majors, but open to all qualified students. **No credit** if taken after MATH 009. Total of 90 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

MATH 007B MATHEMATICAL ANALYSIS 2

4 units

Prerequisite: MATH 007A.

Trigonometric Identities and Equations, Solutions of Triangles, Polar Coordinates, Conic Sections, Parametric Equations, Sequences and Series, Mathematical induction, solutions to linear and non-linear systems, vectors and their applications. **For** mathematics and science majors, but open to all qualified students. Total of 90 hours lecture. **No credit** if taken after MATH 009.

Transfer Credit: CSU; UC credit limitations. See counselor.

**Course Identification Numbering System (C-ID)*

MATH 009 PRECALCULUS MATHEMATICS**5 units****Prerequisite:** *MATH 008 or placement based on Math assessment process.*

Algebraic, exponential, logarithmic and trigonometric functions; inverse functions; zeros and graphs of functions; inequalities; matrices; determinants; sequences and series; binomial theorem; mathematical induction; permutations, combinations and probability; topics in analytic geometry including curve sketching and conic sections. **No credit** if taken after MATH 007A or 007B. Total of 90 hours lecture. *Transfer Credit: CSU; UC credit limitations. See counselor.*

MATH 010 LINEAR ALGEBRA AND APPLICATIONS**5 units****Prerequisite:** *MATH 005B.*

Vector spaces, linear transformations, determinants, solutions of systems of equations, algebra of matrices. Total of 90 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: MATH 250***MATH 015 MATHEMATICS FOR LIBERAL ARTS MAJORS****4 units****Prerequisite:** *MATH 131 or 133B or 134B or 150 or placement based on the Math assessment process.*

Skills and techniques for problem solving using mathematical methods and reasoning, including: geometry; logic; combinatorics and probability; statistics; set theory; finance math; and Algebra. **For** students with non-STEM majors. Total of 90 hours lecture.

*Transfer Credit: CSU; UC***MATH 020 INDEPENDENT STUDY****2 units****Prerequisite:** *Enrollment in or completion of any college level math course; and permission of division dean.*

Faculty-guided survey of contemporary mathematical topics and student research. Total of 108 hours laboratory.

*Transfer Credit: CSU; UC credit limitations. See counselor.***MATH 022 DISCRETE MATHEMATICS****4 units****Prerequisite:** *MATH 003 or MATH 007A or CS 002 or placement based on the Math assessment process.*

Study of finite mathematical systems. Includes set theory logic, combinatorics, relations and functions, matrix algebra, Boolean algebra, recursion, graph theory. **For** mathematics and computer science majors, but open to all qualified students. Total of 90 hours lecture.

*Transfer Credit: CSU; UC***MATH 038 FOUNDATIONS OF ELEMENTARY SCHOOL MATHEMATICS: BASIC NUMBER CONCEPTS****3.5 units****Prerequisite(s):** *MATH 131 or MATH 150; or placement based on the Math assessment process.*

This course uses problem-solving strategies and quantitative reasoning to develop skills and explore topics in numeration systems and the real number system. Designed for prospective elementary and middle school teachers. Total of 54 lecture hours and 27 lab hours.

*Transfer Credit: CSU; UC credit under review.***MATH 055 DIFFERENTIAL EQUATIONS****5 units****Prerequisites:** *MATH 005C and MATH 010.*

Ordinary differential equations with emphasis on the linear equation and its applications in engineering and physics, series solutions, Laplace transforms, Fourier series and their application in partial differential equations. **No credit** if taken after MATH 055H. Total of 90 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: MATH 240***MATH 055H HONORS DIFFERENTIAL EQUATIONS****5 units****Prerequisites:** *MATH 005C and MATH 010.*

Ordinary and partial differential equations, nonlinear differential equations, systems of differential equations, series solutions, Laplace transforms, numerical solutions, Fourier series, functional and harmonic analysis, Sturm-Liouville theory, chaotic dynamical systems, and an introduction to Hilbert spaces; taught with the rigor, breadth and depth expected of an honors course. **For** students going into research in mathematics, physics, astronomy, chemistry, geology and other pure and applied sciences, but open to all qualified students. **No credit** if taken after MATH 055. Total of 90 hours lecture.

*Transfer Credit: CSU; UC credit limitations. See counselor.***MATH 125 BEGINNING ALGEBRA****4 units****Prerequisite:** *MATH 402 or 400B or 250, or placement based on the Math assessment process.*

Simplifying linear, polynomial, rational, and radical expressions. Using properties of exponents. Factoring polynomials. Applications and solving of linear, rational, radical, and quadratic equations. Graphing linear equations and solving systems of linear equations. **Maximum credit** for MATH 125, 127AB, and 128AB is 4 units. **No credit** if taken after MATH 127B or MATH 128B. Total of 90 hours lecture.

MATH 131 INTERMEDIATE ALGEBRA**4 units****Prerequisite:** *MATH 125 or MATH 127B or MATH 128B or placement based on the Math assessment process.*

*Course Identification Numbering System (C-ID)

Solving nonlinear equations such as rational, radical, exponential and logarithmic equations. Applications of nonlinear equations. Operations on and graphs of functions. **Maximum credit** for MATH 131, 133AB, and 134AB is 4 units. **No credit** if taken after MATH 133B or 134B. Total of 90 hours lecture.

MATH 139 PLANE GEOMETRY

3 units

Prerequisite: MATH 125 or MATH 126C or MATH 127B or MATH 128B.

Geometric facts necessary for advanced work in mathematics. Deductive process emphasized. Total of 90 hours lecture.

MATH 141 SURVEY OF MATHEMATICAL IDEAS

4 units

Prerequisite: MATH 125 or MATH 127B or MATH 128B or placement based on the Math assessment process.

Study of practical applications of mathematics, including topics in finance, probability and statistics, and geometry. Additional topics may include graph theory, health and nutrition, voting, history of mathematics, and logic. Total of 90 hours lecture.

MATH 150 QUANTITATIVE LITERACY II

5.5 units

Prerequisite: MATH 250 or MATH 402 or MATH 400B or MATH 127B or placement based on the Math assessment process.

Study of practical applications of mathematics including finance, probability, statistics, geometry, measurement & dimensional analysis, and functions: linear, exponential & logarithmic. **For** non-STEM majors, but open to all qualified students. Total of 90 hours lecture and 45 hours of laboratory.

MATH 171A EXPLORING TOPICS IN MATHEMATICS

3 units

Exploratory course: *Specific topic identified in Schedule of Classes.*

Lecture focusing on topics of current and general interest. **Pass/no pass** grading. Total of 90 hours lecture.

MATH 171B EXPLORING TOPICS IN MATHEMATICS

2 units

Exploratory course: *Specific topic identified in Schedule of Classes.*

Lecture focusing on topics of current and general interest. **Pass/no pass** grading. Total of 45 hours of lecture.

MATH 171C EXPLORING TOPICS IN MATHEMATICS

1 unit

Exploratory course: *Specific topic identified in Schedule of Classes.*

Lecture focusing on topics of current and general interest. **Pass/no pass** grading. Total of 18 hours lecture and 18 hours laboratory.

MATH 250 QUANTITATIVE LITERACY I

5.5 units

Prerequisite: MATH 450 or placement based on the Math assessment process.

Number sense and basic algebraic skills involving integers, fractions, decimals, and percents. Simplifying algebraic expressions, solving linear equations and graphing. With an emphasis on how and where mathematics is used. **No credit** if taken after Math 402, 400B, 125, 127B, or 128B. Total of 90 hours lecture and 45 hours laboratory.

MATH 330 SKILLS FOR COLLEGE SUCCESS IN ELEMENTARY ALGEBRA

2 units

Corequisite: MATH 125.

Development and rigorous practice of essential study techniques and course material for success in Elementary Algebra. Integration of web-based supplemental instruction, life management skills, strategies for successful classroom experience, and critical thinking/problem solving strategies. **No credit** if taken after MATH 110. **For** students admitted to the Math Path program but open to all qualified students. **Pass/no pass** grading. Total of 45 hours of lecture.

MATH 331 SKILLS FOR COLLEGE SUCCESS IN INTERMEDIATE ALGEBRA

2 units

Corequisite: MATH 131.

Development and rigorous practice of essential study techniques and course material for success in Intermediate Algebra. Integration of web-based supplemental instruction, life management skills, strategies for successful classroom experience, and critical thinking/problem solving strategies. **No credit** if taken after MATH 110. **For** students admitted to the Math Path program but open to all qualified students. **Pass/no pass** grading. Total of 45 hours of lecture.

MATH 402 PREALGEBRA

4 units

Prerequisite: MATH 450, or placement based on the Math assessment process.

Basic algebraic skills involving fundamental mathematical operations with integers, fractions, decimals, and percents. Simplifying algebraic expressions and solving equations. **Maximum credit** for MATH 402 and 400AB is 4 units. **No credit** if taken after MATH 400B or 250. Total of 90 hours lecture.

MATH 429 SKILLS FOR SUCCESS IN PREALGEBRA

2 units

Corequisite: *MATH 402*.

Development and rigorous practice of essential study techniques and course material for success in Prealgebra; web-based supplemental instruction; life management skills; strategies for successful classroom experience, and critical thinking/problem solving strategies. **No credit** if taken after MATH 110. **Pass/no pass** grading. Total of 45 hours lecture.

MATH 450 NUMERICAL FOUNDATIONS

4 units

Building whole number arithmetic skills. Includes a brief introduction to fractions, decimals and percents and incorporates study skills for success in mathematics courses. Total of 90 hours lecture.

MEDICAL ASSISTING

(Health Sciences Division)

MA 109 HEALTH INFORMATION TECHNOLOGY

1 unit

Introduction to computer literacy and information technology in health care delivery. Hardware and software, communications and networking, ethical issues, and HIPAA privacy concerns. Topics covered include administrative applications (such as electronic medical recordkeeping), clinical systems involved in direct patient care, and special-purpose applications (such as simulation software used in the education of health care professionals). **Recommended** working knowledge of a computer. **Short term class.** Total of 9 hours lecture and 27 hours laboratory.

MA 110 MEDICAL OFFICE MICROCOMPUTER MANAGEMENT APPLICATION

1 unit

Spreadsheets, accounts receivable, insurance entry, patient demographic entry, and scheduling systems as they apply to the medical office. **Recommended** keyboarding speed of 30 WPM. Total of 9 hours lecture and 27 hours laboratory.

MA 111A MEDICAL OFFICE PROCEDURES I

4 units

Career opportunities; basic office procedures including patient reception, appointment scheduling, telephone techniques, interpersonal relations; computer data entry; initial processing of managed care patients; oral communication; medico-legal doctrines. **Recommended** minimum keyboarding speed of 30 words per minute. Total of 72 hours lecture and 36 hours laboratory.

MA 111B MEDICAL OFFICE PROCEDURES II

4 units

Prerequisite: *MA 111A*.

Patient processing. Medical records maintenance. Written and oral communication. Patient instruction. Processing mail. Banking. Financial procedures including professional fees, billing, and collections. Meeting arrangements and travel itinerary. Marketing. Legal implications of medical practice. Total of 54 hours lecture and 54 hours laboratory.

MA 113 HUMAN DISEASE

3 units

Prerequisite: *MA 115*.

Pathophysiology of body systems; integration of disease processes of organ systems with medical and nursing assessment and procedures; diagnostic tests; invasive procedures; medications; nutritional intervention and expected outcomes. Use of drug reference books. Total of 54 hours lecture.

MA 115 MEDICAL TERMINOLOGY

3 units

Physiological and anatomical terms referring to human tissues and organic systems; medical abbreviations; introduction to medical records and prescription writing; use of medical dictionaries. **Recommended** Pyso 100. Total of 54 hours lecture.

MA 120 INDEPENDENT STUDY

1 unit

Prerequisite: *MA 122A*.

Research or clinical project including experience in clinical practice settings, practical laboratory assignment, lecture attendance, literature review and community projects. Total of 54 hours laboratory.

MA 122A CLINICAL ASSISTING TECHNIQUES I

2 units

Prerequisites: *Enrollment in or completion of all of the following: MA 111A, MA 115, PYSO 100.*

Occupational Safety and Health Act regulations; medical asepsis and infection control; vital signs and height/weight measurements; initial medical record documentation; maintenance of the clinical facility; specimen processing. Total of 27 hours lecture and 36 hours laboratory.

MA 122B CLINICAL ASSISTING TECHNIQUES II

2 units

Prerequisite: *MA 122A*.

Patient history and interviewing; techniques of assisting the physician with patients; sterilization techniques; minor surgeries and sterile dressing change; staple and suture removal; theory of x-ray examination and treatment. Total of 27 hours lecture and 36 hours laboratory.

MA 122C CLINICAL ASSISTING TECHNIQUES III

4 units

Prerequisite: MA 122B and enrollment in or completion of MA 124.

Administration of medication and pharmacology. Patient education. Techniques of assisting in a medical specialist's office. Electrocardiographic methods. Bandaging and first aid. Nutrition and diet modification. Theory of physical therapy. Total of 54 hours lecture and 72 hours laboratory.

MA 124 MEDICAL OFFICE LABORATORY PROCEDURES

3 units

Prerequisites: MA 122B and PYSO 100.

Corequisite: MA 122C.

Methods of specimen collection. Principles of assisting the physician with routine office laboratory tests. Techniques for blood tests and urinalysis. Microbiology pertaining to medical office procedures. Total of 36 hours lecture and 54 hours laboratory.

MA 126 PHARMACOLOGY FOR MEDICAL ASSISTANTS

2 units

Prerequisites: MA 115 and enrollment in medical assisting program.

Introduction to the principles of pharmacology and medication administration in the ambulatory setting. Reading, interpreting and documenting medication orders. Calculating dosages for nonparenteral and parenteral medications used in the ambulatory setting. Common medications used in each body system. Total of 27 hours lecture and 27 hours laboratory.

MA 127 MEDICAL INSURANCE

3 units

Prerequisites: MA 110 and 115.

Types of health insurance and billing procedures. Procedure codings. International Classification of Diseases — Clinical Modifications. Total of 54 hours lecture.

MA 128 CLINICAL EXPERIENCE

4 units

Prerequisites: All the following: MA 122, 124, 127.

Supervised clinical experience in a medical office or clinic. Analysis of medical assisting clinical experience. Applied psychology in the medical office or clinic. Total of 18 hours lecture and 162 hours laboratory.

MA 171A EXPLORING TOPICS IN MEDICAL ASSISTING

1 units

Exploratory course: Specific topic identified in Schedule of Classes.

Lecture focusing on topics of current and general interest. Total of 18 hours lecture.

MA 171B EXPLORING TOPICS IN MEDICAL ASSISTING

3 units

Exploratory course: Specific topic identified in Schedule of Classes.

Course focusing on topics of current and general interest. Total of 54 hours lecture.

MA 171C EXPLORING TOPICS IN MEDICAL ASSISTING

1 units

Exploratory course: Specific topic identified in Schedule of Classes.

Course focusing on topics of current and general interest. Total of 18 hours lecture and 18 hours laboratory.

MICROBIOLOGY

(Natural Sciences Division)

MICR 002 MICROBIOLOGY

4 units

Prerequisite: CHEM 002A or CHEM 022 or CHEM 001A, or placement based on the biochemistry placement process.

Recommended preparation: BIOL 003 or 011.

Structure and function of bacteria, viruses, fungi, protozoa and algae. Elements of microbial physiology, genetics, control and nutrition; epidemiology; immunology and allergy. Survey of microbial infections. Aseptic techniques. Total of 54 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

MUSIC

(Performing and Communication Arts Division)

To learn more about the Music Department, please visit <http://www.pasadena.edu/academics/divisions/performing-arts/music/index.php>

MUSC 001A MUSIC THEORY I

3 units

Corequisite: MUSC 002A.

Recommended Preparation: The ability to read music in at least one clef. MUSC 041A and/or MUSC 040.

This course, through guided composition and analysis, incorporates the following concepts: rhythm and meter; basic properties of sound; musical terminology; intervals; major and minor scales; diatonic triads in major and minor keys; dominant seventh; basic musical structure; figured bass symbols. Development of skills in handwritten

notation is expected. **Recommended** enrollment in MUSC 004A. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: MUS 120*

MUSC 001B MUSIC THEORY II

3 units

Prerequisite: MUSC 001A or placement based on the music assessment process.

Corequisite: MUSC 002B.

A study of common-practice diatonic harmony and part writing. Principles of harmonic progression involving diatonic triads and dominant seventh chords, an introduction to species (2-part) counterpoint, four part (SATB—Soprano/Alto/Tenor/Bass) writing and arranging, harmonization of given and original melodies, bass line construction, non-chord tones, phrase structure, and a brief historical survey of the development of harmony and texture in Western music. **Recommended** enrollment in MUSC 004B. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: MUS 130*

MUSC 001C MUSIC THEORY III

3 units

Prerequisite: MUSC 001B.

Corequisite: MUSC 002C.

Incorporating the concepts from MUSC 001B, the course will include: introduction to chromatic harmony, non-dominant 7th chords, secondary/applied chords, modulation, and a study of binary and ternary form. **Recommended** enrollment in MUSC 004C. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: MUS 140*

MUSC 001D MUSIC THEORY IV

3 units

Prerequisite: MUSC 001C.

Corequisite: MUSC 002D.

This course completes a sequential study of tonal harmony and includes an introduction to 20th century techniques. Topics will include: borrowed chords and modal mixture; the Neapolitan and augmented sixth chords; enharmonic reinterpretation and modulation; altered dominant and 9th chords, contrapuntal techniques of late-Romanticism, and 20th century techniques such as: pandiatonicism; use of synthetic scales; set theory; and rhythm and meter. **Recommended** enrollment in MUSC 004D. Total of 54 hours lecture.

*Transfer Credit: CSU, UC. *C-ID: MUS 150*

MUSC 002A MUSICIANSHIP I

1 unit

Corequisites: MUSC 001A.

Application and development of the materials of MUSC 001A through sight-singing, ear training, and dictation. Topics include rhythm, major and minor scales, intervals,

triads, and simple diatonic melodies. Total of 54 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: MUS 125*

MUSC 002B MUSICIANSHIP II

1 unit

Prerequisite: MUSC 002A.

Corequisites: MUSC 001B.

Application and development of the materials of MUSC 001B through sight-singing, ear training, and dictation. Topics include rhythmic subdivision, diatonic melodies, intervals, alto clef reading, chord progressions with diatonic triads and inversions. Total of 54 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: MUS 135*

MUSC 002C MUSICIANSHIP III

1 unit

Prerequisite: MUSC 002B.

Corequisites: MUSC 001C.

Application and development of the materials of MUSC 001C through sight-singing, ear training, and dictation. Topics include syncopation, non-dominant 7th chords, secondary dominant chords, and an introduction to modulation. Total of 54 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: MUS 145*

MUSC 002D MUSICIANSHIP IV

1 unit

Prerequisite: MUSC 002C.

Corequisite: MUSC 001D.

Application and development of the materials of MUSC 001D through sight-singing, ear training, and dictation. Topics include advanced chromaticism, modulation, modality, complex use of rhythm and meter, and an introduction to atonal music. Total of 54 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: MUS 155*

MUSC 004A KEYBOARD SKILLS I

1 unit

Corequisites: MUSC 001A, 002A.

Primarily for music majors. Keyboard realization of theoretical and harmonic materials from MUSC 001A and MUSC 002A including melodic harmonization with basic chord patterns and transposition. Fundamentals of body, hand and finger control oriented to the keyboard using a first study book for piano. Development of sight-reading skills and elementary repertoire. Total of 54 hours laboratory.

Transfer Credit: CSU; UC

MUSC 004B KEYBOARD SKILLS II

1 unit

Prerequisite: MUSC 004A.

Corequisites: MUSC 001B, MUSC 002B.

Primarily for music majors. Standard upper elementary repertoire. Keyboard realization of theoretical and harmonic

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materials from MUSC 001B with emphasis on basic diatonic progressions. Total of 54 hours laboratory.

Transfer Credit: CSU; UC

MUSC 004C KEYBOARD SKILLS III

1 unit

Prerequisite: MUSC 004B.

Corequisites: MUSC 001C, MUSC 002C.

Primarily for music majors. Standard repertoire representative of music from the Baroque through the contemporary periods. Development of functional keyboard skills correlated with MUSC 001C. Total of 54 hours laboratory.

Transfer Credit: CSU; UC

MUSC 004D KEYBOARD SKILLS IV

1 unit

Prerequisite: MUSC 004C.

Corequisites: MUSC 001D, MUSC 002D.

Primarily for music majors. Standard repertoire and functional keyboard skills, correlated with MUSC 001D in preparation for the keyboard proficiency examination. Total of 54 hours laboratory.

Transfer Credit: CSU; UC

MUSC 007A MUSIC HISTORY AND LITERATURE

3 units

Prerequisite: MUSC 001B.

An intensive chronological study of musical techniques including instrumentation, styles and forms, through listening, performance and score analysis. Early Christian era through the Baroque era. **For** music majors, but open to all qualified students. **Fall** semester. Total of 54 hours lecture.

Transfer Credit: CSU; UC

MUSC 007B MUSIC HISTORY AND LITERATURE

3 units

Prerequisite: MUSC 001B.

An intensive chronological study of musical techniques, including instrumentation, styles and forms, through listening, performance and score analysis. Enlightenment, romantic and contemporary periods. **Recommended** completion of MUSC 007A. **For** music majors, but open to all qualified students. **Spring** semester. Total of 54 hours lecture.

Transfer Credit: CSU; UC

MUSC 008 APPLIED MUSIC

1 unit

Corequisites: MUSC 010; enrollment in one of the following: MUSC 043, 044, 056, 057A-G, 059, 060, 061, 062, 063, 064, 065, 066, 070A-E, 074, 075, 082.

Enrollment Limitation: Audition.

In-class instrumental or vocal performance that reflects individual study with a private teacher (at student expense). Development of interpretational, technical, and presentational skills. **Required** end of semester jury performance. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Applied Music Family:** MUSC 008, 009C, 009E. Total of 18 hours lecture and 90 hours practice laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

Transfer Credit: CSU; UC

MUSC 009A INDIVIDUAL INSTRUCTION I

1 unit

Corequisites: MUSC 010 and one of the following: MUSC 043, 056, 057A-G, 059, 060, 061, 062, 063, 064, 065, 066, 082.

Enrollment Limitation: Audition.

This course is designed for the entering classical, jazz and commercial music major. It consists of twelve 45-minute private lessons with an instructor on the Applied Music staff, participation in a weekly music recital class, and an end-of-semester jury performance. Topics include intermediate technical etudes and exercises, tone production, scales, and short performance pieces. **Recommended** enrollment in smaller ensemble and/or jazz groups. Total of 18 hours lecture and 99 hours practice laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: MUS 160*

MUSC 009B INDIVIDUAL INSTRUCTION II (CLASSICAL)

1 unit

Prerequisite: MUSC 009A.

Corequisites: MUSC 010 and one of the following, appropriate for the student's study path: MUSC 043, 059, 060, 061, 062, 063, 064, 065, 066, 082.

Designed for the intermediate level classical music major, this course consists of twelve 45-minute private lessons with an instructor on the Applied Music staff, participation in a weekly music recital class, and an end-of-semester jury performance. Building on the foundations already established, emphasis is on representative intermediate repertoire, continued technique development, and introduction to appropriate style and interpretation. **Recommended** enrollment in a chamber ensemble class. Total of 18 hours lecture and 99 hours practice laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: MUS 160*

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**MUSC 009C INDIVIDUAL INSTRUCTION III
(CLASSICAL)**

1 unit

Prerequisite: MUSC 009B.

Corequisites: MUSC 010 and one of the following, appropriate for the student's study path: MUSC 043, 044, 059, 060, 061, 062, 063, 064, 065, 066, 074, 075, 082.

This course is for the advanced classical music major, and consists of twelve 45-minute private lessons with an instructor on the Applied Music staff, participation in a weekly music recital class, and an end-of-semester jury performance. Emphasis is placed on appropriate interpretation of advanced repertoire, as well as addressing possible new technical demands. **Recommended** enrollment in a chamber ensemble class. **Maximum credit** 2 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Applied Music Family:** MUSC 008, 009C, 009E. Total of 18 hours lecture and 99 hours practice laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: MUS 160*

**MUSC 009D INDIVIDUAL INSTRUCTION II
(JAZZ/COMMERCIAL)**

1 unit

Prerequisite: MUSC 009A.

Corequisites: MUSC 010 and one of the following, appropriate for the student's study path: MUSC 056, 057A-G.

Designed for the intermediate jazz and commercial music major, this course consists of twelve 45-minute private lessons with an instructor on the Applied Music staff, participation in a weekly music recital class, and an end-of-semester jury performance. Building on the foundations already established, emphasis is on representative intermediate repertoire and improvisation, continued technique development, and introduction to appropriate style and interpretation. **Recommended** enrollment in smaller ensemble and/or jazz groups. Total of 18 hours lecture and 99 hours practice laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: MUS 160*

**MUSC 009E INDIVIDUAL INSTRUCTION III
(JAZZ/COMMERCIAL)**

1 unit

Prerequisite: MUSC 009D.

Corequisites: MUSC 010 and one of the following, appropriate for the student's study path: MUSC 056, 057A-G.

This course is appropriate for the advanced jazz and commercial music major, and consists of twelve 45-minute private lessons with an instructor on the Applied Music staff, participation in a weekly music recital class, and an

end-of-semester jury performance. Emphasis is placed on appropriate interpretation of advanced repertoire, as well as addressing possible new technical and improvisation demands. **Recommended** enrollment in smaller ensemble and/or jazz groups. **Maximum credit** 2 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Applied Music Family:** MUSC 008, 009C, 009E. Total of 18 hours lecture and 99 hours practice laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: MUS 160*

MUSC 010 CONCERT MUSIC

1/2 unit

Development of techniques of critical listening through lectures and demonstration. Required attendance at concerts and recitals. **Maximum credit** 2 units, 1/2 unit each semester. **For** music majors and minors primarily, but open to all qualified students. Total of 18 hours lecture.

Transfer Credit: CSU

MUSC 012 INTRODUCTION TO MUSIC COMPOSITION

3 units

Prerequisite: MUSC 001B.

Survey of contemporary techniques in composition, contemporary literature, and notation. Writing of short pieces for various instruments and voices. Development of a personal approach to composition and an awareness of new compositional ideas and aesthetics. Total of 54 hours lecture.

Transfer Credit: CSU; UC

MUSC 015 SEMINAR IN CONDUCTING

1 unit

Prerequisite: MUSC 001B or placement based on the music assessment process.

A seminar in the art of gestural communication for the instrumental and choral conductor. Theory and history of conducting techniques. Conducting patterns, cueing, dynamics, and music analysis. Study and preparation of basic procedures in rehearsal pedagogy. **Required** end of semester jury performance. **For** students performing at college level. Total of 18 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC

MUSC 017 RECITAL AND AUDITION PREPARATION

1 unit

Prerequisite: MUSC 009C or 009E.

Corequisite: One of the following: MUSC 043, 044, 056, 057A-G, 060, 062, 063, 064, 065, 066, 070A-E, 074, 075, 082.

Individual or small-group instruction in the standard literature for the students' performing medium – instrument or voice. Historical context, form and harmonic aspects, technical demands, stylistic nuances, and expressive con-

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siderations of the pieces studied. One half-hour weekly with an applied music instructor and participation in an Applied Music recital class. **Required** end of semester jury performance. Preparation for transferring to a four-year school or entering the music industry. **For** students playing at the sophomore level. Total of 18 hours lecture and 99 hours practice laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

Transfer Credit: CSU

MUSC 018 INDIVIDUAL PERFORMANCE SKILLS

1 unit

Prerequisite: *Retention based on successful audition.*

Corequisite: *MUSC 010.*

In-class instrumental or vocal performances that reflects the individual practice on selected materials under the guidance of a faculty adviser. Development of interpretational, technical, and presentational skills. **Required** end of semester jury performance. **For** students performing at college level. Total of 18 hours lecture and 36 hours practice laboratory.

Transfer Credit: CSU; UC

MUSC 020 INDEPENDENT STUDY

1 unit

Prerequisites: *Completion of two semesters of a music sequence in the subject area, and approval of the student project.*

Primarily for music majors. Individual projects such as a concert recital, original composition, music arrangement, musicological research paper. Total of 54 hours by arrangement.

Transfer Credit: CSU; UC credit limitations. See counselor.

MUSC 021 MUSIC APPRECIATION

3 units

Introduction to western art music-its understanding and enjoyment, music elements, performance media, style, and literature. Emphasis on critical listening skills. **Required** concert attendance. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: MUS 100*

MUSC 022 MUSIC IN THE CONTEMPORARY WORLD

3 units

Introduction to the music of current Western culture. Emphasis on contemporary classical, jazz, pop, music theater, film and TV media, electronic computer synthesizer. Study of prominent musicians, composers and performers. **Required** concert attendance. Total of 54 hours lecture.

Transfer Credit: CSU; UC

MUSC 023 MUSIC CULTURES OF THE WORLD

3 units

Introduction to music as a worldwide phenomenon covering folk, popular, and art musics of major geographical areas. Emphasis on music as a component of culture and on the unique ways diverse cultures organize sound into music. Special attention on the musics of ethnic groups represented in Southern California. **Required** concert attendance. Total of 54 hours lecture.

Transfer Credit: CSU; UC

MUSC 024A THE JAZZ EXPERIENCE: EVOLUTION AND ESSENCE

3 units

Introduction to jazz: its development, major styles, and innovators. Non-technical analysis of jazz's musical and multicultural elements through lecture, demonstration, reading, film, and required listening. **Required** concert attendance. Total of 54 hours lecture.

Transfer Credit: CSU; UC

MUSC 024B HISTORY OF ROCK MUSIC

3 units

Survey of rock music from the late 1940s to the present – its socio-cultural and historical development. Emphasis on the roots and early development of rock; its stylistic trends and influential artists throughout the years. The politics of rock and the impact of technology. **Required** concert attendance. **No credit** if taken after MUSC 127. Total of 54 hours lecture. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

Transfer Credit: CSU; UC

MUSC 025 AFRICAN-AMERICAN MUSIC

3 units

Survey of the evolution and development of African-American music. Emphasis on African roots and influence of socio-economic factors. Slave songs and Negro spirituals, ragtime, blues, R & B, jazz from New Orleans through avant-garde, contemporary Black popular music. **Required** concert attendance. Total of 54 hours lecture.

Transfer Credit: CSU; UC

MUSC 027 ASIAN MUSIC

3 units

Survey of the music of the East Asia, South Asia, Southeast Asia, Central Asia and West Asia (Middle East): historical and cultural influences, social and religious implications, instrumental and vocal styles. **Required** concert attendance. Total of 54 hours lecture.

Transfer Credit: CSU; UC

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MUSC 028 HISTORY OF OPERA

3 units

Analysis of representative operas by the major composers of each period from the 17th through 20th centuries in Europe and the United States. Origin and development of related musical genres, forms, and styles. Emphasis on critical listening skills. **Required** concert attendance. Total of 54 hours lecture.

Transfer Credit: CSU; UC

MUSC 030 MUSIC FOR EARLY CHILDHOOD EDUCATION

3 units

Survey of music teaching techniques and materials suitable for children ages infancy through 8. Functional skills in reading and performing children's music literature: development of principles for organizing a child development music curriculum. Total of 54 hours lecture.

Transfer Credit: CSU

MUSC 032 INTRODUCTION TO MUSIC EDUCATION

2 units

Recommended Preparation: *MUSC 001A and MUSC 009A.*

Survey of the philosophical, historical, cultural, psychological, and curricular foundations of music education in the United States. Guided field observation and analysis of K-12 classes, and in-class teaching demonstrations. **For** music majors entering or considering music teaching as a career. Total of 36 hours lecture.

Transfer Credit: CSU

MUSC 034A JAZZ KEYBOARD SKILLS

2 units

Prerequisite: *MUSC 004A or 041A.*

Recommended Preparation: *MUSC 036A.*

Study on the keyboard the harmonic and melodic materials of jazz including blues, bossa nova and standard tunes. Introductory skills to play with a jazz feel, create bass lines, accompany singers and instrumentalists, and effectively sight read lead sheets. Technical exercises to improve piano efficiency for jazz and other related styles. Total of 36 hours lecture and 18 hours music laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

Transfer Credit: CSU; UC

MUSC 034B ADVANCED JAZZ KEYBOARD SKILLS

2 units

Prerequisite: *MUSC 034A or retention based on successful audition.*

Study on the keyboard of advanced techniques and materials of jazz such as: blues, ballads, standard tunes, and modal jazz. Emphasis on the advanced ability to play with a jazz feel, create bass lines, accompany singers and in-

strumentalists and effectively sight read lead sheets. Advanced technical exercises to improve piano efficiency for jazz and related styles. Total of 36 hours lecture and 18 hours music laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

Transfer credit: CSU; UC

MUSC 035 MUSIC PREPARATION AND MUSIC COPYING

2 units

Prerequisite: *MUSC 001A or placement based on the Music assessment process.*

Notating music with pen, pencil and computer software. Preparing lead sheets. Extracting parts and producing reduced scores. Reproduction techniques. Pertinent music business aspects. Total of 36 hours lecture and 18 hours music laboratory.

Transfer Credit: CSU

MUSC 036A POP-JAZZ THEORY

3 units

Prerequisite: *MUSC 001A or MUSC 040 placement based on the Music assessment process.*

Major, minor, modal jazz scales. Chord construction: triads through 13ths with alterations, poly chords. Chord families and functions. Common jazz/pop forms. The II-V-I progression with variations and voice leading. Ear training. Total of 54 hours lecture.

Transfer Credit: CSU; UC

MUSC 036B JAZZ - COMMERCIAL THEORY

3 units

Prerequisite: *MUSC 036A or placement based on the Music assessment process.*

Jazz-oriented scales and their applications, contemporary chord voicings, polychords, substitutions. Moving line patterns and harmonic counterlines. Basic chord progressions. Song forms. Four-part writing and arranging. Ear training. Total of 54 hours lecture.

Transfer Credit: CSU; UC

MUSC 038C CHINESE MUSIC ENSEMBLE

1 unit

Performance techniques and cultural context of Chinese music. Playing techniques in the zheng (Chinese long zither) and other Chinese musical instruments. Music for duo and small ensemble performance. For students interested in understanding, appreciating, and performing Chinese music. **Maximum credit** 4 units, 1 unit each semester.

Maximum of 4 enrollments allowed in the **Chamber Ensemble Family:** MUSC 038C, 044, 057AEI, 070ABCDE, 082, 133E. Total of 54 hours laboratory.

Transfer Credit: CSU; UC

MUSC 040 PREPARATORY MUSIC THEORY

3 units

A visual, aural, and kinesthetic introduction to music literacy. Reading and writing rhythmic, melodic, and harmonic notation in treble and bass clefs. Elementary theory, including major scales, the circle of fifths, intervals, and common triads. Fundamental aural skill development through rhythm drills, melodic dictation, singing, and creative exercises. **For** non-music majors and music majors with minimal experience reading music notation. Total of 54 hours lecture.

Transfer Credit: CSU; UC

MUSC 041A FIRST YEAR PIANO

2 units

Primarily for non-music majors. Orientation to the keyboard with emphasis upon finger, hand and body control. Stress on music reading. Study of a first year piano book. Total of 36 hours lecture and 18 hours music laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

Transfer Credit: CSU; UC

MUSC 041B FIRST YEAR PIANO

2 units

Prerequisite: *MUSC 041A or retention based on successful audition.*

Primarily for non-music majors. Standard first book for piano including repertoire representative of various styles and periods. Total of 36 hours lecture and 18 hours music laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

Transfer Credit: CSU; UC

MUSC 042A SECOND YEAR PIANO

2 units

Prerequisite: *MUSC 041B or retention based on successful audition.*

Primarily for non-music majors. Study and performances of varied Grade II materials and standard repertoire. Stress on required instrumental skills. Total of 36 hours lecture and 18 hours music laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

Transfer Credit: CSU; UC

MUSC 042B SECOND YEAR PIANO

2 units

Prerequisite: *MUSC 042A or retention based on successful audition.*

Primarily for non-music majors. Continued study of Grade II materials and representative repertoire. Emphasis upon technical facility and musical interpretation. Total of 36 hours lecture and 18 hours music laboratory.

This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

Transfer Credit: CSU; UC

MUSC 043 PIANO ENSEMBLE

1 unit

Prerequisite: *Retention based on successful audition.*

Ensemble experience for the pianist. Varied levels of both duet, duo and multi-piano literature. A variety of musical styles and their interpretations. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Instrumental Ensemble Family:** MUSC 043, 053, 060, 062, 133AB. Total of 72 hours laboratory.

Transfer Credit: CSU; UC

MUSC 044 PIANO ACCOMPANYING

1 unit

Prerequisite: *Retention based on successful audition.*

Introduction to the techniques of accompanying vocalists and instrumentalists. Study and performance of accompaniment repertoire: art songs and instrumental literature. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Chamber Ensemble Family:** MUSC 038C, 044, 057AEI, 070ABCDE, 082, 133E. Total of 18 hours lecture and 36 hours laboratory.

Transfer Credit: CSU; UC

MUSC 045A INTERMEDIATE INSTRUMENTAL IMPROVISATION

3 units

Prerequisite: *MUSC 144 or retention based on successful audition.*

Techniques of jazz improvisation including a background of theory and skills. Experience in combo performance. Total of 54 hours lecture and 18 hours music laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

Transfer Credit: CSU; UC

MUSC 045B ADVANCED INSTRUMENTAL IMPROVISATION

3 units

Prerequisite: *MUSC 045A.*

Advanced techniques of jazz improvisation for small ensembles. Total of 54 hours lecture and 18 hours music laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

Transfer Credit: CSU; UC

MUSC 053 INSTRUMENTAL/VOCAL WORKSHOPS

1 unit

Prerequisite: *Retention based on successful audition.*

Rehearsal and public performance of representative literature for varied types of large and small ensembles. **Required** instructional trips. **Maximum of 4 enrollments** allowed in the **Instrumental Ensemble Family:** MUSC 043, 053, 060, 062, 133AB. **Recommended** previous instrumental or vocal ensemble experience. Total of 54 hours laboratory.

Transfer Credit: CSU; UC

MUSC 054 LANCER VARSITY BAND

1 unit

Rehearsal and performance of selected band literature appropriate for sporting and community special events. **Required** instructional trips. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Marching/Pep Ensemble Family**: MUSC 054, 055, 061. **For** students playing marching band instruments, drum set, and electric bass. Total of 54 hours laboratory.

Transfer Credit: CSU; UC

MUSC 055 TOURNAMENT OF ROSES BAND

2 units

Enrollment Limitation: *Audition.*

Rehearsal and performance of music and marching drill techniques appropriate to parade functions. Schedule of required rehearsals and performances published at first meeting. **Required** instructional trips. **Students** currently enrolled in a high school band program are eligible to audition. **Maximum credit** 8 units, 2 units each semester. **Maximum of 4 enrollments** allowed in the **Marching/Pep Ensemble Family**: MUSC 054, 055, 061. Total of 54 hours to be arranged lecture and 54 hours to be arranged laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

MUSC 056 VOCAL JAZZ ENSEMBLE

1 unit

Prerequisite: *Retention based on successful audition.*

Enrollment Limitation: *Audition.*

Rehearsal and performance of literature suitable to the vocal jazz ensemble. Vocal and choral techniques and improvisation. **Required** instructional trips. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** in the **Jazz Ensemble Family**: MUSC 056, 057BCDFG, 133D. Total of 72 hours laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: MUS 180*

MUSC 057A JAZZ COMBO

1 unit

Prerequisite: *Retention based on successful audition.*

Theory, history, rehearsal and performance of all jazz styles from New Orleans to avante-garde using written arrangements and lead sheets. Multiple jazz combos will be selected to rehearse, prepare and perform jazz musical repertoire. Opportunities for extended improvised soloing as part of a small jazz group, typically trios to septets including horns and rhythm section. **Required** instructional trips. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Chamber Ensemble Family**: MUSC 038C, 044, 057AEI, 070ABCDE, 082, 133E. Total of 54 hours laboratory and 18 hours TBA

laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: MUS 180*

MUSC 057B LANCER JAZZ BIG BAND

1 unit

Prerequisite: *Retention based on successful audition.*

Theory, history, rehearsal and performance of traditional and contemporary literature for standard 17-piece big band. Development of reading, stylistic and ensemble skills. Instrumentation includes five saxophones, four trumpets, four trombones, piano, guitar, bass, drums. **Required** instructional trips. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Jazz Ensemble Family**: MUSC 056, 057BCDF, 133D. **For** students playing at college level. Total of 54 hours lecture and 18 hours laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: MUS 180*

MUSC 057C STUDIO JAZZ ENSEMBLE

1 unit

Prerequisite: *Retention based on successful audition.*

Theory, history, rehearsal and performance of compositions and arrangements by the important jazz writers. A 17- to 20-piece big band for the more advanced players. Development of aural, technical and interpretive skills. **Required** instructional trips. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Jazz Ensemble Family**: MUSC 056, 057BCDF, 133D. **For** students playing at college level. Total of 54 hours lecture and 18 hours laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: MUS 180*

MUSC 057D SWING BAND

1 unit

Prerequisite: *Retention based on successful audition.*

Theory, history, rehearsal and performance of music from and in the style of the Swing Era. A standard 17-piece big band with vocalist. Development of jazz and dance band interpretations. **Required** instructional trips. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Jazz Ensemble Family**: MUSC 056, 057BCDF, 133D. **For** students playing at college level. Total of 54 hours lecture and 18 hours laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: MUS 180*

MUSC 057E JAZZ GUITAR ENSEMBLE

1 unit

Prerequisite: *Retention based on successful audition.*

Theory, history, rehearsal and performance of compositions and arrangements for jazz guitar ensemble. Development

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of reading, technical and interpretive skills. **Required** instructional trips. **Recommended** completion of MUSC 111A-B. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Chamber Ensemble Family**: MUSC 038C, 044, 057AEI, 070ABCDE, 082, 133E. **For** guitarists, bassists and drummers playing at college level. Total of 54 hours lecture and 18 hours laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: MUS 180*

MUSC 057F LATIN JAZZ ENSEMBLE

1 unit

Prerequisite: *Retention based on successful audition.*

Theory, history, rehearsal and performance of music in the Latin jazz idiom. A conjunto (smaller band) typically consisting of 3-4 horns, rhythm section, timbales, congas, bongos, hand percussionists, and optional vocalist.

Required instructional trips. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Jazz Ensemble Family**: MUSC 056, 057BCDF, 133D. Total of 54 hours lecture and 18 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: MUS 180*

MUSC 057I VOCAL JAZZ COMBO

1 unit

Enrollment Limitation: *Retention based on successful audition.*

Theory, history, rehearsal and performance of all jazz styles from New Orleans to avante-garde using lead sheets. Opportunities for extended improvised soloing as part of a combo band and jazz vocalists, typically a rhythm section and 2 horns. **Required** instructional trips. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Chamber Ensemble Family**: MUSC 038C, 044, 057AEH, 070ABCDE, 082, 133E. Total of 72 hours laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

Transfer Credit: CSU; UC

MUSC 060 COLLEGE/COMMUNITY ORCHESTRA

1 unit

Prerequisite: *Retention based on successful audition.*

Study and performance of standard and contemporary literature of the symphony orchestra. **For** students playing at college level. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Instrumental Ensemble Family**: MUSC 043, 053, 060, 062, 133AB. Total of 54 hours lecture and 18 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: MUS 180*

MUSC 061 LANCER MARCHING BAND

2 units

Prerequisite: *Retention based on successful audition.*

Recommended Preparation: *Previous band experience.*

Rehearsal and performance of representative band literature. Emphasis on development of music reading, instrumental skills and marching techniques. **Required** instructional trips. **Recommended** previous band experience.

Maximum credit 8 units, 2 units each semester. **Maximum of 4 enrollments** allowed in the **Marching/Pep Ensemble Family**: MUSC 054, 055, 061. **Fall** semester. **Satisfies** one unit of Physical Education Activity credit each semester. Total of 81 hours lecture and 63 hours laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

Transfer Credit: CSU; UC credit limitations.

*See counselor. *C-ID: MUS 180*

MUSC 062 LANCER CONCERT BAND

2 units

Prerequisite: *Retention based on successful audition.*

Rehearsal and performance of representative band literature. Emphasis on development of music reading, instrumental skills. **Required** instructional trips. **Maximum credit** 8 units, 2 units each semester. **Maximum of 4 enrollments** allowed in the **Instrumental Ensemble Family**: MUSC 043, 053, 060, 062, 133AB. **Spring** semester. Total of 108 hours laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: MUS 180*

MUSC 063 CONCERT CHOIR

1 unit

Rehearsal and performance of literature suitable to the large ensemble (80-100). Extensive training in vocal and choral techniques. **Required** instructional trips. **For** students singing at college level. **Maximum credit** 4 units, 1 unit each semester. **For** students singing at college level. **Maximum of 4 enrollments** allowed in the **Choral Ensemble Family**: MUSC 063, 064, 066, 133C. Total of 72 hours laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

Transfer Credit: CSU; UC

MUSC 064 CHAMBER SINGERS

1 unit

Prerequisite: *Retention based on successful audition.*

Rehearsal and performance of representative major works suitable to the small ensemble (30-40). Advanced choral and vocal techniques. **Required** instructional trips. **For** students singing at college level. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Choral Ensemble Family**: MUSC 063, 064,

*Course Identification Numbering System (C-ID)

066, 133C. Total of 90 hours laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: MUS 180*

MUSC 066 MADRIGALS

1 unit

Prerequisite: *Retention based on successful audition.*

Enrollment Limitation: *Audition.*

Rehearsal and performance of representative vocal literature, for 4 and 5 part small ensemble (20), of the major historical periods, i.e., Renaissance, Baroque, 20th Century. Advanced choral and vocal techniques. **For** students performing at college level. **Required** instructional trips. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Choral Ensemble Family:** MUSC 063, 064, 066, 133C. Total of 72 hours laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: MUS 180*

MUSC 067 MUSIC THEATER PRODUCTION

1 unit

Prerequisite: *Audition.*

Rehearsal and performance of literature from the musical theater. **Required** instructional trips. **For** students performing at college level. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Musical Theater Production Family:** MUSC 067, 074, 075, 076, THRT 075, 027. Total of 54 hours laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

Transfer Credit: CSU; UC

MUSC 070A WOODWIND ENSEMBLES

1 unit

Prerequisite: *Enrollment in or completion of one of the following: MUSC 055, 057A-G, 059, 060, 061, 062, 065 or retention based on successful audition.*

Rehearsal and performance of standard and contemporary woodwind ensemble literature. Concert(s) each semester. **For** students playing at college level. **Recommended** MUSC 008 or 009. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Chamber Ensemble Family:** MUSC 038C, 044, 057AEI, 070ABCDE, 082, 133E. Total of 54 hours laboratory.

Transfer Credit: CSU; UC

MUSC 070B BRASS ENSEMBLES

1 unit

Prerequisite: *Enrollment in or completion of one of the following: MUSC 055, 057A-G, 059, 060, 061, 062, 065 or retention based on successful audition.*

Rehearsal and performance of standard and contemporary brass ensemble literature. Concert(s) each semester. **For** students playing at college level. **Recommended** MUSC 008 or 009. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Chamber Ensemble Family:** MUSC 038C, 044, 057AEI, 070ABCDE, 082, 133E. Total of 54 hours laboratory.

Transfer Credit: CSU; UC

MUSC 070C PERCUSSION ENSEMBLE

1 unit

Prerequisite: *MUSC 087A or 087B, or enrollment in or completion of one of the following: MUSC 055, 057A-G, 060, 061, 062, 065 or retention based on successful audition.*

Rehearsal and performance of traditional and contemporary percussion ensemble literature. Concert(s) given each semester. **Recommended:** MUSC 008 or 009. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Chamber Ensemble Family:** MUSC 038C, 044, 057AEI, 070ABCDE, 082, 133E. **For** students playing at college level. Total of 54 hours laboratory.

Transfer Credit: CSU; UC

MUSC 070D TROMBONE AND TUBA ENSEMBLES

1 unit

Prerequisite: *Enrollment in or completion of one of the following: MUSC 055, 057A-G, 060, 061, 062, 065 or retention based on successful audition.*

Rehearsal and performance of standard and contemporary trombone and tuba ensemble literature. Concert(s) each semester. **For** students playing at college level. **Recommended:** MUSC 008 or 009. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Chamber Ensemble Family:** MUSC 038C, 044, 057AEI, 070ABCDE, 082, 133E. Total of 54 hours laboratory.

Transfer Credit: CSU; UC

MUSC 070E CHAMBER MUSIC

1 unit

Prerequisite: *Enrollment in or completion of one of the following: MUSC 043, 055, 057A-G, 059, 060, 061, 062, 065, 070A-D, 082, or retention based on successful audition.*

Rehearsal and performance of standard and contemporary ensemble literature for strings with or without other instruments or voice. Concert(s) each semester. **For** students playing at college level. **Recommended:** MUSC 008 or 009. **Maximum credit** 4 units, 1 unit each semester. **Maximum**

*Course Identification Numbering System (C-ID)

of 4 enrollments allowed in the **Chamber Ensemble Family**: MUSC 038C, 044, 057AEI, 070ABCDE, 082, 133E. Total of 54 hours laboratory.
Transfer Credit: CSU; UC

MUSC 071A VOICE TECHNIQUES I

2 units

Exploration of the fundamentals of vocal technique and singing for the beginning voice student. Posture, breath control, tone resonance, vowel placement, registration. Class singing and solo singing from basic text and supplementary materials. **Recommended** enrollment in MUSC 102. Total of 36 hours lecture and 18 hours music laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

Transfer Credit: CSU; UC

MUSC 071B VOICE TECHNIQUES II

2 units

Prerequisite: MUSC 071A or retention based on successful audition.

Continuing development of the fundamentals of vocal technique and singing for the second semester beginning voice student. Solo singing from basic text and supplementary materials. Total of 36 hours lecture and 18 hours music laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

Transfer Credit: CSU; UC

MUSC 072 SECOND YEAR VOICE TECHNIQUES

2 units

Prerequisite: MUSC 071B or audition.

Further development of voice techniques, posture, breath control, tone resonance, vowel placement, registration. Emphasis on performance in class of vocal literature, including folk songs, musical theater, religious songs and elementary art songs. Materials adapted to individual needs. Total of 36 hours lecture and 18 hours music laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

Transfer Credit: CSU; UC

MUSC 073A VOCAL PERFORMANCE TECHNIQUES

1 unit

Corequisite: One of the following: MUSC 008, 009B, or 009C.

The aspects of learning a song or aria: background, meaning, interpretation, poetic and character analysis. Communicating through performance. Total of 18 hours lecture.

Transfer Credit: CSU; UC

MUSC 073B VOCAL PERFORMANCE TECHNIQUES

1 unit

Corequisite: One of the following: MUSC 008, 009B, or 009C.

Continued development of communication through performance. Introduction to singer's diction and the International Phonetic Alphabet. Total of 18 hours lecture.

Transfer Credit: CSU; UC

MUSC 074 OPERA WORKSHOP

2 units

Prerequisite: Retention based on successful audition.

Preparation, rehearsal, and performance of opera excerpts. Study of stage movement, musical styles, and dramatic techniques for the intermediate and advanced voice student. **Recommended** vocal training. **Maximum of 4 enrollments** allowed in the **Musical Theater Production Family**: MUSC 067, 074, 075, 076, THRT 075, 027. **For** students performing at college level. Total of 54 hours laboratory and 54 hours laboratory using the "To Be Arranged" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: MUS 180*

MUSC 075 MUSICAL THEATER WORKSHOP

2 units

Interdisciplinary course: Music, Theater Arts

Prerequisite: Retention based on successful audition.

Techniques, skills, theory and practice of musical theater performance and audition. The practice of songs, scenes and dance for performance on the live stage. **May not be taken concurrently** with or after THRT 075. **Maximum credit** 8 units, 2 units each semester. **Maximum of 4 enrollments** allowed in the **Musical Theater Production Family**: MUSC 067, 074, 075, 076, THRT 075, 027. Total of 72 hours laboratory, 36 hours "To Be Arranged" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: MUS 180*

MUSC 076 OPERA PRODUCTION

2 units

Recommended Preparation: Vocal training.

Enrollment Limitation: Audition.

Preparation, rehearsal and performance of a full opera production. **Maximum credit** 8 units, 2 units each semester. **Maximum of 4 enrollments** allowed in the **Musical Theater Production Family**: MUSC 067, 074, 075, 076, THRT 075, 027. Total of 144 hours laboratory.

Transfer Credit: CSU; UC

MUSC 077A DICTION FOR SINGERS – ENGLISH AND ITALIAN

2 units

Basics of singing diction for English and Italian repertoire. International Phonetic Alphabet (IPA), transcription and decoding skills, speaking, and singing of texts from pieces assigned in course. Total of 36 hours lecture.

Transfer Credit: CSU; UC credit under review.

*Course Identification Numbering System (C-ID)

MUSC 077B DICTION FOR SINGERS – GERMAN AND FRENCH

2 units

Basics of singing diction for German and French repertoire. International Phonetic Alphabet (IPA), transcription and decoding skills, speaking, and singing of texts from pieces assigned in course. Total of 36 hours lecture.

Transfer Credit: CSU; UC credit under review.

MUSC 081A FIRST YEAR CLASSICAL GUITAR

1 unit

Use of right and left hands and simple strokes. Basic theory, elements of musicianship. Fingering and interpretation of elementary guitar music. Solo and class performance. Total of 36 hours lecture and 18 hours music laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

Transfer Credit: CSU; UC

MUSC 081B FIRST YEAR CLASSICAL GUITAR

1 unit

Prerequisite: *MUSC 081A or retention based on successful audition.*

Further development of right and left hands and fingering, shifting, arpeggios, legato, exchange technique. Major and minor scales, seventh and augmented chords. Fingering and interpretation of elementary and intermediate level guitar music. Solo and class performance. Total of 36 hours lecture and 18 hours music laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

Transfer Credit: CSU; UC

MUSC 081C SECOND YEAR CLASSICAL GUITAR

1 unit

Prerequisite: *MUSC 081B or retention based on successful audition.*

Continued development of the technical skills and musical understanding required to perform intermediate to advanced classical guitar literature. Legato and barring techniques, Segovia scale fingerings, tandem finger movements, sonorities, playing in seventh position and beyond. Form analysis, ornaments. Total of 36 hours lecture and 18 hours music laboratory.

Transfer Credit: CSU; UC

MUSC 082 GUITAR ENSEMBLE

1 unit

Prerequisite: *Retention based on successful audition.*

Rehearsal and performance of original and transcribed guitar ensemble literature. Emphasis on preparation of music for performance, developing ensemble skills and improving sight reading. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Chamber**

Ensemble Family: MUSC 038C, 044, 057AEI, 070ABCDE, 082, 133E. **For** students playing at college level. Total of 54 hours laboratory.

Transfer Credit: CSU; UC

MUSC 083A BEGINNING GUITAR

1 unit

Basic right and left hand playing techniques. Tuning, notation, basic music theory, reading and playing of simple melodies and accompaniments. **Recommended** enrollment in MUSC 101 or 102. Total of 36 hours lecture and 18 hours music laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

Transfer Credit: CSU; UC

MUSC 083B BEGINNING GUITAR

1 unit

Prerequisite: *MUSC 083A or retention based on successful audition.*

Extended chords in first position, bar chords, movable scales, arpeggios, note reading in fifth position and simple solos. Total of 36 hours lecture and 18 hours music laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

Transfer Credit: CSU; UC

MUSC 084 INTERMEDIATE GUITAR

1 unit

Prerequisite: *MUSC 083B or retention based on successful audition.*

Guitar literature and techniques. Emphasis on individual progress in execution and interpretation. Total of 36 hours lecture and 18 hours music laboratory.

Transfer Credit: CSU; UC

MUSC 085A BEGINNING WOODWIND TECHNIQUES

2 units

Fundamental techniques, care and maintenance of standard woodwind instruments. Reading elementary level music. Total of 36 hours lecture and 18 hours music laboratory.

Transfer Credit: CSU; UC

MUSC 085B BEGINNING WOODWIND TECHNIQUES

2 units

Prerequisite: *MUSC 085A.*

Continuing development of performance techniques of standard woodwind instruments. Reading intermediate level music. Total of 36 hours lecture and 18 hours music laboratory.

Transfer Credit: CSU; UC

MUSC 086A BEGINNING BRASS TECHNIQUES**2 units**

Fundamental techniques, care and maintenance of standard brass instruments. Reading elementary level music. Total of 36 hours lecture and 18 hours music laboratory.

Transfer Credit: CSU; UC

MUSC 086B BEGINNING BRASS TECHNIQUES**2 units**

Prerequisite: MUSC 086A.

Continued development of performance techniques standard brass instruments. Reading elementary intermediate level music. Total of 36 hours lecture and 18 hours music laboratory.

Transfer Credit: CSU; UC

MUSC 087A PERCUSSION INSTRUMENT TECHNIQUES**2 units**

Recommended Preparation: Ability to read rhythmic notation.

Rudiments of standard percussion instruments with emphasis upon snare drum. **Recommended** ability to read music. Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC

MUSC 088A BEGINNING STRING TECHNIQUES**1 unit**

Fundamental techniques, including position, fingering, bowing of violin, viola, cello and string bass. Reading elementary level music. Total of 36 hours lecture and 18 hours music laboratory.

Transfer Credit: CSU; UC

MUSC 088B BEGINNING STRING TECHNIQUES**1 unit**

Prerequisite: MUSC 088A.

Continued development of fundamental techniques, including position, fingering, bowing of violin, viola, cello and string bass. Total of 36 hours lecture and 18 hours music laboratory.

Transfer Credit: CSU; UC

MUSC 093A INTRODUCTION TO MUSIC BUSINESS AND ENTREPRENEURSHIP**2 units**

Overview of making a career in music with a focus on entrepreneurial skills. Understanding academic programs in music in higher education. Introduction to fundamental business and personal finance skills, analysis of current trends in advertising and marketing music and musicians. **For** students in the Music Entrepreneurship Certificate program, but open to all interested students. Total of 36 hours lecture.

Transfer Credit: CSU; UC credit under review.

MUSC 093B THE MUSIC BUSINESS**2 units**

Prerequisite: MUSC 093A.

Overview of music in the marketplace, including the processes of promotion, publicity, artist management, talent agents, recording strategies, selling music through the internet, copyrights, and royalties. Total of 36 hours lecture.

Formerly MUSC 093.

Transfer Credit: CSU

MUSC 094 INTRO TO MUSIC TECHNOLOGY FOR MUSICIANS**3 units**

Prerequisite: One of the following: MUSC 001A, 040, 041A or placement based on the music assessment process.

Introduction to music technology tools commonly used by musicians and music educators. Basic computer notation, MIDI, recording, digital audio workstations, microphone techniques and sound reinforcement. Total of 54 hours lecture and 18 hours music laboratory.

Transfer Credit: CSU

MUSC 096A INTRODUCTION TO MUSIC RECORDING AND PRODUCTION**3.5 units**

Prerequisite: One of the following: MUSC 001, 040, 041A or placement based on the music assessment process.

Introduction to computer music production. Use of MIDI (Musical Instrumental Digital Interface), methods of triggering MIDI (controllers, sequencers etc.), samplers and synthesizers, digital audio recording, signal processing. Aesthetic principles of music production. Total of 54 hours lecture and 36 hours laboratory.

Transfer Credit: CSU

MUSC 096B MUSIC RECORDING & PRODUCTION APPLICATIONS**3.5 units**

Prerequisite: MUSC 096A.

Production of music projects using modern recording techniques. Utilization of microphones & preamps, hardware & virtual mixers, outboard plug-in effects, and other associated digital audio workstation components. Music production values are studied through analytical listening. Total of 54 hours lecture and 36 hours laboratory.

Transfer Credit: CSU

MUSC 096C MUSIC RECORDING & PRODUCTION WORKSHOP**3.5 units**

Prerequisite: MUSC 096A.

Strategies for mixing pre-recorded, multi-track music. Critical listening, musical aesthetics of recorded music. Room

acoustics for critical listening. Extensive use of equalizers, dynamics and time-based effects. Advanced signal routing. Extensive hands-on projects. Total 54 hours lecture and 36 hours laboratory.

Transfer credit: CSU

MUSC 099: MUSIC ENTREPRENEURSHIP PRACTICUM
2 units

Prerequisite: MUSC 093A.

Analysis of case studies of music-related projects such as recitals, recordings, business plans and music videos. The practicum culminates in the planning and presentation of individual capstone projects. Total of 36 hours lecture.

Transfer Credit: CSU; UC credit under review.

MUSC 101 MUSIC FUNDAMENTALS

1/2 unit

A multi-media music course. Introduction to music notation, melodic and rhythmic. Note values, meter, time signatures, the grand staff, major scales and keys. Total of 27 hours music laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

MUSC 105 POPULAR SONGWRITING

3 units

Theory and practice in popular songwriting. Music fundamentals, lyric construction, and marketing techniques. For students interested in developing their songwriting capabilities for the commercial music industry. **Recommended** enrollment in MUSC 102 and/or MUSC 041A. Total of 54 hours lecture and 18 hours music laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

MUSC 112A ELECTRIC BASS TECHNIQUES

2 units

Theory and technique of playing electric bass: hand position, fingering, tuning, and maintenance. Fundamentals of music theory including scales, intervals, and triads. Reading and counting of contemporary and traditional music. Student must provide own instrument. **Recommended** enrollment in MUSC 101 or 102. Total of 36 hours lecture and 18 hours music laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

MUSC 112B ELECTRIC BASS REPERTOIRE

2 units

Prerequisite: MUSC 112A or retention based on successful audition.

Study of bass lines in Jazz, Latin, Rock and classical music. Seventh and altered chords, pedal tones, and chord progressions. Further development of reading skills. Emphasis on playing in time. Function of bass in traditional and contemporary music. Music business considerations. Total of 36 hours lecture and 18 hours music laboratory. This

course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

MUSC 115 CONTEMPORARY GUITAR TECHNIQUES

2 units

Recommended preparation: MUSC 083A.

Enrollment Limitation: Retention based on successful audition.

Intermediate level guitar techniques in popular styles. Melody and chord reading, right and left hand technique, accompaniment patterns, and improvisation. Playing solos and rhythm section concepts in duos, trios, and quartets.

Recommended ability to read melodies and play major and minor chords in first position. Total of 36 hours lecture and 18 hours laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

MUSC 116 DRUM SET TECHNIQUES

2 units

Recommended preparation: MUSC 087A or enrollment as drummer/percussionist in one of the following: MUSC 057A-G 059, 061, 062, 065, 070C or retention based on successful audition.

Basic techniques of drum set playing. Emphasis on hand-foot coordination. Styles studied include jazz, Latin and rock. Total of 36 hours lecture and 18 hours music laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

MUSC 117 RHYTHM SECTION TECHNIQUES

2 units

Prerequisite: Retention based on successful audition.

Theory and techniques of playing in a rhythm section both as an independent unit and as the accompaniment to soloists, combos and big bands. Interpretation of individual function, style and written notation in jazz, rock, Latin and swing ensembles. **Recommended** enrollment in one of the following: MUSC 045A-B, 057A-G, 111A-B, 112A-B, 114A-B, 116 or 144. **For** pianists, guitarists, bassists, set drummers, percussionists. Total of 36 hours lecture and 18 hours music laboratory.

MUSC 121 LATIN PERCUSSION TECHNIQUES

2 units

Theory and technique of performing Latin percussion. Afro-Cuban and Brazilian rhythms. Latin, Latin-Jazz, Latin-Rock and Latin-Soul styles. Technique and rhythm patterns on Latin percussion instruments including congas, bongos, timbales, claves, cowbell, guiro, and shekere. **Recommended** enrollment in or completion of MUSC 087A or 116, or percussion experience in an ensemble. Total of 36 hours lecture and 18 hours music laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

MUSC 129A MUSIC IN MULTIMEDIA

3 units

Prerequisite: *MUSC 001B and 096A.*

Survey of techniques for placing music in multimedia. Musical sources including music libraries, licensing existing music and composing original music for media. Musical techniques specific to media including tempo-mapping to accommodate dramatic action, spotting sessions, and narrative composition. Production techniques including MIDI and audio recording and score preparation for recording sessions. Total of 54 hours lecture and 18 hours music laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

MUSC 131 MULTICULTURAL MUSIC MATERIALS FOR YOUNG CHILDREN

3 units

Recommended preparation: *MUSC 030.*

Introduction to the basic concepts of multicultural education as applied to music for young children. Focus on varied musical arts of worldwide cultures reflected in North American society. Development of age-appropriate teaching strategies, materials, and resources designed to enhance multicultural music experiences for young children in group settings. Meets partial fulfillment of the requirements for Child Development specialization in preschool music education. Total of 54 hours lecture.

MUSC 133A PERFORMANCE ENSEMBLE — ORCHESTRA

1 unit

Prerequisite: *Retention based on successful audition.*

Rehearsal and preparations for actual performance by soloists and ensembles. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Instrumental Ensemble Family:** MUSC 043, 053, 060, 062, 133AB. **Pass/no pass** grading. Total of 18 hours lecture.

MUSC 133B PERFORMANCE ENSEMBLE — CONCERT BAND

1 unit

Prerequisite: *Retention based on successful audition.*

Rehearsal and preparations for actual performance by soloists and ensembles. **Maximum credit** 4 units, 1 unit each semester **Maximum of 4 enrollments** allowed in the **Instrumental Ensemble Family:** MUSC 043, 053, 060, 062, 133AB. **Pass/no pass** grading. Total of 18 hours lecture.

MUSC 133C PERFORMANCE ENSEMBLE — CHOIR

1 unit

Prerequisite: *Retention based on successful audition.*

Rehearsal and preparations for actual performance by soloists and ensembles. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in

the **Choral Ensemble Family:** MUSC 063, 064, 066, 133C. **Pass/no pass** grading. Total of 18 hours lecture.

MUSC 133D PERFORMANCE ENSEMBLE — JAZZ

1 unit

Prerequisite: *Retention based on successful audition.*

Rehearsal and preparations for actual performance by soloists and ensembles. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Jazz Ensemble Family:** MUSC 056, 057BCDF, 133D. **Pass/no pass** grading. Total of 18 hours lecture.

MUSC 133E PERFORMANCE ENSEMBLE — SMALL GROUPS

1 unit

Prerequisite: *Retention based on successful audition.*

Rehearsal and preparations for actual performance by soloists and ensembles. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Chamber Ensemble Family:** MUSC 038C, 044, 057AEI, 070ABCDE, 082, 133E. **Pass/no pass** grading. Total of 18 hours lecture.

MUSC 135 CURRICULUM APPLICATIONS OF MUSIC IN EARLY CHILDHOOD EDUCATION

3 units

Recommended preparation: *MUSC 030.*

Development and application of music curriculum in approved group programs for children from infancy through school age. Observing, planning, and guiding musical play and learning. Practical application of theoretical concepts. Meets partial fulfillment of the requirement for specialization in preschool music education. Total of 54 hours lecture.

MUSC 144 INTRODUCTION TO IMPROVISATION

1 unit

Recommended preparation: *MUSC 102.*

Performance oriented course. Application of basic music theory and reading concepts to an instrument. Development of fluency in all keys. Study of scales, arpeggios and melodic and rhythmic patterns with application to basic chord progressions. A preparation course for MUSC 045A. Total of 54 hours lecture and 18 hours music laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format. *Some scheduled hours in this course may be replaced by TBA hours arranged independently with the course instructor.*

MUSC 171A TECHNIQUES OF POPULAR SINGING

2 units

Development of basic techniques and skills appropriate for singing various styles of popular music. Emphasis on fundamental singing techniques, interpretation, and stage presence. Music technology and the business of music.

Solo singing performance required. Total of 36 hours lecture and 18 hours music laboratory.

MUSC 171B TECHNIQUES OF POPULAR SINGING
2 units

Prerequisite: MUSC 171A.

Development of intermediate level techniques and skills appropriate for singing various styles of commercial and popular music. Emphasis on fundamental singing techniques, song interpretation, and remembering how to enjoy performing. Music technology and the business of music. Ensemble and solo singing performance required. Total of 36 hours lecture and 18 hours music laboratory.

NURSING

(Health Sciences Division)

NURS 040 MATERNAL NEWBORN NURSING
1 unit

Prerequisites: NURS 050, 050L, 050S, 137, and 138.

Corequisite: NURS 040L.

Nursing theory and concepts to promote and maintain safe, developmentally appropriate, outcome-focused health care for culturally diverse maternal, newborn clients and their families. Integrate professional nursing roles of clinician, teacher, leader, and advocate while demonstrating critical thinking and nursing process in the care of patient response to physiological and psychosocial health conditions of maternal and newborn clients. Total of 18 hours lecture.

Transfer Credit: CSU

NURS 040L MATERNAL NEWBORN NURSING LAB
2 units

Prerequisite: NURS 050, 050L, 050S, 137, and 138.

Corequisite: NURS 040.

Application of nursing theory and concepts to promote and maintain safe, developmentally appropriate, outcome-focused health care for culturally diverse maternal, newborn patients and their families. Implement professional nursing roles of clinician, teacher, leader, and advocate while demonstrating critical thinking and nursing process in the care of client response to physiological and psychosocial conditions of maternal and newborn clients. **Pass/no pass grading.** Total of 108 hours laboratory.

Transfer Credit: CSU

NURS 041 PEDIATRIC NURSING
1 unit

Prerequisite: NURS 050, 050L, 050S, 137 and 138.

Corequisite: NURS 041L.

Nursing theory and concepts to promote and maintain safe, developmentally appropriate, outcome-focused health care for culturally diverse pediatric clients and their families. Integrate professional nursing roles of clinician, teacher,

leader, and advocate while demonstrating critical thinking and nursing process in the care of pediatric client response to physiological and psychosocial health conditions of child and adolescent patients. Total of 18 hours lecture.

Transfer Credit: CSU

NURS 041L PEDIATRIC NURSING LAB
2 units

Prerequisite: NURS 050, 050L, 050S, 137 and 138.

Corequisite: NURS 041.

Application of nursing theory and concepts to promote and maintain safe, developmentally appropriate, outcome-focused health care for culturally diverse pediatric patients and their families. Implement professional nursing roles of clinician, teacher, leader, and advocate while demonstrating critical thinking and nursing process in the care of patient response to physiological and psychosocial conditions of child and adolescent patients. **Pass/no pass grading.** Total of 108 hours laboratory.

Transfer Credit: CSU

NURS 042 PSYCHIATRIC MENTAL HEALTH NURSING
1 unit

Prerequisite: NURS 051A, 051L, 040, 040L, 041, 041L, and 051S.

Corequisite: NURS 042L.

Nursing theory and concepts to promote and maintain safe, developmentally appropriate, outcome-focused health care for culturally diverse psychiatric - mental health patients across the lifespan. Integrate professional nursing roles of clinician, teacher, leader, and advocate while demonstrating critical thinking and nursing process in the care of patient response to mental health conditions. Total of 18 hours lecture.

Transfer Credit: CSU

NURS 042L PSYCHIATRIC MENTAL HEALTH NURSING LAB

1¹/₂ units

Prerequisite: NURS 051A, 051L, 051S, 040, 040L 041 and 041L.

Corequisite: NURS 042.

Application of nursing theory and concepts to promote and maintain safe, developmentally appropriate, outcome-focused health care for culturally diverse psychiatric - mental health patients across the lifespan. Implement professional nursing roles of clinician, teacher, leader, and advocate while demonstrating critical thinking and nursing process in the care of client response to mental health conditions. **Pass/no pass grading.** Total of 81 hours lecture.

Transfer Credit: CSU

NURS 050 FOUNDATIONAL NURSING CARE

3 units

Corequisites: *NURS 050L, NURS 050S, and either NURS 137 or NURS 138.*

Enrollment Limitation: *Acceptance in the Registered Nursing Program.*

Introduction to foundational nursing theory and concepts that integrate the nursing roles of clinician, teacher, leader, and advocate while relating the concepts of patient-centered care, teamwork and collaboration, evidence-based practice, safety, informatics, and professionalism to the foundational nursing care of adult and geriatric patients. Total of 54 hours lecture.

Transfer Credit: CSU

NURS 050L FOUNDATIONAL NURSING CARE – CLINICAL

5 units

Corequisites: *NURS 050, NURS 050S, and either NURS 137 or NURS 138.*

Enrollment Limitation: *Admission into the Registered Nursing Program.*

Introduction to foundational nursing skills and clinical reasoning that integrate the nursing roles of clinician, teacher, leader, and advocate while relating the concepts of patient-centered care, teamwork and collaboration, evidence-based practice, safety, informatics, and professionalism to the foundational nursing care of adult and geriatric patients. Total of 270 hours laboratory.

Transfer Credit: CSU

NURS 050S FOUNDATIONAL NURSING – SEMINAR

1 unit

Corequisites: *NURS 050, NURS 050L.*

Foundational nursing theory and concepts to promote and maintain safe and effective health care. Critical thinking and the nursing process in the foundational care of patient responses to physiological and psychosocial health conditions of adult and geriatric clients. Total of 18 hours lecture.

Transfer Credit: CSU

NURS 051A BEGINNING MEDICAL SURGICAL NURSING

1 unit

Prerequisites: *All of the following: NURS 050, 050L, 050S, 137, and 138.*

Corequisites: *NURS 051L and NURS 051S.*

Beginning nursing theory and concepts to promote and maintain a safe, developmentally appropriate, outcome-focused health care for culturally diverse adult and geriatric medical surgical patients. Integrate professional nursing roles of clinician, teacher, leader, advocate while demonstrating critical thinking and nursing process in the

care of patient response to physiological and psychosocial health conditions of adult and geriatric patients. Total of 18 hours lecture.

Transfer Credit: CSU

NURS 051L BEGINNING MEDICAL SURGICAL NURSING LAB

2 units

Prerequisites: *All of the following: NURS 050, 050L, 050S, 137, and 138.*

Corequisites: *NURS 051A and NURS 051S.*

Application of beginning nursing theory and concepts to promote and maintain safe, developmentally appropriate, outcome-focused health care for culturally diverse adult and geriatric medical surgical patients. Implement professional nursing roles of clinician, teacher, leader, and advocate while demonstrating critical thinking and nursing process in the care of adult and geriatric patients. **Pass/no pass** grading. Total of 108 hours laboratory.

Transfer Credit: CSU

NURS 051S BEGINNING NURSING – SEMINAR

1 unit

Prerequisites: *NURS 050, 050L, 050S, 137, and 138.*

Corequisites: *NURS 051A and 051L or NURS 040 and 040L or NURS 041 and 041L.*

Beginning nursing theory and concepts including leadership, patient-centered care, safety, evidence-based practice, informatics, and communication as they apply to patients and their families at a beginning level. Exploration and analysis of current nursing research and its application to specific clinical issues or conditions. Development of educational presentations and practice of leadership and communications skills. Total of 18 hours lecture.

Transfer credit: CSU

NURS 052A INTERMEDIATE MEDICAL SURGICAL NURSING

2 units

Prerequisites: *(1) NURS 051A, 051L, 051S, 040, 040L, 041, and 041L or (2) NURS 210 and acceptance into the career ladder LVN to RN program.*

Corequisites: *NURS 052L and 052S.*

Intermediate medical surgical nursing theory and concepts to promote and maintain safe, developmentally appropriate, outcome-focused health care for culturally diverse adult and geriatric medical surgical patients. Integrate professional nursing roles of clinician, teacher, leader, and advocate while demonstrating critical thinking and nursing process in the care of patient response to physiological and psychosocial health conditions of adult and geriatric patients. Total of 36 hours lecture.

Transfer Credit: CSU

NURS 052L INTERMEDIATE MEDICAL SURGICAL NURSING LAB

3¹/₂ units

Prerequisites: All of the following: NURS 051A, 051L, 051S, 040, 040L, 041, and 041L.

Corequisite: NURS 052A.

Application of intermediate nursing theory and concepts to promote and maintain safe, developmentally appropriate, outcome-focused health care for culturally diverse adult and geriatric medical surgical clients. Implement professional nursing roles of clinician, teacher, leader and advocate while demonstrating critical thinking and nursing process in the care of client response to physiological and psychosocial conditions of adult and geriatric clients.

Pass/no pass grading. Total of 189 hours laboratory.

Transfer Credit: CSU

NURS 052S INTERMEDIATE NURSING CARE – SEMINAR

1 unit

Corequisites: NURS 052, NURS 052L.

Intermediate nursing theory and concepts to promote and maintain safe and effective health care. Critical thinking and the nursing process in the intermediate care of patient responses to physiological, psychosocial and psychiatric-mental health conditions. Total of 18 hours lecture.

Transfer Credit: CSU

NURS 053 ADVANCED MEDICAL – SURGICAL NURSING

3 units

Prerequisites: All of the following: NURS 052, 052L, 052S.

Corequisites: NURS 053L, 053S.

Advanced nursing theory and concepts to promote and maintain safe and effective health care with culturally diverse patients. Integrate professional nursing roles of clinician, teacher, leader and advocate while demonstrating critical thinking and nursing process in the advanced care of patient response to physiological and psychosocial health conditions. Total of 54 hours lecture.

Transfer Credit: CSU

NURS 053L ADVANCED MEDICAL – SURGICAL NURSING – CLINICAL

5 units

Corequisite: NURS 053.

Application of advanced nursing theory and concepts to promote and maintain safe and effective health care with culturally diverse patients. Integrate the professional nursing roles of clinician, teacher, leader and advocate while demonstrating critical thinking and nursing process in the advanced care of patient response to physiological and psychosocial health conditions. **Pass/no pass grading.** Total of 270 hours laboratory.

Transfer Credit: CSU

NURS 053S ADVANCED NURSING – SEMINAR

1 unit

Prerequisites: NURS 052A, 052L, 052S, 042, and 042L.

Corequisites: NURS 053 and NURS 053L.

Advanced nursing theory and concepts to promote and maintain safe and effective health care. Critical thinking and the nursing process in the advanced care of client responses to physiologic and psychosocial health conditions of clients across the lifespan. Total of 18 hours lecture.

Transfer Credit: CSU

NURS 103 NURSING ASSISTANT

5 units

Prerequisite: Completion of high school 10th grade; minimum age of 16.

Introduction to basic principles of nursing, including the role of the certified nurse assistant on a health care team; gross anatomy and medical terminology; ethics and communication; basic procedural skills with emphasis on gerontology. **Six weeks. Pass/no pass grading.** For students accepted to the Vocational Nursing program but open to all students. Total of 54 hours lecture and 108 hours laboratory.

NURS 108A NURSING SKILLS LABORATORY—VN

1 unit

Corequisites: NURS 125, 125L and 122.

Enrollment Limitation: Enrollment in the Licensed Vocational Nursing Program.

Foundational nursing procedural skills, therapeutic communication, and documentation skills. Development and laboratory practice of nursing procedural skills correlated with NURS 125 and 125L. Utilization of the nursing process in demonstrating critical elements of procedures. **Pass/no pass grading.** Total of 54 hours laboratory.

NURS 108B NURSING SKILLS LABORATORY—VN

1 unit

Prerequisite: NURS 125, 125L, 108A, and 122.

Corequisites: NURS 126, 126L, and 124.

Enrollment Limitation: Enrollment in the Licensed Vocational Nursing Program.

Continued development and progression in the practice of procedural skills associated with NURS 126 and 126L. Application of the nursing process in the performance of complex technical skills. **Pass/no pass grading. Short term class.** Total of 54 hours laboratory.

NURS 122 MEDICATION ADMINISTRATION FOR VOCATIONAL NURSES—THEORY

3 units

Prerequisites: MATH 400B or MATH 402.

Corequisites: NURS 125, 125L and 108A.

Enrollment Limitation: Enrollment in the Vocational Nursing Program.

Principles of medication administration, classification of drugs, drug actions and side effects. Role and responsibilities of the vocational nurse in the interpretation of drug orders, dosage calculation, and administration of medications. Calculation of intravenous rates and management of intravenous fluids for the vocational nurse. Total of 54 hours lecture.

NURS 123A ADMINISTRATION OF MEDICATIONS

2 units

Prerequisite: *MATH 401C or 402.*

Corequisites: *NURS 108A, 125, 125L.*

Introduction to principles of medication administration, classification of drugs, drug actions, and side effects. Role and responsibilities of the vocational nurse in the interpretation of drug orders, dosage calculation, and administration of medications. **Recommended** Pre-Algebra math skill; be able to compute basic math and do metric system conversions. Total of 36 hours lecture.

NURS 123B ADMINISTRATION OF MEDICATIONS

2 units

Prerequisite: *NURS 123A.*

Corequisites: *NURS 126, 126L.*

Continued studies in the administration of medications, classification of drugs, drug actions and side effects. Role and responsibilities of the vocational nurse in administration of medications. Calculation of intravenous rates and management of intravenous fluids for the vocational nurse. Total of 36 hours lecture.

NURS 124 MENTAL HEALTH NURSING FOR VOCATIONAL NURSES

2 units

Prerequisites: *NURS 125, 125L, 108A, and 122.*

Corequisites: *NURS 126, 126L, and 108B.*

Enrollment Limitation: *Enrollment in the Vocational Nursing Program.*

Mental health nursing theory and concepts to promote and maintain safe, developmentally appropriate health care for culturally diverse psychiatric - mental health clients across the lifespan. Integrate vocational nursing responsibilities of data collection, planning interventions, reporting and documentation. Utilization of nursing process in the vocational nurse's care of client response to psychiatric-mental health conditions. Total of 36 hours lecture.

NURS 125 FUNDAMENTALS OF VOCATIONAL NURSING—THEORY

5 units

Prerequisites: *NURS 103, NUTR 011 or 125; PSYC 102 or 024; and enrollment in or completion of PYSO 100.*

Corequisites: *NURS 108A, 123A, 125L, 125S.*

Enrollment Limitation: *Enrollment in the Vocational Nursing Program.*

Introduction to the fundamentals of vocational nursing. Theory common to the care of adult medical/surgical clients. Introduction to the components of the nursing process. Concepts of communication in a multicultural environment. Total of 90 hours lecture.

NURS 125L FUNDAMENTALS OF VOCATIONAL NURSING—CLINICAL

5 units

Prerequisite: *NURS 137.*

Corequisites: *NURS 108A, 123A, 125.*

Introduction and application of basic vocational nursing skills. Application of nursing theory and the nursing process to the care of individuals in hospitals and community agencies. **Pass/no pass** grading. Total of 270 hours laboratory.

NURS 125S FUNDAMENTALS OF VOCATIONAL NURSING—SEMINAR

1 units

Corequisites: *NURS 125, 125L, 108A, 123A.*

Introduction to the concepts of communication necessary to the care of adult and geriatric medical, surgical, and psychiatric clients at the beginning vocational level. Total of 18 hours lecture.

NURS 126 INTERMEDIATE VOCATIONAL NURSING—THEORY

5 units

Prerequisites: *NURS 108A, 125, 125L, and 122.*

Corequisites: *NURS 126L, 108B, and 124.*

Enrollment Limitation: *Enrollment in the Vocational Nursing Program.*

Progression in vocational nursing. Elaboration on concepts of safe care of medical/surgical clients. Progression in the vocational nurse utilization of nursing process for more complex client problems. Further concepts of cultural proficiency, therapeutic communication, and client advocacy. Total of 90 hours lecture.

NURS 126L INTERMEDIATE VOCATIONAL NURSING—CLINICAL

5 units

Corequisites: *NURS 126.*

Application of nursing theory and skills to the care of individuals experiencing complex medical/surgical conditions. Progressive use of the nursing process. **Pass/no pass** grading. Total of 270 hours laboratory.

NURS 126S INTERMEDIATE VOCATIONAL NURSING – SEMINAR

1 unit

Prerequisites: *All of the following: NURS 108A, 123A, 125, 125L, 125S.*

Corequisites: *NURS 126, 126L, 108B, 123B.*

Continuation and progression in vocational nursing theory and concepts common to the care of complex adult medical/surgical clients at the intermediate vocational nursing level. Total of 18 hours lecture.

NURS 127 ADVANCED VOCATIONAL NURSING—THEORY

6 units

Prerequisites: *All of the following: NURS 108B, 124, 126, 126L.*

Corequisite: *NURS 127L.*

Continuation and progression in vocational nursing. Nursing care of maternal-newborn, pediatric, and medical-surgical clients. Concepts of emergency and disaster nursing, community nursing, leadership and supervision. Current trends in vocational nursing, legal, ethical issues, career opportunities and job application. Preparation for vocational nursing licensure examination. Total of 108 hours lecture.

NURS 127L ADVANCED VOCATIONAL NURSING—CLINICAL

4 units

Corequisite: *NURS 127.*

Application of nursing theory to the care of maternal/child, pediatric, and adult medical/surgical clients. Integration of nursing process into the role of vocational nurse leader. Role of the vocational nurse in an emergency setting. **Twelve weeks. Pass/no pass** grading. Total of 216 hours laboratory.

NURS 137 FOUNDATION PHARMACOLOGY

1 unit

Corequisites: *NURS 050, 050L, and 050S.*

Enrollment Limitation: *Admission to Registered Nursing Program.*

Introduction to foundational pharmacological principles and dosage calculation that relate the concepts of patient-centered care, teamwork and collaboration, evidence-based practice, safety, informatics, and professionalism to the care of patients receiving medication across the developmental spectrum. Total of 18 hours of lecture.

NURS 138 PHARMACOLOGY: PROCESS AND PROBLEMS

1 unit

Prerequisite: *NURS 137.*

Corequisites: *NURS 050, 050L, and 050S.*

The role of the nurse in medication administration. Focus on drug information to enhance safe and effective use of over-the-counter and prescription medications. Current issues related to drug therapy explored. Total of 18 hours lecture.

NURS 139 INTERMEDIATE CLINICAL PHARMACOLOGY 2 units

Focus on effective pharmacological and parenteral treatments to alleviate illness, relieve pain, and facilitate healing. Individualized care plan based on patient values, clinical experience and evidence-based practice. Demonstration of effective use of strategies to reduce risk of harm when administering or evaluating medication. Total of 36 hours lecture.

NURS 200 NURSING LABORATORY

1 unit

Prerequisite: *Enrollment or awaiting readmission in a Nursing, Emergency Medical Technology or Radiologic Technology course.*

Development of nursing skills and concepts in a laboratory setting. **Pass/no pass** grading. Total of 54 hours laboratory.

NURS 201 NURSING BOOT CAMP

1.5 units

Enrollment Limitation: *Acceptance into PCC Nursing Program.*

Foundational skills and concepts will prepare the new nursing student for the rigors of the nursing program and the development of the ability to provide patient-centered, collaborative, evidence-based, safe nursing care to individuals while maintaining professional and ethical standards. Vital information related to nursing school success strategies, math skills, and the required competencies for the nursing program are included. Students will have the opportunity to practice newly acquired cognitive and psychomotor skills. This course is **strongly** recommended for students beginning the PCC Nursing Program at the start of the next academic semester. Total of 18 hours of lecture and 27 hours of laboratory.

NURS 202 NURSING SKILLS ENRICHMENT

3 units

Prerequisite: *Either NURS 050, 050L, 137, 138 and NURS 050S, or Nurs 051A, 051L, and 051S or Nurs 040, 040L and 051S, or Nurs 041, 041L, and 051S or Nurs 042, 042L, and 052S, or Nurs 052A, 052L, and 052S, or Nurs 053, 053L, and 053S.*

Enrollment Limitation: *Acceptance into PCC Nursing Program.*

Development and improvement of nursing knowledge, skills, and attitudes in a supervised clinical setting, based on self-evaluation and improvement planning. Focus for this course is on patient-centered care, teamwork and collaboration, evidence-based practice, safety, informatics, and professionalism. **Pass/no pass** grading. Total of 162 hours laboratory.

NURS 210 NURSING ROLE TRANSITION

2 units

Prerequisite: *Acceptance into Licensed Vocational Nurse Based Registered Nursing program.*

Nursing concepts, judgment, skills, and practices related to the role transition of the licensed vocational nurse to the registered nurse. Total of 27 hours lecture and 27 hours laboratory.

NURS 211 BASIC CARDIAC DYSRHYTHMIAS

1 unit

Provides nurses, paramedics, and other health care providers with an opportunity to become proficient in interpreting and applying basic cardiac dysrhythmias in clinical practice. **Pass/no pass** grading. Total of 18 hours lecture.

NURS 213 INTRAVENOUS THERAPY AND BLOOD WITHDRAWAL

1 unit

Prerequisites: *NURS 051, 051L or NURS 126 and 126L.*

This course covers basic concepts, principles, and techniques of I.V. therapy and blood withdrawal. Emphasis is on the acquisition of venipuncture and blood withdrawal skills. Course approved by the BRN and BVNPTE for continuing education hours. **Pass/no pass** grading. **Short term class.** Total of 9 hours lecture and 27 hours laboratory.

NUTRITION

(Health Sciences Division)

NUTR 011 HUMAN NUTRITION

3 units

Nutrition from birth through old age. Relationship of diet to physical activity and body functions. Caloric foods, minerals and vitamins. Total of 54 hours lecture and 18 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: NUTR 110*

NUTR 012 PRINCIPLES OF FOOD SCIENCE

3 units

Application of food science principles with emphasis on ingredient function and interaction, food preparation techniques, sensory evaluation standards, food safety and sanitation, and nutrient composition of food. Total of 54 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit under review.

PARALEGAL STUDIES

(Business Division)

PLGL 134 INTRODUCTION TO PARALEGAL STUDIES

3 units

The career as a paralegal. Relationship of attorney and paralegal in decision making and systems procedures. Introduction to law; composition, location and jurisdiction of courts; legal terminology; bibliography, social forces and effect of law. Total of 54 hours lecture.

PLGL 135A WILLS, TRUSTS, PROBATE ADMINISTRATION

3 units

Prerequisite: *Enrollment in or completion of PLGL 134.*

Overview of property, wills and general estate planning; overview of probate and probate court, guardianships, conservatorships, elder law, tax-related issues, probate alternatives; probate litigation. Total of 54 hours lecture.

PLGL 135B WILLS, TRUSTS, PROBATE ADMINISTRATION

3 units

Prerequisite: *PLGL 135A.*

Probate administration and mechanics, summary administration, family allowance and homestead, estate planning and use of trusts. Total of 54 hours lecture.

PLGL 136 PROPERTY LAW, BANKRUPTCY AND CREDITORS RIGHTS

3 units

Prerequisite: *Enrollment in or completion of PLGL 134.*

Law of personal, real and community property, joint tenancy leases, deeds, contracts, escrows, deeds of trust; drafting problems in real estate transactions; systems of recording, search of public documents, bankruptcy laws and forms; creditors' rights, debtors' exemptions and secured transactions. Total of 54 hours lecture.

PLGL 137 LEGAL WRITING AND DRAFTING

3 units

Prerequisite: *PLGL 134 or 145A.*

Advanced legal drafting and writing; special research and projects. Preparation of course papers; general papers. Total of 54 hours lecture.

PLGL 138 PARALEGAL STUDIES FIELD PRACTICE

4 units

Prerequisite: *Maintain enrollment in 7 units or more including field practice and in Paralegal Studies curriculum.*

Supervised field experience or employment in legal office leading to training in systems approach for paralegals (legal assistants). Total of 360 hours field practice.

**Course Identification Numbering System (C-ID)*

PLGL 139 TORT LAW AND CLAIMS INVESTIGATION**3 units****Prerequisite:** *Enrollment in or completion of PLGL 134.*

Intentional torts and negligence, including insurance claims procedures; evaluation of personal injury claims and pleadings used in law offices either in settlement or litigation. Total of 54 hours lecture.

PLGL 140 FAMILY LAW AND DISSOLUTION PROCEDURES**3 units****Prerequisite:** *Enrollment in or completion of PLGL 134.*

Law and procedure relative to marriage, dissolution, adoption and community property. Total of 54 hours lecture.

PLGL 141 CIVIL AND CRIMINAL EVIDENCE**3 units****Prerequisite:** *Enrollment in or completion of PLGL 134.*

Rules of civil and criminal evidence and the admissibility of such evidence in court, deposition comprehension and interrogatory summarizing. Total of 54 hours lecture.

PLGL 142 LAW OFFICE PROCEDURES AND ETHICS**3 units****Prerequisite:** *Enrollment in or completion of PLGL 134.*

Basic objectives of law office management procedures. Coordination of operational skills in a law office. Ethics of the legal profession and the judiciary. Total of 54 hours lecture.

PLGL 143 WORKER'S COMPENSATION LAW**3 units**

Background of Worker's Compensation Law. Relevant statutory and case law, substantive and procedural issues including compensability, benefit structure and tort law relationships of Worker's Compensation. Total of 54 hours lecture.

PLGL 145A LEGAL RESEARCH**3 units****Prerequisite:** *Enrollment in or completion of PLGL 134.*

Introduction to the technical skills of legal research. Use of a case digest, interpretation of statutes, Shepardizing authorities, prioritizing authorities. Total of 54 hours lecture.

PLGL 145B COMPUTER AIDED RESEARCH**1 unit****Prerequisite:** *Enrollment in or completion of PLGL 134 and 145A.*

On-line computer research with West Publishing Company. Composing queries, researching case law, statutes, and legal periodicals with the computer. Total of 9 hours lecture and 27 hours laboratory.

PLGL 146 COMPUTER USE FOR THE LAW OFFICE**2 units****Prerequisite:** *PLGL 134.*

An introduction to computer use in the law office. Applications will include software for judicial council form applications, jury instruction preparation, billing and accounting, legal calendaring, word processing applications for legal document preparation. **Recommended** basic word processing skills. Total of 36 hours lecture and 18 hours laboratory.

PLGL 148 IMMIGRATION LAW**3 units****Prerequisite:** *Enrollment in or completion of PLGL 134.*

Historical background; administration of immigration law; citizenship and nationality; immigration preference system; non-immigrants; visas; refugees and asylum. Total of 54 hours lecture.

PLGL 150 PARALEGAL STUDIES GRADUATE SEMINAR**1 unit****Prerequisite:** *Enrollment in or completion of final semester of Paralegal Studies courses.*

Designed to help students bridge the gap between the educational institution and working field. Resume writing, interviewing for employment, application writing. Total of 18 hours lecture.

**PERSONAL HEALTH CARE ASSISTANT
(Health Sciences Division)****PHCA 100 PERSONAL HEALTH CARE AIDE****2 units****Enrollment Limitation:** *Completion of high school 10th grade; minimum age of 16.*

Prepares students to provide or support activities of daily living, personal care, and homemaker services to elderly and disabled individuals needing assistance to remain safely and independently in their own home or in an assisted living facility. Topics include communication skills, maintenance of a healthy environment, procedures for emergencies, physical, emotional, and developmental characteristics of the patients served, personal hygiene, safe transfer techniques, and basic nutrition. Total of 108 hours laboratory.

PHILOSOPHY

(Social Sciences Division)

PHIL 001 INTRODUCTION TO PHILOSOPHY

3 units

Introduction to the most troublesome questions: meaning, existence, truth, reasoning, perception, intuition, morality, god, self, mind. Appropriate readings. **No credit** if taken after PHIL 001H. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: PHIL 100*

PHIL 001H HONORS INTRODUCTION TO PHILOSOPHY

3 units

Enrollment Limitation: *Acceptance into the Honors program.*

Introduction to the most troublesome questions: meaning, existence, truth, reasoning, perception, intuition, morality, god, self, mind. Appropriate readings. This enriched course is designed for the Honors Program allowing more student directed discussions and more extensive writing assignments. **No credit** if taken after PHIL 001. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: PHIL 100*

PHIL 003 ETHICS

3 units

What is the nature of moral judgments and of moral truth? What kind of person should you be? What is the right thing to do? What is of ultimate moral value? How does morality relate to science and to religion? This course provides an introduction to these and other questions from moral philosophy. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: PHIL 120*

PHIL 007 CONTEMPORARY MORAL PROBLEMS

3 units

Nature of value. Concepts of choice, obligations, moral standards; types of ethical theory. Analysis of such concepts as justice, freedom, the state; various types of political theory. Total of 54 hours lecture.

Transfer Credit: CSU; UC

PHILO 008 PHILOSOPHY AND HUMANNES

3 units

The essence of human nature: reason, desire, work, freedom and organism; some deficiencies in human nature: sin, ignorance, neurosis, alienation; means for changing human nature: redemption, education, therapy, social reconstruction. Total of 54 hours lecture.

Transfer Credit: CSU; UC

PHIL 020 INDEPENDENT STUDY

1 unit

Prerequisites: *One semester of philosophy and permission of department chairperson.*

Individual research projects; emphasis on library research and preparation of research papers. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

PHIL 020A HISTORY OF ANCIENT PHILOSOPHY

3 units

Beginnings of philosophy and science in Greece; Socrates, Plato, Aristotle; philosophies in Roman Empire; developments to St. Thomas Aquinas. Total of 54 hours lecture.

Transfer Credit: CSU; UC

PHIL 020B HISTORY OF MODERN PHILOSOPHY

3 units

Philosophical systems of Renaissance; rationalism in Descartes, Spinoza and Leibniz; empiricism in Locke, Berkeley and Hume; Kant and post-Kantian philosophers; 20th century developments. Total of 54 hours lecture.

Transfer Credit: CSU; UC

PHIL 025 INTRODUCTION TO CRITICAL THINKING

3 units

Prerequisite: *ENGL 001A, 001AH, or 001AS.*

An introduction to critical thinking skills and techniques of critical analysis in written form. Course will include applications of critical reasoning skills in everyday situations and seek to develop the ability to integrate the principles of critical thinking with the techniques of effective written argument. A total of 6,000 to 8,000 words will be required during the semester in a variety of written assignments. Total of 54 hours lecture.

Transfer Credit: CSU; UC

PHIL 030 LOGIC

3 units

Elementary thought processes, both deductive and inductive, emphasis on definition, verification, evidence, validity, forms of argument and of fallacious reasoning. Total of 54 hours lecture.

Transfer Credit: CSU; UC

PHIL 031 CONTEMPORARY CHICANO PHILOSOPHY

3 units

Survey of Mexican philosophy; emphasis on contemporary developments; implications of Mexican thought for the Mexican-American. Total of 54 hours lecture.

Transfer Credit: CSU; UC

**Course Identification Numbering System (C-ID)*

PHIL 033 INTRODUCTION TO SYMBOLIC LOGIC

3 units

Elements of symbolic logic; sentential and quantification-al; forms of reasoning; structure of language. Total of 54 hours lecture.

Transfer Credit: CSU; UC

PHIL 037 PHILOSOPHY OF RELIGION

3 units

Nature of the religious experience; content of religious studies. Relationship of religion to philosophy and science. Role of reason and faith; arguments for God's existence; meaning of evil; beliefs in immortality. Religion as a social and political force. Total of 54 hours lecture.

Transfer Credit: CSU; UC

PHIL 110 SKILLS FOR COLLEGE SUCCESS IN PHILOSOPHY

1 unit

Development of essential study techniques for success in philosophy courses; orientation to applications of computer-based technologies in philosophy; time management; textbook mastery, lecture outlining, test taking, and critical analysis. Total of 18 hours lecture.

PHOTOGRAPHY

(Visual Arts and Media Studies Division)

PHOT 010 HISTORY OF PHOTOGRAPHY

3 units

Historical trends of the medium from its inception to the present, including historical context, technical innovations and aesthetic concerns. Total of 54 hours lecture.

Transfer Credit: CSU; UC

PHOT 021 INTRODUCTION TO BLACK AND WHITE PHOTOGRAPHY

3 units

Introduction to black and white photography as a form of visual communication: cameras, film, film processing, darkroom printing, composition, photographic genre, concept development, professionalism and critique. Genres include documentary, fashion, landscape, portraiture staged, still life, and street photography with an emphasis on analog photography. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

PHOT 022A LARGE FORMAT PHOTOGRAPHY

3 units

Prerequisites: PHOT 021 and PHOT 030.

Recommended Preparation: PHOT 031.

Introduction to View Camera as a form of visual communication: 4 x 5 black and white and color film, 4 x 5 film pro-

cessing, advanced darkroom and presentation technique, fiber printing, Introduction to studio lighting for product, scanning for 4 x 5 film, digital modification and preparation for output of large format prints, concept development and critique. Photographic genres included in course: advertisement, architecture, landscape and fine art. Total of 36 hours lecture and 72 hours of laboratory.

Transfer Credit: CSU

PHOT 030 INTRODUCTION TO DIGITAL IMAGE EDITING

3 units

Prerequisite: PHOT 021 or placement based on the Photography assessment process.

Recommended Preparation: PHOT 023A and either 024A or 024B.

Introduction to artistic image editing using industry standard digital image editing software for photographers, illustrators and graphic designers. Techniques to scan, edit, retouch, paint, mask, manipulate, and output digital imagery. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

PHOT 031 BEGINNING DIGITAL PHOTOGRAPHY

3 units

Recommended Preparation: PHOT 021 and PHOT 030.

Introduction to digital photography as a form of visual communication: DSLR cameras, digital image editing and management, digital output for print and screen, composition, professionalism, photographic genre, concept development and critique. Genres include documentary, fashion, landscape, portraiture staged, still life, and street photography with an emphasis on digital photography. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

PHOT 033 PORTRAIT PHOTOGRAPHY

3 units

Prerequisite: PHOT 030 and either PHOT 021 or 031.

Exploration of the fundamentals of portrait photography in the context of a variety of locations. Emphasis on planning, interpreting, and presenting a portrait photographically. Medium format film cameras, advanced printing techniques as well as in studio lighting set-ups using hot lights, strobes, electronic metering will be covered. Total of 36 hours lecture and 72 hours laboratory.

Transfer credit: CSU; UC

PHOT 040 FASHION PHOTOGRAPHY

3 units

Prerequisite: PHOT 030 and either PHOT 021 or PHOT 031.

Commercially oriented course with assignments covering fashion and fashion specific product photography in the studio and on location to produce a photograph that sells an idea, product, or service. Fundamentals of stu-

dio photography including strobes, electronic metering, digital SLR and lighting for fashion. Business practices in commercial and editorial photography will be discussed. Students are expected to become visually and technically competent with artificial light sources in the studio. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

PHOT 130 ADVANCED DIGITAL IMAGE EDITING

3 units

Prerequisite: *PHOT 030.*

Advanced concepts and techniques in digital image editing for artists. An in depth examination of producing complex masks and selections from existing channel information. Students will explore many of the advanced features of industry standard digital image editing software. Emphasis is on students incorporating advanced digital image editing techniques into their existing art practice. Total of 36 hours lecture and 72 hours laboratory.

PHOT 132 ADVANCED DIGITAL PHOTOGRAPHY

3 units

Prerequisites: *PHOT 030 and PHOT 031, or placement based on the Photography assessment process.*

Advanced practices in digital photography. Studio capture techniques for product and portrait photography. Advanced principles of color management, software-based digital image editing and compositing of images, and printing. Emphasis on the intersection of professional photographic technique and digital image editing. Total of 36 hours lecture and 72 hours laboratory.

PHOT 135 ADVANCED PHOTOGRAPHY

3 units

Prerequisites: *One of the following: 1) PHOT 023A and PHOT 022A or 024A or 024B; OR 2) portfolio presentation; OR 3) placement based on the Photography assessment process.*

Creation of a portfolio leading to job training or fine arts school. Black and white, color, digital and studio and location photography with concept and technique both emphasized. Beginning research into editorial, commercial or fine arts job market. Total of 36 hours lecture and 72 hours laboratory.

PHOT 136 VIDEO FOR PHOTOGRAPHERS

3 units

Prerequisites: *PHOT 021 or JOUR 021.*

Recommended Preparation: *PHOT 031 or PHOT 023A.*

Introduction for photographers to the technical skills and conceptual fundamentals to produce video content. Exploration of current video project types created by professional still photographers. Examination of the similarities and differences between still photography and motion pictures. Introduction to basic video production procedures.

Emphasis on fundamental technical knowledge, conceptualization, camera operation, sound recording, lighting, editing and delivery techniques for video. Projects may include event documentation, creating a companion video for a series of still photographs, and/or creating a short narrative video. Total of 36 hours lecture and 72 hours laboratory.

PHOT 140 PROFESSIONAL PRACTICES FOR PHOTOGRAPHERS

3 units

Prerequisites: *One of the following: PHOT 030, PHOT 031, PHOT 022A, PHOT 024A, PHOT 033 or PHOT 040.*

Introduction to principles and practices within the photography field for hire or exhibition to empower students to identify and achieve professional photographic objectives. Topics include how to obtain preparatory work experience, getting gallery representation, establishing a photographic business, basic financial practices, and legal issues. **Recommended** basic word processing and spreadsheet skills. Total of 54 hours lecture.

PHOT 171A EXPLORING TOPICS IN PHOTOGRAPHY

3 units

Exploratory course: *Specific topic identified in Schedule of Classes.*

Lecture focusing on topics of current and general interest. Total of 54 hours lecture.

PHOT 171B EXPLORING TOPICS IN PHOTOGRAPHY

2 units

Exploratory course: *Specific topic identified in Schedule of Classes.*

Lecture, discussion, and lab focusing on topics of current and general interest. Total of 36 hours lecture.

PHOT 171C EXPLORING TOPICS IN PHOTOGRAPHY

1 unit

Exploratory course: *Specific topic identified in Schedule of Classes.*

Course focuses on topics of current and general interest. Total of 18 hours lecture and 18 hours laboratory.

PHYSICAL SCIENCE

(Natural Sciences Division)

PHSC 002 SCIENTIFIC METHOD AS CRITICAL THINKING

3 units

Prerequisite: *ENGL 001A.*

Written expression and analysis of ideas, arguments and issues in the Physical Sciences. Instruction in critical thinking, inductive and deductive reasoning, and the scientific method. Particular emphasis on compositional expression

necessary in developing a complex scientific argument; an interdisciplinary course. Total of 54 hours lecture.

Transfer Credit: CSU; UC

PHSC 003 PHYSICAL SCIENCES

3 units

Prerequisite: *Eligibility for MATH 131 or higher.*

Basic principles of physics and chemistry and their applications to modern daily life with a primarily conceptual approach. Emphasis on critical thinking skills and general methods of scientific inquiry. **Recommended** for students in the California State Teacher's Preparation Program and other appropriate non-sciences majors but open to all qualified students. Total of 54 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

**C-ID: CHEM 140 or PHYS 140*

PHSC 003L LABORATORY FOR PHYSICAL SCIENCE

1 unit

Prerequisite: *Enrollment in or completion of PHSC 003.*

Laboratory investigation of the basic principles of physics and chemistry and their applications to modern daily life with a primarily conceptual approach, with emphasis on critical thinking skills and general methods of scientific inquiry. **Recommended** for students in the California State Teacher Preparation Program and other appropriate non-sciences majors. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

**C-ID: CHEM 140 or PHYS 140*

PHSC 071A EXPLORING TOPICS IN PHYSICAL SCIENCE

3 units

Exploratory course: *Specific topic identified in Schedule of Classes.*

Lecture focusing on topics of current and general interest. Total of 54 hours lecture.

Transfer Credit: CSU

PHSC 071B EXPLORING TOPICS IN PHYSICAL SCIENCE

1 unit

Exploratory course: *Specific topic identified in Schedule of Classes.*

Lecture focusing on topics of current and general interest. Total of 18 hours lecture.

Transfer Credit: CSU

PHSC 071C EXPLORING TOPICS IN PHYSICAL SCIENCE

1 unit

Exploratory course: *Specific topic identified in Schedule of Classes.*

Lecture focusing on topics of current and general interest. Total of 18 hours lecture and 18 hours laboratory.

Transfer Credit: CSU

PHSC 171A EXPLORING TOPICS IN PHYSICAL SCIENCE

3 units

Exploratory course: *Specific topic identified in Schedule of Classes.*

Lecture focusing on topics of current and general interest. Total of 54 hours lecture.

PHSC 171B EXPLORING TOPICS IN PHYSICAL SCIENCE

1 unit

Exploratory course: *Specific topic identified in Schedule of Classes.*

Lecture focusing on topics of current and general interest. Total of 18 hours lecture.

PHSC 171C EXPLORING TOPICS IN PHYSICAL SCIENCE

1 unit

Exploratory course: *Specific topic identified in Schedule of Classes.*

Lecture focusing on topics of current and general interest. Total of 18 hours lecture and 18 hours laboratory.

PHYSICS

(Natural Sciences Division)

PHYS 001A GENERAL PHYSICS

5 units

Prerequisite: *MATH 005A.*

Calculus-based study of classical mechanics, including unit systems, particle kinematics, Newton's laws of motion, work and energy, linear and angular momentum, and rigid-body rotation and equilibrium. Total of 72 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

**C-ID: PHYS 205; PHYS SEQ 200S (WITH PHYS 001B, 001C, 001D)*

PHYS 001B GENERAL PHYSICS

5 units

Prerequisites: *PHYS 001A and MATH 005A.*

Calculus-based study of gravitation, fluid mechanics, oscil-

**Course Identification Numbering System (C-ID)*

lations and waves, and thermodynamics. Total of 72 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

*C-ID: PHYS SEQ 200S (WITH PHYS 001A, 001C, 001D)

PHYS 001C GENERAL PHYSICS

5 units

Prerequisites: PHYS 001B and MATH 005B.

Calculus-based study of electricity and magnetism, and geometrical and physical optics. Total of 72 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

*C-ID: PHYS 210; PHYS SEQ 200S (WITH PHYS 001A, 001C, 001D)

PHYS 001D GENERAL PHYSICS

5 units

Prerequisites: PHYS 001C and MATH 005C.

Calculus-based study of introductory modern physics, including the theory of relativity, basic principles of quantum mechanics, elementary atomic, molecular, solid state, nuclear, and particle physics. Total of 72 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

*C-ID: PHYS SEQ 200S (WITH PHYS 001A, 001B, 001C)

PHYS 002A GENERAL PHYSICS

4 units

Prerequisite: One of the following: MATH 131 or 133B or 134B or 150.

Recommended preparation: MATH 007A.

Algebra- and trigonometry-based study of classical mechanics and thermodynamics. Total of 54 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

*C-ID: PHYS 105

PHYS 002B GENERAL PHYSICS

4 units

Prerequisite: PHYS 002A.

Algebra- and trigonometry-based study of electricity, magnetism, special relativity, atomic and nuclear physics, and elementary particles. Total of 54 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

PHYS 010 DESCRIPTIVE INTRODUCTION TO PHYSICS

3 units

Prerequisite: MATH 131 or 150.

Application of physics to modern life with minimum of mathematical emphasis. **No credit** if taken after any other college physics. Total of 54 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

PHYS 010L DESCRIPTIVE PHYSICS IN THE LABORATORY

1 unit

Prerequisite: Enrollment in or completion of PHYS 010.

Laboratory investigations of physical principles with a minimum of mathematical emphasis. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

PHYS 020 INDEPENDENT STUDY

2 units

Prerequisite: Enrollment in or completion of any college physics course.

Faculty-guided student research. Each topic includes library research, design and execution of the experiments and the preparation of a summary research report. Total of 108 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

PHYS 031A GENERAL PHYSICS

5 units

Prerequisite: MATH 005A.

Classical mechanics and thermal physics. For life sciences majors but open to all qualified students. Total of 72 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

PHYS 031B GENERAL PHYSICS

5 units

Prerequisites: PHYS 031A and MATH 005B.

Electricity and magnetism, optics, and modern physics. **Recommended** enrollment in or completion of MATH 005C. For life sciences majors but open to all qualified students. Total of 72 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC credit limitation. See counselor.

PHYSIOLOGY

(Natural Sciences Division)

PYSO 001 HUMAN PHYSIOLOGY

4 units

Prerequisites: ANAT 025 and CHEM 002A.

Introduction to human cellular and organ physiology, human genetics and embryology, current topics in health. **Recommended** sophomore standing. Total of 54 hours lecture and 54 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: BIOL 120B*

PYSO 100 BASIC PHYSIOLOGY AND ANATOMY

3 units

Fundamentals of human physiology and anatomy. Structure and function of tissues, organs and organ systems. Em-

*Course Identification Numbering System (C-ID)

phasis on medical relationships. **No credit** if taken after ANAT 025, PYSO 001, 002A or 126A. **For** majors in medical assisting and vocational nursing, but open to all qualified students. Total of 54 hours lecture and 36 hours laboratory.

POLITICAL SCIENCE

(Social Sciences Division)

POLS 001 INTRODUCTION TO AMERICAN GOVERNMENT AND POLITICS

3 units

Introduction to American government and politics incorporating California state and local history, constitution, institutions and policies. POLS 001 and 002 usually required for advanced political science courses. **No credit** if taken after AMERI 005. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: POLS 110*

POLS 002 COMPARATIVE GOVERNMENT AND POLITICS

3 units

Comparative study of constitutional principles, governmental institutions and political processes in selected contemporary nations. Emphasis on the U.S. and major European governments. POLS 001 and 002 usually required for advanced political science courses. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: POLS 130*

POLS 006 THE U.S. AND WORLD POLITICS

3 units

The role of the president, Congress, public opinion, the media and special interest groups in the formation of U.S. foreign policy. Emphasis on U.S. governmental institutions. Total of 54 hours lecture.

Transfer Credit: CSU; UC

POLS 007 PRINCIPLES OF POLITICAL SCIENCE

3 units

Scope and methods of political science; basic political philosophies and ideologies; some concepts of the modern state, public law, public administration and government. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: POLS 150*

POLS 020 INDEPENDENT STUDY

1 unit

Prerequisites: *One semester of political science and permission of department chairperson.*

Individual projects; research techniques; written reports.

Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

POLS 021 INTRODUCTION TO POLITICAL ECONOMY 3 units

Political economy as a system; role of government; relationships among the public, quasi-public, and private sectors; strategies of government interventions; and the impact of government policies on the economy at the local, state, national, and global levels. Total of 54 hours lecture.

Transfer Credit: CSU; UC

POLS 022 INTRODUCTION TO POLITICAL THEORY 3 units

Introductory exploration of the nature and role of major political theories from ancient times to the present; central questions of political life, views of human nature, political organizations, power, justice, and revolutions. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: POLS 120*

POLS 110 SKILLS FOR COLLEGE SUCCESS IN POLITICAL SCIENCE

1 unit

Development of essential study techniques for success in political science courses; orientation to applications of computer-based technologies in political science; time management; textbook mastery, lecture outlining, test taking, and critical analysis. Total of 18 hours lecture.

PORTUGUESE

(Languages Division)

PORT 001 ELEMENTARY PORTUGUESE – LEVEL 1

5 units

Practice in pronunciation, reading, writing, and speaking. Introduction to customs and culture of Portugal, Brazil, and the Portuguese diaspora. Corresponds to first year high school Portuguese. Total of 90 hours lecture.

Transfer Credit: CSU; UC

PORT 002 ELEMENTARY PORTUGUESE – LEVEL 2

5 units

Prerequisite: *PORT 001 or placement based on the foreign language assessment process.*

Completion of elementary essentials; stress on oral work; further study of Portuguese and Brazilian culture. Total of 90 hours lecture.

Transfer Credit: CSU; UC

*Course Identification Numbering System (C-ID)

PORT 003 INTERMEDIATE PORTUGUESE

5 units

Prerequisite: *PORT 002 or two years of high school Portuguese or placement based on the foreign language assessment process.*

Development of communication skills based on 19th and 20th century Portuguese-language readings; review of basic structure of Portuguese. Customs and culture. Total of 90 hours lecture.

Transfer credit: CSU; UC

PORT 004 INTERMEDIATE PORTUGUESE

5 units

Prerequisite: *PORT 003 or three years of high school Portuguese or placement based on the foreign language assessment process.*

Further development of communication skills based on 19th and 20th century Portuguese-language readings; finish review of the basic structure of Portuguese. Customs and culture. Total of 90 hours lecture.

Transfer credit: CSU; UC

PORT 140 PORTUGUESE PRONUNCIATION

2 units

Introduction to the Portuguese sound system, basic stress and intonation patterns. Imitation and practice of proper pronunciation; reading of Portuguese texts. For beginners and those wishing to gain additional proficiency in pronunciation. Total of 36 hours lecture.

PORT 150A PORTUGUESE FOR TRAVEL AND BUSINESS

2 units

Practical conversational Portuguese for travel and business. Contemporary culture in Portuguese-speaking areas. Total of 36 hours lecture.

PORT 150B PORTUGUESE FOR BUSINESS AND TRAVEL

2 units

Prerequisite: *PORT 150A or placement based on the foreign language assessment process.*

Further practice in practical conversational Portuguese for travel and business. Contemporary culture in Portuguese-speaking countries. Total of 36 hours lecture.

PSYCHOLOGY

(Social Sciences Division)

PSYC 001 INTRODUCTORY PSYCHOLOGY

3 units

Principles of human behavior; physiological foundations,

influence of heredity and environment; sense-perception, attention, capacities and abilities; learning; emotion and motivation; special emphasis on personality development and adjustment. **No credit** if taken after PSYC 001H. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: PSY 110*

PSYC 001H HONORS INTRODUCTORY PSYCHOLOGY

3 units

Enrollment Limitation: *Acceptance into the Honors program.*

Principles of human behavior; physiological foundations, influence of heredity and environment; sense-perception, attention, capacities and abilities; learning; emotion and motivation; special emphasis on personality development and adjustment. This enriched course is designed for the Honors Program, allowing more student-directed discussions and more extensive writing assignments. **No credit** if taken after PSYC 001. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: PSY 110*

PSYC 002 ELEMENTARY PHYSIOLOGICAL PSYCHOLOGY

3 units

Prerequisite: *PSYC 001.*

Interrelationship of physiological mechanisms and behavior. Emphasis on the role of the brain and nervous system in perception, emotion, motivation, states of consciousness, language, memory and learning. Relevance of the biological perspective to an understanding of behavior and experience. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: PSY 150*

PSYC 005 RESEARCH METHODS IN PSYCHOLOGY

4 units

Prerequisite: *PSYC 001 and ENGL 001A and either STAT 018 or STAT 050.*

Introduction to the planning and execution of research in psychology, and to the analysis, interpretation and reporting of data. Total of 54 hours lecture and 36 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: PSY 205B*

PSYC 020 INDEPENDENT STUDY

1 unit

Prerequisites: *One semester of psychology and permission of department chairperson.*

Laboratory research projects; library research; design and construction of research equipment; experiments; written reports. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

**Course Identification Numbering System (C-ID)*

**PSYC 021 DEVELOPMENTAL PSYCHOLOGY:
THE CHILD**

3 units

Growth processes and dynamics of psychological development from conception through adolescence; physical, cognitive, emotional, personality, and social development of the child and adolescent. **No credit** if taken after PSYC 021H. Total of 54 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

**C-ID: CDEV 100*

**PSYC 021H HONORS DEVELOPMENTAL PSYCHOLOGY:
THE CHILD**

3 units

Enrollment Limitation: *Acceptance into the Honors program.*

Growth processes and dynamics of psychological development from conception through adolescence; physical, cognitive, emotional, personality, and social development of the child and adolescent. This enriched course is designed for the Honors Program allowing more student directed discussions and more extensive writing assignments. **No credit** if taken after PSYC 021. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: CDEV 100*

**PSYC 022 DEVELOPMENTAL PSYCHOLOGY:
THE ADULT**

3 units

Dynamics of psychological development from young adulthood through maturity and old age; sensory, motor, neurological, and cognitive changes; development of personality and social behavior through the adult life cycle; process of aging, dying, and bereavement. Total of 54 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

PSYC 023 SOCIAL PSYCHOLOGY

3 units

The individual within a social context; the scientific study of how people think about, influence and relate to one another. Topics include: attitude development and change; conformity, persuasion, leadership; and interpersonal relations, prejudice, aggression, conflict resolution, liking and loving others. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: PSYC 170*

PSYC 024 LIFESPAN DEVELOPMENTAL PSYCHOLOGY

3 units

Process and dynamics of human development from conception through adult maturity, old age, and death; biological, cognitive, personality, sociocultural, and existential factors influencing the course of psychological develop-

ment across the lifespan. Total of 54 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

**C-ID: PSY 180*

PSYC 025 HUMAN SEXUALITY

3 units

Historical, psychological, sociological and biological aspects of love, intimacy and human sexuality. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: PSY 130*

PSYC 029 PSYCHOLOGY OF THE AFRO-AMERICAN

3 units

Afro-American behavior patterns in relationship to dominant concepts in psychology. Analysis of psychological attitudes and problems of Afro-Americans resulting from racism, oppression and alienation. Total of 54 hours lecture.

Transfer Credit: CSU; UC

PSYC 031 STUDIES IN CHICANO BEHAVIOR

3 units

An examination of Mexican-American behavior patterns. Emphasis on attitudes, feelings and socio-psychological conflicts of the Mexican-American in relation to social situations. Total of 54 hours lecture.

Transfer Credit: CSU; UC

**PSYC 033 PSYCHOLOGY OF PERSONAL AND SOCIAL
ADJUSTMENT**

3 units

Dynamics of personality; problems of adjustment to life stresses, theories of therapy. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: PSY 115*

PSYC 041 PSYCHOLOGY OF THE ASIAN AMERICAN

3 units

Asian American behavior patterns in relationship to basic principles of psychology; search for identity in a multicultural society; roles of male and female in Asian American society. Total of 54 hours lecture.

Transfer Credit: CSU; UC

**PSYC 110 SKILLS FOR COLLEGE SUCCESS
IN PSYCHOLOGY**

1 unit

Development of essential study techniques for success in psychology courses; orientation to applications of computer-based technologies in psychology; time management; textbook mastery, lecture outlining, test taking, and critical analysis. Total of 18 hours lecture.

**Course Identification Numbering System (C-ID)*

PSYC 120 PARENTING

3 units

Theories of parenting. Stages of human development. Effect of family relationships on children. Specific problems related to growth and learning in children. Total of 54 hours lecture.

RADIOLOGIC TECHNOLOGY

(Health Sciences Division)

RDTC 100 BASIC RADIOLOGIC TECHNOLOGY PRACTICES

2 units

Prerequisites: PYSO 002A and B within 3 years, and completion of MA 115 within one year of acceptance in Radiological Technology Program.

Corequisite: RDTC 101.

Radiologic technology as a profession. Responsibilities of the radiologic technologist regarding ethics and the patient's emotional needs. Patient consents. Developing introductory positioning skills using anatomical landmarks, role-play in chest radiography. Total of 18 hours lecture and 18 hours laboratory.

RDTC 101 MEDICAL PROCEDURES FOR THE TECHNOLOGIST

3 units

Prerequisites: Valid CPR card and PYSO 002A and B.

Corequisite: RDTC 100.

Physical needs of the X-ray patient with emphasis on aseptic technique, required preparations and ECG procedure. Responsibilities of the technologist during first aid and crash cart procedure. CPR review. **Eight weeks.** Total of 24 hours lecture and 24 hours laboratory.

RDTC 102 RADIATION PROTECTION

3 units

Prerequisites: RDTC 100 and 101.

Corequisites: RDTC 103A, 110, 112A, 117A.

Radiologic protection for operator and patients complying with the State of California Administrative Code, Title 17. Use of X-ray equipment, X-ray machine circuitry with emphasis on devices and techniques to reduce ionizing radiation. Total of 54 hours lecture.

RDTC 103A RADIOGRAPHIC ANATOMY AND POSITIONING

3¹/₂ units

Prerequisites: RDTC 100 and 101.

Corequisites: RDTC 102, 110, 112A, 117A.

Positioning nomenclature, topographic anatomy emphasizing surface landmarks to locate organs within each body region. Positioning by use of phantoms. Radiography of the skeleton, thoracic cavity and abdominal cavity. Anatomy and positioning of the gastrointestinal and biliary tracts. Basic mobile radiography. Radiography of pediatric, geriatric and psychiatric patients. Types of contrast media. Total of 45 hours lecture and 72 hours laboratory.

RDTC 103B RADIOGRAPHIC ANATOMY AND POSITIONING

3¹/₂ units

Prerequisites: All of the following: RDTC 102, 103A, 110, 112A, 117A.

Corequisites: RDTC 104, 112B, 117B.

Anatomy and positioning of the cervical, thoracic and lumbar spines, the salivary glands and skull. Anatomy and positioning of the genitourinary tract. Principles of tomography equipment. Opaque media, drug side effects and indications. Use of phantoms. Emphasis on skull positioning. Radiograph critique. Total of 45 hours lecture and 72 hours laboratory.

RDTC 103C RADIOGRAPHIC ANATOMY AND POSITIONING

3 units

Prerequisites: RDTC 103B and 119.

Corequisites: RDTC 105, 111, 117C.

Identification of sectional anatomy concentrating on brain, neck, thorax, abdomen, and pelvis, including the cervical, thoracic and lumbar spines. Correlation of axial, sagittal and coronal sections to positioning in CT scanning and some MRI scanning. Total of 54 hours lecture.

RDTC 104 PRINCIPLES OF RADIOGRAPHIC EXPOSURE

3 units

Prerequisites: All of the following: RDTC 102, 103A, 110, 112A, 117A.

Corequisites: RDTC 103B, 112B, 117B.

Development and use of technique charts. Calculations to determine specific exposures. Processing techniques and other factors affecting radiographic quality. Use radiographic phantoms and accessory devices. Total of 36 hours lecture and 54 hours laboratory.

RDTC 105 SPECIAL RADIOGRAPHIC PROCEDURES

3 units

Prerequisites: RDTC 119.

Corequisites: RDTC 103C, 111, 117C.

Specialized technical procedures in radiography. Angiogram, equipment and accessories. Anatomy and physiology of involved areas. Emphasis on myelography, selective angiography and the technologist as part of the special procedures team. Total of 54 hours lecture.

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RDTC 110 PROFESSIONAL ETHICS**2 units****Prerequisites:** *RDTC 100 and 101.***Corequisites:** *RDTC 102, 103A, 112A, 117A.*

Integration of interpersonal skills while analyzing the medicolegal issues, professional and ethical values in radiologic technology. Total of 36 hours lecture.

RDTC 111 COMPUTERIZED IMAGING**2 units****Prerequisites:** *RDTC 119.***Corequisites:** *RDTC 103C, 105 and 117C.*

Principles, components and functions of computerized imaging systems with emphasis on the application of computers in the radiology department. Brief introduction to computed tomography, magnetic resonance imaging. Total of 36 hours lecture.

RDTC 112A RADIOLOGIC PHYSICS**3 units****Prerequisites:** *RDTC 100 and 101.***Corequisites:** *RDTC 102, 103A, 110, 117A.*

Fundamentals of electrical and radiation physics. Emphasis on principles underlying optics, electromagnetic and other types of ionizing radiation. Total of 36 hours lecture and 54 hours laboratory.

RDTC 112B RADIOLOGIC PHYSICS**3 units****Prerequisites:** *All of the following: RDTC 102, 103A, 110, 112A, 117A.***Corequisites:** *RDTC 103B, 104, 117B.*

Function and use of basic radiologic physics in diagnostic radiology. Applied physical rules and laws in general physics, production of the X-ray beam, tubes and generators, circuitry and equipment. Quality assurance of special equipment. Total of 36 hours lecture and 54 hours laboratory.

RDTC 113A CLINICAL LEARNING EXPERIENCE**2 units****Prerequisites:** *All of the following: RDTC 102, 103A, 112A, 117A.*

Intermediate Clinical Learning Experience in a Radiology Department of an affiliate hospital or medical center under the supervision of a licensed Radiologic Technologist. Participation will include observation, assistance and performance in basic radiographic procedures. Clinical practice shall be designed to provide standard patient care and assessment, integration and application of radiographic procedures learned during the first semester, which include the upper and lower limbs, and the gastrointestinal tract. **Short term course.** Total of 96 hours laboratory.

RDTC 113B CLINICAL LEARNING EXPERIENCE**6 units****Prerequisites:** *All of the following: RDTC 103C, 105, 111, 113A, 117C.*

Intermediate clinical learning Experience that is designed for sequential development, application, integration, synthesis and evaluation of concepts and theories in the performance of radiographic procedures. Clinical practice shall be designed to provide patient care and assessment, competent performance of basic and advance radiographic procedures under the appropriate level of supervision of a licensed Radiologic Technologist, and enhance professional development. **Short term course.** Total of 192 hours of laboratory.

RDTC 116 PERSPECTIVES IN RADIOLOGIC TECHNOLOGY**2 units****Prerequisites:** *All of the following: RDTC 103C, 105, 111, 117C.***Corequisites:** *RDTC 117D; 118; and either RDTC 121 or 123.*

Utilization of advanced concepts, principles and skills of the radiologic technologist in an affiliated hospital as an extension of and related to classroom instruction. Emphasis on film critique. Total of 36 hours lecture.

RDTC 117A CLINICAL EXPERIENCE**2 units****Prerequisites:** *All of the following: RDTC 100, 101, valid CPR card.***Corequisites:** *RDTC 102, 103A, 110, 112A.*

Clinical experience in a radiology or medical imaging facility under the supervision of a licensed Radiologic Technologist. Participation will consist of observation, assistance and performance. Total of 288 hours laboratory.

RDTC 117B CLINICAL EXPERIENCE**2 units****Prerequisites:** *All of the following: RDTC 102, 103A, 110, 112A, 117A.***Corequisites:** *RDTC 103B, 104, 112B.*

Clinical experience in the radiology department of affiliated hospitals under the supervision of a licensed radiologic technologist. Total of 288 hours laboratory.

RDTC 117C CLINICAL EXPERIENCE**4 units****Prerequisites:** *All of the following: RDTC 117A, 117B, 119, valid CPR card.***Corequisites:** *RDTC 103C, 105, 111.*

Clinical experience in the radiology department of affiliated hospitals under the supervision of a licensed radiologic technologist. Total of 576 hours laboratory.

RDC 117D CLINICAL EXPERIENCE

4 units

Prerequisites: All of the following: RDC 103C, 105, 111, 117C.

Corequisites: RDC 116, 118, and either RDC 121 or 123. Clinical experience in the radiology department of affiliated hospitals under the supervision of a certified radiologic technologist. Total of 512 hours laboratory.

RDC 118 FLUOROSCOPY

3 units

Prerequisites: All of the following: RDC 103C, 105, 111, 117C.

Corequisites: RDC 116; 117D; and either RDC 121 or 123. Technical function and design of image intensification, recording monitoring systems, human anatomy and physiology of the eye. Emphasis on radiation protection and quality control testing. Total of 40 hours lecture and 15 hours laboratory.

RDC 119 CLINICAL EXPERIENCE

6¹/₂ units

Prerequisites: All of the following: RDC 103B, 104, 113A, 117B.

Clinical experience in affiliated hospitals as an extension of and related to classroom instruction, and application of disease and injury changes. Emphasis on features of conditions in X-ray examinations. **Ten weeks.** Total of 20 hours lecture and 380 hours laboratory.

RDC 120 INDEPENDENT STUDY

1 unit

Prerequisite: RDC 101.

Research or clinical project including experience in clinical practice settings, practical laboratory assignment, lecture attendance, literature review and community projects. Total of 54 hours laboratory.

RDC 121 MAMMOGRAPHIC PROCEDURES

3 units

Prerequisites: All of the following: RDC 103C; 105; 111; 117C or a valid CRT ARRT Certification certificate.

Corequisites: RDC 116, 118, 117D. For non-PCC students documentation of current California Radiologic Technology Certificate in Diagnostic Radiologic Technology and/or approved by Program Director.

Technical and procedural aspects of mammography including radiation protection, quality assurance, breast anatomy, pathology, film critique, positioning and mass localization procedures. Total of 54 hours lecture.

RDC 123 COMPUTERIZED TOMOGRAPHY

3 units

Prerequisites: All of the following: RDC 103C; 105; 111; 117C or a valid California Radiologic Technologist Certificate in Diagnostic Radiology, and/or approval from the Program Director.

Corequisites: RDC 116, 118, 117D. For non-PCC students documentation of current California Radiologic Technology Certificate in Diagnostic Radiologic Technology and/or approved by Program Director.

Principles of computed tomography, including data acquisition, image reconstruction, image display system, image recording system, and image storage system. Quality assurance aspects of CT, and basic concepts of Spiral and Helical scanning. Total of 54 hours lecture.

RELIGIOUS STUDIES

(Social Sciences Division)

RELG 001 RELIGIOUS ISSUES, PERSONALITIES AND VALUES

3 units

Origin and function of religion in its individual and sociological aspects; basic characteristics of major religions; outstanding personalities, sacred writings, historical foundations of basic religious traditions. Total of 54 hours lecture.

Transfer Credit: CSU; UC

RELG 002 COMPARATIVE RELIGIONS: FAR EAST

3 units

Cultural history and doctrinal interpretations of living religions of Far East, Hinduism, Jainism, Buddhism, Sikhism, Taoism, Confucianism and Shintoism. Brief introduction to representative dead religions; Babylonia, Egypt, Greece and Rome. Origin and nature of religion, symbolism and surviving values of scriptures. Total of 54 hours lecture.

Transfer Credit: CSU; UC

RELG 003 COMPARATIVE RELIGIONS: NEAR EAST

3 units

Cultural history and doctrinal interpretations of living religions of Near East: Zoroastrianism, Islam, Judaism and Christianity. Summary contrasts and comparisons with emphasis on present-day religious issues and their relationship to social and political problems. Total of 54 hours lecture.

Transfer Credit: CSU; UC

RESTORATIVE DENTAL TECHNOLOGY (Health Sciences Division)

RDT 125A BEGINNING CROWN AND BRIDGE

4 units

Corequisites: RDT 130A, 135A, 140A, 145, and 150.

Theory, laboratory techniques and procedures for inlay, onlay and crown fabrication; model and die fabrication, mounting patient cases to a semi-adjustable articulator, wax design of fixed restorative prosthetics, direct spruing and investing, of single inlays, crowns and onlays dental restorations. Identification of the margin in dental impressions, on stone dies, and on computer rendered (CAD) images or designs generated from a digital impression scan. Esthetics, basic occlusal factors, tooth contour and anatomy of single tooth restorations as both a computer-aided-design (CAD) rendering and as a manual design. Total of 36 hours lecture and 108 hours laboratory. **Formerly** DLT 114A.

RDT 125B ADVANCED CROWN AND BRIDGE

5 units

Prerequisites: RDT 125A or the equivalent knowledge and experience.

Corequisites: RDT 130B, 135B, 140B, 155, and 160.

Theory, techniques and laboratory procedures for advanced crown and bridge fabrication. Emphasis on principles of fixed partial denture (FPD)/bridge design for esthetics, function, sanitation and comfort. Abutment theory, pontic designs and bridge retainer designs in both wax and by using computer-aided-design (CAD) software, laboratory procedures related to the lost wax process, casting, metal finishing and polishing for both single and multiple unit/tooth fixed restoration prosthetics. Laboratory projects include design and fabrication of a multiple unit/tooth simulated patient case with an FPD with a semi-precision (broken-stress) attachment, post/core telescopic crown restoration mounted on a semi-adjustable articulator, dental alloy soldering procedures for bridge connectors and crown repairs. Reinforcement of techniques taught in the basic Crown and Bridge curriculum with emphasis on productivity, time management and quality requirements. **Maximum credit** for RDT 125B and DLT 114B is 5 units. Total of 36 hours lecture and 162 hours laboratory. **Formerly** DLT 114B.

RDT 130A BEGINNING COMPLETE DENTURES

4 units

Corequisites: RDT 125A, 135A, 140A, 145, and 150.

Infection control procedures as they pertain to removable prosthetics. Theory and related laboratory procedures for fabricating preliminary and master casts followed by custom edentulous impression trays, record bases, and occlusion rims. Will learn how to use the semi-adjustable articulator for mounting denture master casts following the arbitrary mount method and incorporating condylar

guidance as well as anterior guidance. Denture tooth selection, esthetic arrangement and set up of a complete set of maxillary and mandibular denture teeth into bilateral balance functional occlusion followed by anatomic wax up of the gingival architecture. Total of 36 hours lecture and 108 hours laboratory. **Formerly** DLT 113A.

RDT 130B ADVANCED COMPLETE DENTURES

5 units

Prerequisites: RDT 130A or the equivalent knowledge and experience.

Corequisites: RDT 125B, 135B, 140B, 155, and 160.

Theory and laboratory techniques for processing bilaterally balanced complete dentures to include: flasking (investing), boil-out, packing, compression and heat-curing techniques, denture recovery and occlusal adjustments, remounting procedures, selective grinding of opposing complete dentures to incorporate protrusive, bilateral balance, and correction of vertical errors, as well as finishing and polishing complete dentures to completion. Semi-adjustable articulators will be employed during these processing steps. Additional laboratory procedures include: characterizing denture base resins, repairing individual denture teeth and fractures in denture bases utilizing cold cure techniques, relining and rebase procedures for ill-fitting complete dentures, dentures opposing natural dentition, immediate dentures, cast metal denture bases, tooth-borne overdentures utilizing computer-aided-design (CAD) software, and techniques to duplicate dentures and fabricate a surgical template. **Maximum credit** for DLT 113B and RDT 130B is 5 units. Total of 36 hours lecture and 162 hours laboratory. **Formerly** DLT 113B.

RDT 135A BEGINNING DENTAL ANATOMY

2.5 units

Corequisites: RDT 125A, 130A, 140A, 145, and 150.

Introductory anatomy of the oral cavity to include: classifications of dentition, permanent and deciduous dentition, dental arch and quadrants, as well as names of teeth, three tooth numbering/notation systems and supporting structures of teeth: periodontium, alveolar process, and gingiva. Dental structures; crown and root, enamel and dentin, pulp and pulp cavity as well as dental nomenclature; terms for tooth surfaces, division of crowns and roots into horizontal and longitudinal thirds, combining terms of orientation, line and point angles for anterior and posterior teeth, distinctive crown convexities and elevations as well as distinctive crown concavities or depressions, geometric crown forms, contact areas and embrasures as well as individual tooth anatomy for maxillary and mandibular anterior teeth. Laboratory lectures and activities will include wax-carving exercises of anterior incisor teeth, intra-arch alignment, inter-arch relationships, facial and lingual contours, proximal surfaces, marginal ridges and interproximal contacts as well as centric (functional) and non-centric cusps, axial transitional lines and tooth designing activi-

ties using wax on mounted maxillary and mandibular models made of dental stone as well as designing activities using Computer-Aided-Design CAD software. **Maximum credit** for DLT 116A and RDT 135A is 2.5 units. Total of 27 hours lecture and 54 hours laboratory. **Formerly** DLT 116A.

RDT 135B INTERMEDIATE DENTAL ANATOMY **2.5 units**

Prerequisites: *RDT 135A or the equivalent knowledge and experience.*

Corequisites: *RDT 125B, 130B, 140B, 155, and 160.*

Principles of posterior tooth anatomy, detailed sculpting and designing of selected posterior premolars and molars using wax carving blocks and computer-aided-design (CAD) software. Emphasis on the morphology of the five tooth surfaces, anatomy of the root, and detailed occlusal anatomy for all permanent posterior maxillary and mandibular premolar and molar teeth. To include dental anatomy nomenclature, development of the teeth, variations and anomalies, and fabrication methods for the interim or provisional fixed prosthesis as well as preparing and mounting dental casts to an articulator and anatomic tooth drawings of posterior teeth. **Maximum credit** for DLT 116B and RDT 135B is 2.5 units. Total of 27 hours lecture and 54 hours laboratory. **Formerly** DLT 116B.

RDT 140A BEGINNING DIGITAL DENTISTRY CAD CAM I **1.5 units**

Corequisites: *RDT 125A, 130A, 135A, 145, and 150.*

Introduction to the concept of digital dentistry: its applications, advantages and limitations. Computer-aided-design (CAD) and computer-aided-manufacture (CAM) system components and how they are related. Laboratory projects include using case manager software to set up new patient cases, importing scanned STL digital data/files into 3-D design software, and using digital design tools and icons. Emphasis on step-by-step laboratory procedures associated with the digital design of fixed single tooth full crown dental prostheses using the laboratory scanner and computer-aided-design (CAD) software. For example, morphing tools, using the virtual articulator, digital manipulation, identifying margins on a 3-D rendering, rotation tool, path of insertion, tooth anatomy, calibration of the scanner and use of various milling materials. Students are expected to have a general understanding of Microsoft Windows, importing/exporting files and Microsoft Power Point. **Required** field trips. Total 9 hours lecture and 54 hours laboratory.

RDT 140B INTERMEDIATE DIGITAL DENTISTRY **CAD CAM II**

1.5 units

Prerequisites: *RDT 140A or the equivalent knowledge and experience.*

Corequisites: *RDT 125B, 130B, 135B, 155, and 160.*

Course will explore various computer-aided-manufacture

(CAM) milling machinery (wet and dry, various axes), milling materials, and their applications for the digital fabrication dental prostheses. Emphasis on learning to operate and maintain a milling unit, exporting .stl files to CAM software, using digital design software to generate digital designs of a fixed partial denture (FPD), interim FPD, FPD substrate and digital denture, and setting up patient cases in Dental Manager software. Students are expected to have a general understanding of Microsoft Windows, importing/exporting files and Microsoft Power Point. **Required** field trips. Total 9 hours lecture and 54 hours laboratory.

RDT 145 DENTAL MATERIALS **2 units**

Corequisites: *RDT 125A, 130A, 135A, 140A, and 150.*

Overview of the history of dentistry: its milestone developments. The role of the American Dental Association (ADA) Council on Dental Materials and Devices, American National Standards Institute (ANSI), Food and Drug Administration (FDA) and U.S. Bureau of Standards as they relate to dental materials standards for manufacturing, patient safety, infection prevention and control as well as safe storage requirements. The composition, characteristics, chemical composition, physical and biological requirements, and uses of gypsum products, dental waxes, impression materials, denture base materials, metals used in dentistry, dental porcelains, separating materials, fluxes and antfluxes, alcohols and acids (pickling solutions), wax solvents, abrasive (polishing agents), laboratory gases and some miscellaneous materials as they apply to the fabrication of dental prostheses. Total of 36 hours lecture. **Formerly** DLT 109.

RDT 150 DENTAL COMMUNICATION AND WORKPLACE **READINESS SKILLS**

0.5 units

Corequisites: *RDT 125A, 130A, 135A, 140A, and 145.*

Emphasis on the traits expected of a dental/oral health care professional that constitute professionalism and workplace readiness needed for success in a dental setting with a focus on specific skills needed for working in fixed and removable restorative dental laboratories. Included are skills in communicating professionally with dental colleagues in a dental office or operator or when in the presence of the dentist or a patient. Verbal and nonverbal communication skills, business telephone etiquette, written communication skills, and technology and voice mail etiquette will be studied. Job interview skills are included. Total of 9 hours of lecture.

RDT 155 ANATOMY OF ORAL AND FACIAL **STRUCTURES**

1 unit

Prerequisites: *RDT 145 and 150 or the equivalent knowledge and experience.*

Corequisites: *RDT 125B, 130B, 135B, 140B, and 160.*

Anatomical structures of the human head (skull) and face as well as intraoral anatomy in relation to the fabrica-

tion of fixed and removable restorative dental prostheses. Overview of human anatomy to include: body planes, bony elevations, bone depressions and channels, and joints. Detailed emphasis of the bony anatomy of the skull, muscles of mastication, depressor muscles of the mandible, muscles of facial expression, intraoral soft tissue anatomy, and structures of the temporomandibular joint. **Maximum credit** for DLT 115 and RDT 155 is 1 unit. Total of 18 hours lecture. **Formerly** DLT 115.

RDT 160 DENTAL CALCULATIONS, WEIGHTS AND MEASURES

0.5 units

Prerequisites: RDT 145 and 150 or the equivalent knowledge and experience.

Corequisites: RDT 125B, 130B, 135B, 140B, and 155.

Various weight and measure systems commonly used in a fixed and removable restorative dental laboratory. Included are specific dental calculations, metal alloy formulations, use of instruments, conversions, gauges, and scales for restorative dental laboratory operations and procedures. Measures of temperature, length, liquid volume, and gauge thickness. Total 9 hours lecture.

RDT 225A BEGINNING REMOVABLE PARTIAL DENTURES (RPDs)

4 units

Prerequisites: RDT 125B, 130B, 135B, 140B, 145, 150, 155, and 160 or the equivalent knowledge and experience.

Corequisites: RDT 230A, 235A, 240, 245, and 250.

Laboratory techniques and procedures required for the fabrication of chrome-cobalt removable partial denture (RPD) frameworks. Emphasis is on designing rationale and correct application of various RPD components (major and minor connectors as well as direct and indirect retentive clasp designs). Laboratory projects include; model preparation, fabrication of refractory casts, custom dentulous impression trays, principles of surveying and designing as well as the usage of the dental surveyor instrument, determination of the correct path of insertion for an RPD, as well as spruing, investing, burnout and induction casting procedures. Total of 36 hours lecture and 108 hours laboratory. **Formerly** DLT 119A.

RDT 225B ADVANCED REMOVABLE PARTIAL DENTURES (RPDs)

3 units

Prerequisites: RDT 225A, 240, 245, and 250 or the equivalent knowledge and experience.

Corequisites: RDT 230B, 235B, 255, 260, and 265.

Laboratory procedures and theory for seating metal chrome-cobalt RPD castings to their respective master casts. Included are laboratory procedures for performing necessary adjustments to the occlusion, metal finishing and polishing, as well as artificial tooth arrangements and denture base waxing, flasking procedures, wax elimination

(boil out) and processing. Laboratory projects include RPD denture base relining procedures, various repairs to tooth and denture base fractures as well as electric and torch soldering of metal fractures and warped areas, as well as design and fabrication of an injection molded flexible RPD. Designing of a digital RPD using computer-aided-design (CAD) design software and overview of laboratory procedures for fabricating a Swing-Lock RPD. **Maximum credit** for DLT 119B and RDT 225B is 3 units. Total of 18 hours lecture and 108 hours laboratory. **Formerly** DLT 119B.

RDT 230A BEGINNING DENTAL CERAMICS

5 units

Prerequisites: RDT 125B, 130B, 135B, 140B, 145, 150, 155, and 160 or the equivalent knowledge and experience.

Corequisites: RDT 225A, 235A, 240, 245, and 250.

Complex model and die preparation and cast evaluation for metal-ceramic, pressed, and milled ceramic cases, physical characteristics of dental porcelain, metal-ceramic terminology, and components of the metal-ceramic restoration. Design and construction of single unit/tooth substructures (substrates) for metal-ceramic restorations as well as pressed and milled ceramic restorations utilizing computer-aided-design (CAD) and computer-aided-manufacture (CAM) technologies as well as traditional analog lost wax technology and analysis of bonding mechanisms at the interface between the metal substructure and porcelain as well as difference between pressable ceramic and conventional porcelain systems. Laboratory procedures include: fabrication of pressed ceramic restorations, designing both metal and milled substrates, metal finishing techniques for various metal substructures, oxidation and metal cleansing procedures, basic porcelain application techniques up through opaque application and firing procedures for opaque cycles. **Maximum credit** for DLT 118A and RDT 230A is 5 units. Total of 36 hours lecture and 162 hours laboratory. **Formerly** DLT 118A.

RDT 230B ADVANCED DENTAL CERAMICS

5 units

Prerequisites: RDT 230A, 240, 245, and 250 or the equivalent knowledge and experience.

Corequisites: RDT 225B, 235B, 255, 260 and 265.

Theory and laboratory techniques for fabricating metal-ceramic crown and multi-unit fixed partial denture (FPD) restorations. Multi-unit substrate designs using traditional analog/manual wax design technique and also using computer-aided-design (CAD) software, application of discreet layers of opaque, dentin and enamel to substrates, various porcelain build-up or sculpting techniques, porcelain contouring, extrinsic staining, corrections and additions. Fabrication of porcelain shoulder or porcelain butt margins and porcelain laminate veneers. Pre-soldering procedures, various casting procedures, and metal finishing and preparation of multi-unit substrates for porcelain. Color science, shade verification, staining and glazing procedures. Metal-

lurgy of base metal, noble metal, and high noble alloys. Porcelain chemistry and manufacture of metal-ceramic, all ceramic, milled and pressed porcelain systems as well as the coefficient of thermal expansion (CTE) and its limitations for each material. Firing procedures using the porcelain furnace and inputting firing parameters into the furnace. **Maximum credit** for DLT 118B and RDT 230B is 6 units. Total of 36 hours lecture and 162 hours laboratory. **Formerly** DLT 118B.

RDT 235A FUNCTIONAL OCCLUSION AND ARTICULATOR INSTRUMENTATION

2.5 units

Prerequisites: *RDT 125B, 130B, 135B, 140B, 145, 150, 155, and 160 or the equivalent knowledge and experience.*

Corequisites: *RDT 225A, 230A, 240, 245, and 250.*

Course focuses on the physiology of functional mandibular movement and advanced articulator instrumentation. Topics include; basic terminology/nomenclature associated with the study of occlusion, cusp positions in Maximum Intercuspation (MI) including cusp-to-marginal ridge and cusp-to-fossa patterns of occlusion, mandibular movements, functional articulations, types of articulator instruments (hinge, semi-adjustable, and fully adjustable), and parts of a semi-adjustable articulator instrument. Laboratory projects include working with various jaw relationship records (checkbites) and the facebow transfer as well as how to use them to mount maxillary and mandibular casts to a semi-adjustable articulator and incorporating correct settings for condylar and anterior guidances. The fully adjustable articulator instrument and its associated occlusal records such as, pantographs, axiographs, and various facebows will also be introduced. Total of 27 hours lecture and 54 hours laboratory. **Formerly** DLT 116C.

RDT 235B ADVANCED FUNCTIONAL OCCLUSION AND BIOMECHANICS OF THE MASTICATORY SYSTEM

2.5 units

Prerequisites: *RDT 235A, 240, 245, and 250 or the equivalent knowledge and experience.*

Corequisites: *RDT 225B, 230B, 255, 260 and 265.*

Course is an intense study of the components of the stomatognathic system and how each corresponds to functional occlusion. A detailed review of the functional components of anterior and posterior teeth, analysis of the difference between malocclusion, normal occlusion, and adaptive occlusion, and learning skills in eliminating centric and excursive interferences and learning the impact interferences have on functional occlusion. Occlusal disharmony including bruxing and its impact on functional occlusion, a thorough review of the vertical and horizontal determinants of occlusal morphology and how they guide design of an optimum functional occlusion. Nomenclature and precision waxing techniques will be practiced. Laboratory projects will involve learning to design and recognize

various functional occlusion types: bilaterally balanced, unilaterally balanced, cusp-fossa and mutually protected occlusions. Total of 27 hours lecture and 54 hours laboratory. **Formerly** DLT 116D.

RDT 240 ADVANCED DIGITAL DENTISTRY CAD CAM III **1.5 units**

Prerequisites: *RDT 140B, or the equivalent knowledge and experience.*

Corequisites: *RDT 225A, 230A, 235A, 245, and 250.*

Course focuses on rapid prototype 3-D printing; laser sintered technology and generative computer-aided-manufacturing (CAM) processes. Included are usage of 3-D software to create orthognathic study casts, 3-D fabrication of laboratory models and dies, operation and maintenance of the 3-D printer, and generating transferable files in .stl format that will be exported to the 3-D Printer. Laboratory projects include: introductory design processes for fabrication of a digital removable partial denture (RPD) using RPD Design software, using Real View Engine software to assist in viewing the patient's facial landmarks and smile design options, as well as a preview of Orthodontic Appliance Design software and Implant Studio software. Total of 9 hours lecture and 54 hours laboratory.

RDT 245 ORTHODONTICS AND PEDODONTICS

3 units

Prerequisites: *RDT 125B, 130B, 135B, 140B, 145, 150, 155, and 160 or the equivalent knowledge and experience.*

Corequisites: *RDT 225A, 230A, 235A, 240, and 250.*

Basic principles and laboratory procedures for the fabrication of digital and stone orthognathic study casts (models) that meet with criteria as set forth by the American Board of Orthodontics (ABO). Design and fabrication of orthodontic and pedodontic fixed and removable appliances with emphasis on design and wire contouring of various types of arch wires, clasps and springs, working with autopolymerizing acrylic resin, laser welding and torch soldering procedures, as well as minor repairs. Laboratory projects include active and passive removable appliances such as the Hawley retainer, fixed space maintainer, arch expanders, inclined plane, space-closing or space-regaining appliances with expansion screws, and tooth stabilization holding appliances. Included is fabrication of an interim removable partial denture (RPD) stay plate with wrought/stainless steel wire clasps. **Maximum credit** for DLT 117 and RDT 245 is 3 units. Total of 27 hours lecture and 81 hours laboratory. **Formerly** DLT 117.

RDT 250 LABORATORY BUS. MGMT/ ADMIN, LEGALITIES, ETHICS AND JURISPRUDENCE

1 unit

Prerequisites: *RDT 125B, 130B, 135B, 140B, 145, 150, 155, and 160 or the equivalent knowledge and experience.*

Corequisites: *RDT 225A, 230A, 235A, 240, and 245.*

Course emphasizes ethics, laws, federal and state regulations, and industry organizations governing the practice of

restorative dental laboratory technology and the professional relationship of dentists and dental technologists. Introduction to managerial skills required for the operation of a dental laboratory business including development of the components of a business plan, marketing plan, business management/organizational plan and human resource management system. Studies will include an introduction to the use of computerized dental laboratory business management software. State and national professional dental technology organizations, the Certified Dental Technician (CDT), Recognized Graduate (RG), and Certified Dental Laboratory application requirements and procedures, benefits, and continuing education requirements. **Maximum credit** for DLT 124 and RDT 250 is 2 units. Total of 18 hours lecture. **Formerly** DLT 124.

RDT 255 INTRODUCTION TO DENTAL IMPLANTS **2 units**

Prerequisites: *RDT 240, 245, and 250 or the equivalent knowledge and experience.*

Corequisites: *RDT 225B, 230B, 235B, 260 and 265.*

Introduction to dental implants, their historical development, the concept of osseointegration, overview of the steps involved in implant surgery and laboratory procedures for fabricating single tooth fixed implant prosthetics. Implant material choices, nomenclature related to implantology, and the many components of an implant system. Laboratory procedures and fabrication of the radiographic stent, surgical guide template, master cast, articulation to a semi-adjustable articulator, use of the articulator during fabrication of implant prostheses, and provisional or interim implant prostheses will be practiced. Focus on fabrication of single-unit/tooth cement-retained and single-unit/tooth screw-retained implant prostheses. Course includes an overview of digital computer-aided-design (CAD) for implant prosthetics using Implant Studio software and a preview of implant-retained removable dentures, hybrid dentures, and a bar (Hader) and clip retained overdenture. **Required** field trips. Students are expected to drive their own vehicle to implant laboratories during field trips. Total of 18 hours lecture and 54 hours laboratory.

RDT 260 TRANSITION TO THE RESTORATIVE DENTAL TECHNOLOGY PROFESSION

1.5 units

Prerequisites: *RDT 240, 245, and 250 or the equivalent knowledge and experience.*

Corequisites: *RDT 225B, 230B, 235B, 255, and 265.*

A review of nomenclature, concepts, dental materials, health and safety and infection prevention and control protocols, dental anatomy, articulator instrumentation and the facebow transfer, as well as laboratory techniques and procedures studied across the sub specialties throughout the two-year Restorative Dental Technology Program. Development of critical thinking skills and judgments as well as practical performance of laboratory skills practiced

in commercial dental laboratories such that students may transition from being student technicians to certified technologists. Included is an overview of dental technology organizations and the certification process as well as an introduction of the government organizations that govern the practice of restorative dental technology. Course is also open to professional dental technologists already in commercial dental laboratories to serve as a refresher. Prepares graduates for written and practical components of the Certified Dental Technician Examination given by the National Bureau for Certification in Dental Technology. Course may also be taken for possible job advancement. Total of 9 hours lecture and 54 hours laboratory. **Formerly** DLT 126.

RDT 265 CLINICAL EXPERIENCE

3 units

Prerequisites: *RDT 240, 245, and 250 or the equivalent knowledge and experience.*

Corequisites: *RDT 225B, 230B, 235B, 255, and 260.*

Emphasis is on having the student demonstrate and practice skills in restorative dental technology procedures in a commercial dental laboratory or dental laboratory setting. Will include participating in the fabrication of dental prostheses for patients currently under treatment or from actual casts or impressions and occlusal jaw relationship records from previously fabricated prostheses. Completion of a Personal Portfolio to include resume, sample letters, sample of laboratory projects, photo documentation of laboratory work, and letters of recommendation. Completion of detailed Work Journals and signed Attendance Sheets at laboratories is required. It is expected that students shall provide their own private transportation to clinical laboratory sites. **Maximum credit** for DLT 125 and RDT 265 is 3.5 units. Total of 18 hours lecture and 108 hours laboratory. **Formerly** DLT 125.

RUSSIAN

(Languages Division)

RUSS 001 ELEMENTARY RUSSIAN

5 units

Pronunciation, reading, writing and speaking. Introduction to Russian geography, history and culture. Corresponds to first year of high school Russian. Total of 90 hours lecture. *Transfer Credit: CSU; UC*

RUSS 002 ELEMENTARY RUSSIAN

5 units

Prerequisite: *RUSS 001, or the first year of high school Russian, or placement based on the foreign language assessment process.*

Grammar essentials; oral work; aspects of Russian history and culture. Total of 90 hours lecture.

Transfer Credit: CSU; UC

RUSS 003 INTERMEDIATE RUSSIAN

5 units

Prerequisite: *RUSS 002 or two years of high school Russian or placement based on the foreign language assessment process.*

Development of communication skills based on contemporary Russian readings; review of basic structure of Russian. Customs and culture. Total of 90 hours lecture.

Transfer Credit: CSU; UC

RUSS 004 INTERMEDIATE RUSSIAN

5 units

Prerequisite: *RUSS 003 or three years of high school Russian or placement based on the foreign language assessment process.*

Further development of communication skills based on contemporary Russian readings; finish review of basic structure of Russian. Customs and culture. Total of 90 hours lecture.

Transfer Credit: CSU; UC

RUSS 011 RUSSIAN CIVILIZATION

3 units

History, geography, language, literature and music; customs of the Soviet Union. (Course conducted in English.) Total of 54 hours lecture.

Transfer Credit: CSU; UC

RUSS 150A RUSSIAN FOR BUSINESS AND TRAVEL

2 units

Practical conversation Russian for business and travel. Contemporary culture in Russian-speaking areas. Total of 36 hours lecture.

RUSS 150B RUSSIAN FOR BUSINESS AND TRAVEL

2 units

Prerequisite: *RUSS 150A or placement based on the foreign language assessment process.*

Further instruction in conversational Russian for business and travel. Contemporary culture in Russian-speaking areas. Total of 36 hours lecture.

SOCIAL SCIENCES

(Social Sciences Division)

SOSC 017 INTRODUCTION TO RESEARCH METHODS IN SOCIAL SCIENCES

3 units

Prerequisite: *SOC 001.*

Fundamental elements of empirical research and the ways in which social scientists gather, evaluate, and critique research findings. Attention to the importance of profes-

sional ethics when conducting research. Application of qualitative and quantitative analytic tools for research design, such as survey, observational, experimental, case study and comparative historical research. Total of 54 hours lecture.

Transfer Credit: CSU; UC credit under review.

SOSC 110 SKILLS FOR COLLEGE SUCCESS IN SOCIAL SCIENCES

1 unit

Development of essential study techniques for success in social science courses; orientation to computer-based technologies, time management, textbook mastery, lecture outlining, test taking, and critical analysis. Total of 18 hours lecture.

SOCIOLOGY

(Social Sciences Division)

SOC 001 INTRODUCTORY SOCIOLOGY

3 units

Human culture, social order and group memberships. Cultural growth and change; ecology, population, social institutions; group processes, social control, personality. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: SOCI 110*

SOC 002 CONTEMPORARY SOCIAL PROBLEMS

3 units

Identification and analysis of major social problems: population pressures, crime and delinquency, race relations, mental illness and health, alcoholism and drug abuse, urbanization, political responsibilities. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: SOCI 115*

SOC 014 INTRODUCTION TO ETHNIC STUDIES

3 units

An interdisciplinary course with focus on the sociological analysis of racial/ethnic relations in the U.S. It introduces core concepts, it explores the social, historical, economic and political construction of race and ethnicity, and it addresses the systematic aspect of racial/ethnic stratification. Through critical readings, individual reflections, class discussions, and documentaries students will have the opportunity to develop a solid grasp of immigration issues, colorblindness, white privilege, social & racial justice, and the intersectionality of race, class, and gender. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: SOCI 150*

*Course Identification Numbering System (C-ID)

SOC 015 CRIME, DELINQUENCY AND SOCIETY**3 units**

Analysis of crime theories, social control, and punishment. Examines the sociological impact, functions, and roles of the criminal and juvenile justice systems in the U.S. Emphasis on the sociological process and impact of law enforcement, courts, and correctional components of the criminal justice and juvenile justice process. Focuses on the interaction between the citizen, the community, and the components of the justice system. Total of 54 hours lecture.

Transfer Credit: CSU; UC

SOC 016 URBAN SOCIOLOGY**3 units**

The sociological nature, causes, theories, and consequences of urbanization along with its changing scale and complexity, demographics, and ecological patterns. The quality of life in urban areas, processes of decision-making in cities, and the bearing of sociological research on public policy and community are examined. Total of 54 hours lecture.

Transfer Credit: CSU; UC

SOC 020 INDEPENDENT STUDY**1 unit**

Prerequisites: *One semester of sociology and permission of department chairperson.*

Individual projects; research techniques; written reports. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

SOC 022 SOCIOLOGY OF AGING**3 units**

Examination of the physical, psychological and sociological aspects of aging in various cultures. Methods of dealing with aging for the individual. The family and society. Elders and the law. The sociology of grief in American culture and other cultures. Total of 54 hours lecture.

Transfer Credit: CSU; UC

SOC 024 MARRIAGE AND THE FAMILY**3 units**

The family as a social institution; social, economic, legal, psychological aspects of marriage and family life; patterns of courtship, marriage and family organization. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: SOCI 130*

SOC 029 SOCIOLOGY OF THE AFRICAN-AMERICAN**3 units**

Sociological factors affecting African-American's relationships to major institutions, social movements, attitudes

and values of American culture. Total of 54 hours lecture.

Transfer Credit: CSU; UC

SOC 031 CHICANO SOCIOLOGY**3 units**

Cultural background of Mexican-American; major differences between Anglo and Mexican-American values and attitudes; past and present intercultural problems; economic, educational, political, language, family; Mexican-American contributions to the United States. Total of 54 hours lecture.

Transfer Credit: CSU; UC

SOC 041 SOCIOLOGY OF THE ASIAN AMERICAN**3 units**

Analysis of sociological factors influencing Asian American experience in American society. Evaluation of effects of living in a dual culture with concomitant stresses upon Asian American psyche. Total of 54 hours lecture.

Transfer Credit: CSU; UC

SPANISH**(Languages Division)****SPAN 001 ELEMENTARY SPANISH****5 units**

Beginning language acquisition with practice in listening, speaking, reading and writing. Introduction to customs and culture of Spain and Latin America. Corresponds to first year of high school Spanish. Total of 90 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: SPAN 100*

SPAN 002 ELEMENTARY SPANISH**5 units**

Prerequisite: *SPAN 001 or 150B, or the first year of high school Spanish, or placement based on the foreign language assessment process.*

Continuation of elementary grammar essentials; speaking, reading, listening and writing with stress on authentic language; further study of Spanish and Latin-American civilization. **No credit** if taken after SPAN 002A. Total of 90 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: SPAN 110*

SPAN 002A SPANISH FOR SPANISH SPEAKERS**5 units**

Intensive training in oral and written Spanish for those who speak it, but have had little or no formal training in the language. Improvement of oral expression; Spanish grammar; readings in contemporary Spanish prose; composition; study of Spanish and Latin American cultures. **No**

*Course Identification Numbering System (C-ID)

credit if taken after SPAN 001 or 002. Total of 90 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

SPAN 003 INTERMEDIATE SPANISH

5 units

Prerequisite: *SPAN 002 or 002A or two years of high school Spanish or placement based on the foreign language assessment process.*

Reading, writing, speaking and listening with development of communication and analytical skills based on 20th and 21st century Spanish and Latin-American readings; review of Spanish grammar; increased vocabulary. Customs and culture. Total of 90 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: SPAN 200*

SPAN 004 INTERMEDIATE SPANISH

5 units

Prerequisite: *SPAN 003 or three years of high school Spanish or placement based on the foreign language assessment process.*

Further reading, writing, speaking and listening with development of communication and analytical skills based on 20th and 21st century Spanish and Latin-American readings; review of Spanish grammar; increased vocabulary. Customs and culture. Total of 90 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: SPAN 210*

SPAN 005 INTRODUCTION TO SPANISH LITERATURE

3 units

Prerequisite: *SPAN 004 or placement based on the foreign language assessment process.*

Reading and discussion of selections from Spanish literature. Total of 54 hours lecture.

Transfer Credit: CSU; UC

SPAN 006A INTRODUCTION TO SPANISH-AMERICAN LITERATURE

3 units

Prerequisite: *SPAN 004 or placement based on the foreign language assessment process.*

Reading and discussion of selections from Spanish-American literature from the Conquest to the end of 19th Century. Total of 54 hours lecture.

Transfer Credit: CSU; UC

SPAN 006B INTRODUCTION TO SPANISH-AMERICAN LITERATURE

3 units

Prerequisite: *SPAN 004 or placement based on the foreign language assessment.*

Reading and discussion of XX Century selections from Spanish-American literature. Total of 54 hours lecture.

Transfer Credit: CSU; UC

SPAN 008A-B INTRODUCTION TO SPANISH CONVERSATION

4 units

Prerequisite: *SPAN 002 or two years of high school Spanish or placement based on the foreign language assessment process.*

Practice in oral self-expression and understanding spoken Spanish. **No credit** if taken after SPAN 003 or SPAN 009A-C. **For** non-native speakers of Spanish. **Each course** 2 units, and a total of 36 hours lecture.

Transfer Credit: CSU

SPAN 009A-C SPANISH CONVERSATION

6 units

Prerequisite: *SPAN 003 or three years of high school Spanish or placement based on the foreign language assessment process.*

Intensive practice in oral expression and comprehension of spoken Spanish. **Each course** 2 units, and a total of 36 hours lecture.

Transfer Credit: CSU; UC

SPAN 012 SPANISH LITERATURE IN TRANSLATION

3 units

Prerequisite: *Eligibility for ENGL 001A.*

Reading and discussion of major works of Spanish or Latin American literature in translation from different historical periods. Selections will be made from different genres: novel, drama, poetry and the essay. Students will learn to identify the unique traits of each work and become acquainted with the historical, cultural and artistic influences on them. (Course conducted in English.) Total of 54 hours lecture.

Transfer credit: CSU; UC

SPAN 025 SPANISH COMPOSITION

3 units

Prerequisite: *SPAN 004 or placement based on the foreign language assessment process.*

Practice in writing Spanish with appropriate vocabulary, syntactical structures and stylistic patterns. Emphasis on written expression that is grammatically correct, lexically sophisticated and rhetorically competent. Production of coherent expository prose. Total of 54 hours lecture.

Transfer Credit: CSU; UC

SPAN 031 LANGUAGE OF THE BARRIO

3 units

Prerequisite: *SPAN 001 or Spanish conversational ability.* Study of the language that is used in the Mexican-Ameri-

*Course Identification Numbering System (C-ID)

can barrios. Emphasis given to how language reflects the uniqueness of the community. Total of 54 hours lecture.
Transfer Credit: CSU

SPAN 042A CIVILIZATION OF SPAIN AND PORTUGAL
3 units

Lectures and discussions on the geography, history and institutions of Spain and Portugal; life and customs, literature, music and art. (Course conducted in English.) **No credit** if taken after SPAN 042 or 042B. Total of 54 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

SPAN 042B CIVILIZATION OF SPAIN AND PORTUGAL
3 units

Prerequisite: *SPAN 003 or placement based on the foreign language assessment process.*

Lectures and discussions on the geography, history and institutions of Spain and Portugal; life and customs, literature, music and art. (Course conducted in Spanish.) **No credit** if taken after SPAN 042 or 042A. Total of 54 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

SPAN 044A CIVILIZATION OF LATIN AMERICA
3 units

Geography, history, life, customs, literature, music and art of Spanish and Portuguese speaking peoples of Latin America. (Course conducted in English.) **No credit** if taken after SPAN 044 or 044B. Total of 54 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

SPAN 044B CIVILIZATION OF LATIN AMERICA
3 units

Prerequisite: *SPAN 003 or placement based on the foreign language assessment process.*

Geography, history, life, customs, literature, music and art of Spanish and Portuguese speaking peoples of Latin America. (Course conducted in Spanish.) **No credit** if taken after SPAN 044 or 044A. Total of 54 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

SPAN 050 SPANISH AND LATIN AMERICAN CINEMA
3 units

Prerequisite: *Eligibility for ENGL 001A or placement based on the foreign language assessment process.*

Introductory study of Spanish and Latin-American films. The historical evolution of cinema as an art form, with emphasis on major themes, directors and movements, including recent developments in US Latino films. (Course conducted in English). Total of 54 hours lecture.

Transfer Credit: CSU; UC

SPAN 150A SPANISH FOR BUSINESS AND TRAVEL

2 units

Practical conversational Spanish for business and travel. Contemporary culture in Spanish-speaking areas. Total of 36 hours lecture.

SPAN 150B SPANISH FOR BUSINESS AND TRAVEL

2 units

Prerequisite: *SPAN 150A, or placement based on the foreign language assessment process.*

Further instruction in conversational Spanish for business and travel. Contemporary culture in Spanish-speaking areas. Total of 36 hours lecture.

SPECIAL EDUCATION TECHNOLOGY

(Social Sciences Division)

SET 102 ADULTS WITH DISABILITIES

3 units

Exploration of the effects of disabilities and resulting functional limitations of adults on their personal relationships, behavior and roles in society. **Recommended** enrollment in or completion of PSYC 022. Total of 54 hours lecture.

SET 108 INTRODUCTION TO LEARNING DISABILITIES

3 units

Introduction to the concept of learning disabilities, the recognition of learning disorders in children and adults and the various approaches for remediating or coping with these difficulties. For individuals who have a general interest in the field of learning disabilities and/or desire to help learning disabled individuals in the classroom, home or working world. **Recommended** enrollment in or completion of PSYC 021 or 022 or SET 100. Total of 54 hours lecture.

SET 111 INTRODUCTION TO DEVELOPMENTAL DISABILITIES

3 units

Survey of developmental disabilities for which residential care facilities are designed with emphasis upon methods and strategies for behavior modification employed by residential care staff for infants, children and adults with developmental disabilities. Completion of SET 111 and SET 112 meets California Regional Center Certificate requirements. Total of 54 hours lecture.

SET 112 WORKING WITH THE DEVELOPMENTALLY DISABLED

3 units

Practical applications of principles used in the administration of residential care facilities for persons with developmental disabilities; methods of accounting, licensing,

health, safety and a review of programs available for the developmentally disabled. Completion of SET 111 and SET 112 meets California Regional Center Certificate requirements. Total of 54 hours lecture.

SPECIAL SERVICES

(Special Services Division)

SPSV 101 SPEECH-LANGUAGE LAB

1 unit

Understanding and correction of one's speech, language and communication disorders. Designed for students with disabilities who are recommended by Special Services, including Disabled Students Programs and Services (DSPS). Pass/no pass grading. **No credit** if taken after SPCH 120. Total of 54 hours laboratory. **Formerly** SPCH 120.

SPSV 480A READING FOR DEAF STUDENTS – LEVEL 1

3 units

Introduction to vocabulary building, word attack skills, and basic reading techniques. **Recommended** enrollment in SPSV 490A or ESL 490A. **No credit** if taken after ESL 432 or SPSV 480B, ENGL 415, 130, or 014. **Cannot be taken concurrently** with ESL 432, SPSV 480B or ESL 480B, ENGL 415, 130 or 014. Total of 54 hours lecture and 18 hours laboratory.

SPSV 480B READING FOR DEAF STUDENTS – LEVEL 2

3 units

Prerequisite: *ESL 480A, ESL 460, SPSV 480A, or placement based on reading assessment.*

Development of work attack skills, vocabulary, study skills and basic reading techniques. **Recommended** enrollment in SPSV 490A or SPSV 490B or ESL 490A or ESL 490B. **No credit** if taken after ESL 432, ENGL 415, 130 or 014. **Cannot be taken concurrently** with SPSV 480A or ESL 480A, ENGL 415, 130 or 014. Total of 54 hours lecture and 18 hours laboratory.

SPSV 490A ESL READING AND WRITING FOR DEAF STUDENTS – LEVEL 1

4 units

Interdisciplinary Course: ESL 490A

Intensive practice in basic English sentence structure for students who are deaf or hard-of-hearing. Introduction to spelling, punctuation, vocabulary development and English writing conventions. **Recommended** enrollment in ESL 460. **No credit** if taken after ESL 033A, 033B, 122, ENGL 001A, 001B, 001C or 100. **Cannot enroll concurrently** in

ESL 033A, 033B, 122, 420, 422, ENGL 001A, 001B, 001C, 100 or 400. **May not be taken concurrently** with or after ESL 490B, SPSV 490A or 490B. (Course conducted in American Sign Language.) Total of 90 hours lecture.

SPSV 490B ESL READING AND WRITING FOR DEAF STUDENTS – LEVEL 2

4 units

Interdisciplinary Course: ESL 490B

Prerequisite: *ESL 490A, SPSV 490A, or placement based on the ESL assessment process.*

Development of reading and writing skills for academic purposes for students who are deaf or hard-of hearing. Reading of low intermediate fiction and nonfiction; written practice in sentence patterns and compositions. **Recommended** enrollment in ESL 432. **No credit** if taken after ESL 033A, 033B, 122, ENGL 001A, 001B, 001C, 100 or 400. **Cannot enroll concurrently** in ESL 033A, 033B, 122, 420, 422, ENGL 001A, 001B, 001C, 100 or 400. **May not be taken concurrently** with or after ESL 490A, SPSV 490A or SPSV 490B. (Course conducted in American Sign Language.) Total of 90 hours lecture.

SPEECH COMMUNICATION

(Performing and Communication Arts Division)

SPCH 001 FUNDAMENTALS OF SPEECH

3 units

Principles and practices of public speaking, speech composition, organization, audience analysis and listening skills. **Recommended** proficiency in spoken English. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: COMM 110*

SPCH 001H HONORS FUNDAMENTALS OF SPEECH

3 units

Enrollment Limitation: *Acceptance to the Honors Program.* Principles and practices of public speaking, speech composition, organization, audience analysis and listening skills. **Recommended** proficiency in spoken English. Total of 54 hours lecture. **No credit** if taken after Speech 001.

Transfer Credit: CSU; UC credit under review.

**C-ID: COMM 110*

SPCH 002 PERSUASION

3 units

Recommended Preparation: *SPCH 001 or ENGL 100.*

Speech composition and organization for special speaking situations. Emphasis on persuasion and application of persuasive theory. Audience analysis and attention to development of listening skills. Total of 54 hours lecture.

Transfer Credit: CSU; UC

**Course Identification Numbering System (C-ID)*

SPCH 003 VOICE AND DICTION**3 units**

Physiological and anatomical basis of voice production and articulation. Instruction in articulation, pronunciation and vocal quality. **Recommended** proficiency in reading aloud. **For** broadcasting, drama and communication majors, but open to all qualified students. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***SPCH 004 ORAL INTERPRETATION****3 units**

Oral presentation of thought and feeling by an individual performer in various types of prose and poetry. Criticism and appreciation, analysis and evaluation. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: COMM 170***SPCH 005 FORENSICS - SPEECH AND DEBATE TEAM****3 units**

Intercollegiate competitive speaking including platform events (informative, persuasive, communication analysis); interpretation (prose, duo, poetry, poi); limited preparation (impromptu and extemporaneous); and debate (parliamentary debate). **Maximum credit** 12 units, 3 units each semester. Total of 36 hours lecture and 72 hours laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: COMM 160B***SPCH 005A FORENSICS RESEARCH AND PREPARATION (SPEECH AND DEBATE TEAM)****3 units**

Intercollegiate competitive speaking including platform events (informative, persuasive, communication analysis), interpretation (prose, duo, poetry, poi), limited preparation (impromptu and extemporaneous), and debate (parliamentary debate). **Required** instructional trips. **Maximum credit** 6 units, 3 units each semester. Total of 36 hours lecture and 72 hours laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

*Transfer Credit: CSU. *C-ID: COMM 160B***SPCH 005B OFF-SEASON FORENSICS: SPEECH AND DEBATE TEAM****1 unit**

Intercollegiate competitive speaking including platform events (informative, persuasive, communication analysis), interpretation (prose, duo, poetry, poi), limited preparation (impromptu and extemporaneous), and debate (parliamentary debate). **Required** instructional trips. Total of 54 hours laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

*Transfer Credit: CSU. *C-ID: COMM 160B***SPCH 006 ARGUMENTATION AND DEBATE****3 units**

Principles and forms of argumentation and debate. Logical analysis and reflective thinking. Adaptation of materials to audience situations. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: COMM 120***SPCH 008 READERS' THEATER****3 units**

Oral presentation of literary material with emphasis on ensemble performance using choral reading and body movement. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***SPCH 009 SMALL GROUP COMMUNICATION****3 units**

Principles of communication in a variety of group contexts. Theory, application, and evaluation of group communication processes, including problem solving, conflict management, decision making, and leadership. Total of 54 hours lecture.

*Transfer Credit: CSU. *C-ID: COMM 140***SPCH 010 INTERPERSONAL COMMUNICATION****3 units**

Principles and practices in communication and communication theories. Intrapersonal, interpersonal and small group communication. Non-verbal communication, perception-information processing, attitude change and semantics. **Recommended** proficiency in spoken English. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: COMM 130***SPCH 012 ARGUMENTATION AND CRITICAL THINKING****3 units****Prerequisite:** ENGL 001A.

Oral and extensive written analysis of propositions, tests of evidence, argumentation fields, critical analysis and interpretation and evaluation of contemporary public controversy. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: COMM 120***SPCH 013 INTRODUCTION TO SPEECH COMMUNICATION****3 units**

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. This course explores the basic history, assumptions, principles, processes, variables, methods, and specializations of human communication as an academic field of study. **Recommended** proficiency in spoken English. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: COMM 180*

**Course Identification Numbering System (C-ID)*

SPEECH-LANGUAGE PATHOLOGY ASSISTANT

(Performing and Communication Arts Division)

SLPA 018 SPEECH-LANGUAGE PATHOLOGY AND AUDIOLOGY

3 units

Prerequisite: *Eligibility for ENGL 001A.*

Introduction to the field of communication disorders. Guidelines for determining the development of normal and pathological speech. Observation in various clinical sites. **Recommended** enrollment in SPCH 003. **For** students pursuing a Certificate of Achievement in Speech-Language Pathology Assistant. Total of 54 hours lecture and 18 hours laboratory.

Transfer Credit: CSU

SLPA 119 SPEECH-LANGUAGE PATHOLOGY: PROFESSIONAL ISSUES

3 units

Prerequisite: *SLPA 018.*

Principles and procedures for management of individuals with communicative disorders with consideration for cultural and linguistic variations. Legal and ethical considerations as well as requirements for employment in various work settings, including interdisciplinary and supervisory relationships, and scope of responsibilities of a Speech-Language Assistant. Total of 54 hours lecture.

SLPA 123A COMMUNICATION DISORDERS: ASSESSMENT AND REMEDIATION

3 units

Prerequisite: *SLPA 119.*

Examination of specific disorders of communication, including their characteristics, causes and the anatomical structures and physiological muscle functions related to normal speech and language development. Assessment and screening techniques; scope of practice and role of the Speech-Language Pathology Assistant. Data collection, clinical documentation and record-keeping. **Required** for all Speech-Language Pathology Assistant majors. **No credit** if taken after SPCH 123. Total of 54 hours lecture and 18 hours laboratory.

SLPA 123B COMMUNICATION DISORDERS: REMEDIATION

3 units

Prerequisite: *SLPA 123A.*

Remediation techniques, rationale for commonly used therapeutic approaches, including assistive and computer technology. Scope of practice and role of Speech-Language

Pathology Assistant in intervention procedures including clinical documentation and appropriate use of therapeutic materials. **Required** for all Speech-Language Pathology Assistant majors. Total of 54 hours lecture and 18 hours laboratory.

SLPA 126 SPEECH LANGUAGE PATHOLOGY ASSISTANT FIELD WORK

2 units

Prerequisite: *Enrollment in or completion of SLPA 123B.*

Enrollment Limitation: *Student must have current, clear TB test and/or chest x-ray certifying health to off-campus populations which will be served and a clear DOJ Livescan for both the college and the off-campus site. Student must meet with the on-campus Instructor prior to semester of enrollment for (1) a fieldwork orientation (2) to establish a signed contract of understanding of all requirements for the off-campus experience.*

Supervised fieldwork experience assisting with the clinical management of persons with communicative disorders. Opportunities to interact with clients/patients while implementing a prescribed remedial plan, assisting with screening or evaluation under the direction of a speech-language pathologist, record keeping and managing of clinical data, setting up clinical equipment and materials, and performing various clerical duties as needed. **Pass/no pass** grading. Total of 180 hours field practice.

STATISTICS

STAT 015 STATISTICS FOR BUSINESS AND ECONOMICS

4 units

(Business Division)

Prerequisite: *MATH 131 or 133B or 134B or BUS 014A or placement based on the mathematics assessment process.*

Descriptive and inferential statistics. Collection, analysis, and presentation of business and economic data using probability techniques, hypothesis testing, and predictive strategies to facilitate decision-making. Topics include measures of central tendency, and deviation; probability and sampling distributions; statistical inference; correlation and linear regression; analysis of variance, chi square, and t-tests; and, application of technology for statistical analysis including the interpretation of the relevance of the statistical findings. **No credit** if taken after STAT 018 or 050. Total of 72 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

**C-ID: MATH 110*

*Course Identification Numbering System (C-ID)

STAT 018 STATISTICS FOR BEHAVIORAL AND SOCIAL SCIENCES

4 units

(Social Sciences Division)

Prerequisite: *MATH 131 or 133B or 134B or 141 or 150 or placement based on the statistics assessment process.*

Basic statistics for majors in anthropology, economics, psychology and sociology; tables, charts, summary measures, regression and correlation, statistical inference, sampling, variance, nonparametric and parametric tests, simple multivariate analysis; ANOVA; use of calculators and EXCEL. **No credit** if taken after STAT 015 or 050. Total of 90 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

**C-ID: SOCI 125*

STAT 050 ELEMENTARY STATISTICS

4 units

(Mathematics Division)

Prerequisite: *MATH 131 or 133B or 134B or 141 or 150 or placement based on the Math assessment process.*

Analysis of data relative to social and natural processes. Collecting, grouping and presenting numerical data by means of: frequency distributions, measures of central tendency and deviation, probability and sampling, measures of prediction and correlation, linear regression, hypothesis testing, including analysis of variance. **No credit** if taken after STAT 015 or 018. Total of 90 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

**C-ID: SOCI 125*

TECHNICAL EDUCATION (GENERAL)

(Engineering and Technology Division)

TECH 107A TECHNICAL CALCULATIONS

3 units

Review of basic arithmetic and geometric principles with application to solution of technical problems in the trades. Total of 54 hours lecture.

TECH 120 INDEPENDENT STUDY

1 unit

Prerequisite: *Completion of Career and Technical Education certificate or enrollment in last course of program sequence and permission of Division Dean.*

Individual internship, community service, field practice opportunities in technology; on-the-job experiences in selected fields. Total of 54 hours of laboratory.

TECH 196 TECHNOLOGY LABORATORY

1 unit

Opportunity for qualified students to do individual or group work in their chosen branch of technology. Total of 9 hours lecture and 27 hours laboratory.

TECH 197 TECHNOLOGY LABORATORY

2 units

Opportunity for qualified students to do individual or group work in their chosen branch of technology. Total of 18 hours lecture and 54 hours laboratory.

TECH 198 TECHNOLOGY LABORATORY

5 units

Opportunity for qualified students to do individual or group work in their chosen branch of technology. Total of 45 hours lecture and 135 hours laboratory.

TECH 199 TECHNOLOGY LABORATORY

10 units

Opportunity for qualified students to do individual or group work in their chosen branch of technology. Total of 90 hours lecture and 270 hours laboratory.

TELEVISION AND RADIO

(Performing and Communication Arts Division)

TVR 001 INTRODUCTION TO ELECTRONIC MEDIA

3 units

Recommended Preparation: *ENGL 001A.*

Overview of the telecommunications industry. History, law, business operations, economics, new technology, career opportunities and the future of the telecommunications industry. Total of 54 hours lecture.

Transfer Credit: CSU

TVR 002A BEGINNING AUDIO PRODUCTION

3 units

Introduction to the theory and practice of audio production for radio, television, film and digital recording applications. Fundamentals of sound design and aesthetics, microphone use, and digital recording equipment. Hands-on experience recording, editing, mixing and mastering audio. Basic knowledge of applied audio concepts, production workflow, equipment functions, and audio editing software. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU

TVR 002B RADIO BROADCAST MASTER CONTROL OPERATIONS

3 units

Prerequisite: *TVR 002A.*

Introduction to operation of radio broadcast master control facilities and studio control facilities, remote

**Course Identification Numbering System (C-ID)*

control systems, FCC rules and regulations, mathematical calculations relating to proper transmitter operation, program logs, remote control systems, remote pickup units, EAS system requirement, network and satellite operations, remote broadcasts and system level troubleshooting. **Recommended** ELTN 130 and high school algebra, TECH 107A or ELTN 109A. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU

TVR 004 BEGINNING SINGLE CAMERA PRODUCTION
3 units

Introduction to the theory, terminology, and techniques of single camera video production including producing and directing, content development, aesthetics, camera operation, portable lighting, video recorder operation, sound recording and basic editing techniques. Total of 36 hours lecture and 54 hours laboratory.

*Transfer Credit: CSU; UC credit under review. *C-ID: FTVE 130*

TVR 007 BEGINNING TV STUDIO PRODUCTION
3 units

Introduction to 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. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU

TVR 012 BEGINNING ANNOUNCING AND PERFORMING IN ELECTRONIC MEDIA
3 units

Recommended Preparation: *SPCH 003.*

Performance for electronic media with emphasis on voice skills, communication of personality and ideas. Techniques for various microphones and environment. Total of 54 hours lecture.

Transfer Credit: CSU

TVR 014A BEGINNING RADIO PRODUCTION
3 units

Recommended preparation: *TVR 012 and TVR 015.*

Introductory course in theory and application of audio production techniques for radio. Students will gain a basic understanding of audio equipment in both live and pre-recorded broadcasting. This includes recording equipment, mixers, digital audio production, radio program formats, broadcast writing and announcing skills. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU

TVR 014B ADVANCED RADIO PRODUCTION

3 units

Prerequisite: *TVR 014A.*

Advanced projects in production: news, public affairs, documentary and music programs. Total of 54 hours lecture and 18 hours laboratory.

Transfer Credit: CSU

TVR 015 INTRODUCTION TO MEDIA WRITING

3 units

Recommended Preparation: *ENGL 001A.*

Basic introductory course in writing for the film and electronic media. Emphasis on preparing scripts in proper formats, including fundamental technical, conceptual and stylistic issues related to writing fiction and non-fiction scripts for informational and entertainment purposes in film and electronic media. Total of 54 hours lecture.

Transfer Credit: CSU

TVR 016A TELEVISION PRODUCTION

4 units

Recommended Preparation: *TVR 007.*

Concepts and practices in scripting, producing and directing a variety of television program formats for multi-camera studio production. **Recommended** concurrent enrollment in TVR 014A. Total of 72 hours lecture and 36 hours laboratory.

Transfer Credit: CSU

TVR 016B TELEVISION PRODUCTION

4 units

Prerequisites: *TVR 007 and TVR 016A.*

Advanced television studio production. Includes such projects as interviews, music videos, and dramatic scenes. Total of 54 hours lecture and 90 hours laboratory.

Transfer Credit: CSU

TVR 017A TELEVISION AND FILM SCRIPT WRITING

3 units

Script analysis and construction. Marketing of dramatic material for television and film productions. Methods, devices and forms of script writing. Total of 54 hours lecture.

Transfer Credit: CSU

TVR 017B TELEVISION AND FILM SCRIPT WRITING

3 units

Prerequisite: *TVR 017A.*

Advanced script analysis, development and construction. Emphasis on solving problems in the writing process. Study and employment of various problem-solving approaches to rewriting and refinement of scripts. Total of 54 hours lecture.

Transfer Credit: CSU

TVR 018 RADIO AND TELEVISION NEWSWRITING**3 units**

Writing and editing radio and television news. Opportunities to participate in writing news copy for Lancer Radio and cable television. **Recommended** COMM 001 or JOUR 004A. Total of 54 hours lecture.

Transfer Credit: CSU

TVR 019 INTRODUCTION TO MEDIA AESTHETICS AND CINEMATIC ARTS**3 units**

Recommended Preparation: *Eligibility for ENGL 001A.*

An introduction to the close analysis of film, television and electronic media texts. The course will examine broad questions of form and content, aesthetics and meaning, and history and culture. Using a wide variety of TV, films, filmmakers, and film movements the course explores the diverse possibilities presented by the cinematic art form. Topics include modes of production, narrative and non-narrative forms, visual design, editing, sound, genre, ideology and critical analysis. Total of 54 hours lecture.

Transfer Credit: CSU

TVR 021 ELECTRONIC MEDIA MANAGEMENT**3 units**

Theory and practice of electronic media management. Advertising and other funding sources. **Recommended** enrollment in or completion of TVR 001. Total of 54 hours lecture.

Transfer Credit: CSU

TVR 024 ELECTRONIC NEWS GATHERING AND EDITING**3 units**

Prerequisite: *TVR 007 or 107.*

Fundamentals and aesthetics of electronic news gathering (ENG), single camera shooting style and basic editing techniques. **Recommended** TVR 018 and Phot 021. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU

TVR 041 BEGINNING DIGITAL NON-LINEAR VIDEO EDITING**3 units**

Prerequisite: *TVR 007.*

Introductory theory and application of beginning editing techniques using the Avid Editing System. Study of the editing process. Digitizing, and editing scenes. **No credit** if taken after TVR 141A. **Formerly** TVR 141A. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC credit under review.

TVR 104 LIVE SOUND REINFORCEMENT**3 units**

Recommended Preparation: *TVR 002A.*

The elements of live sound reinforcement for front of house and monitor reinforcement including design and engineering, speaker and microphone types, placement of components, equalization methods, acoustics, wiring, AC power distribution, and mixing techniques. Emphasis on system engineering, component placement and mixing. Total of 36 hours lecture and 72 hours laboratory.

TVR 107 VIDEO STUDIO CONTROLS**5 units**

Prerequisite: *TVR 007.*

Recommended preparation: *TVR 002A.*

Theory and application of television studio equipment in production: lighting, cameras, switchers, electronic graphics, digital recording, audio mixer, and video monitoring equipment. Total of 72 hours lecture and 72 hours laboratory.

TVR 108 TELEVISION OPERATIONS**4 units**

Prerequisite: *TVR 007.*

Definition, processing, distribution, and evaluation of television signals. Television system evaluation using standardized test signals and TV monitoring equipment. Total of 72 hours lecture and 18 hours laboratory.

TVR 117 TELECOMMUNICATIONS WORKSHOP**1 unit**

Prerequisite: *One of the following: TVR 002B, 014A, 016A, 107.*

Enrollment Limitation: *Instructor approval.*

Faculty-selected projects permitting advanced students to work in any field of telecommunications. Total of 54 hours laboratory.

TVR 119 RADIO WORKSHOP**3 units**

Prerequisite: *One of the following: TVR 002B, 014A.*

Faculty selected projects permitting advanced students to work in radio production and/or radio operations. Total of 162 hours laboratory.

TVR 120 RADIO WORKSHOP**2 units**

Prerequisite: *One of the following: TVR 002B, 014A.*

Faculty selected projects permitting advanced students to work in radio production and/or operations. Total of 108 hours laboratory.

TVR 124 TELEVISION FIELD PRODUCTION

3 units

Prerequisites: *TVR 016A and TVR 107.*

Television production and operations techniques associated with field production. Total of 36 hours lecture and 54 hours laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

TVR 125A TELEVISION DRAMA PRODUCTION

3 units

Prerequisite: *TVR 007 or 107.*

Techniques associated with three-camera production of dramatic scripts. Directing, blocking, scene breakdown, lighting and post-production. Production of television drama or comedy. Total of 18 hours lecture and 108 hours laboratory.

TVR 125B TELEVISION DRAMA PRODUCTION

3 units

Prerequisite: *TVR 007 or 107.*

Techniques associated with film-style production of dramatic scripts. Directing, blocking, scene breakdown, lighting and post-production. Production of television drama. Total of 18 hours lecture and 108 hours laboratory.

TVR 128A TV OPERATIONS INTERNSHIP

1 unit

Prerequisites: *TVR 107 and maintain enrollment in 7 units or more including internship.*

Supervised, practical experience in an industry related professional environment. **Pass/no pass** grading. **May not be taken concurrently** with TVR 128B, C, D, E, F or TVR 129A, B, C, D, E, F. Total of 90 hours field practice.

TVR 128B RADIO OPERATIONS INTERNSHIP

1 unit

Prerequisites: *TVR 002B and maintain enrollment in 7 units or more including internship.*

Supervised, practical experience in an industry related professional environment. **Pass/no pass** grading. **May not be taken concurrently** with TVR 128A, C, D, E, F or TVR 129A, B, C, D, E, F. Total of 90 hours field practice.

TVR 128C BROADCAST NEWS/ADMINISTRATION INTERNSHIP

1 unit

Prerequisites: *TVR 024 and maintain enrollment in 7 units or more including internship.*

Supervised, practical experience in an industry related professional environment. **Pass/no pass** grading. **May not be taken concurrently** with TVR 128A, B, D, E, F or TVR 129A, B, C, D, E, F. Total of 90 hours field practice.

TVR 128D MUSIC RECORDING/AUDIO INTERNSHIP

1 unit

Prerequisites: *TVR 103A and maintain enrollment in 7 units or more including internship.*

Supervised, practical experience in an industry related professional environment. **Pass/no pass** grading. **May not be taken concurrently** with TVR 128A, B, C, E, F or TVR 129A, B, C, D, E, F. Total of 90 hours field practice.

TVR 128E TELEVISION PRODUCTION INTERNSHIP

1 unit

Prerequisites: *TVR 016A and maintain enrollment in 7 units or more including internship.*

Supervised, practical experience in an industry related professional environment. **Pass/no pass** grading. **May not be taken concurrently** with TVR 128A, B, C, D, F or TVR 129A, B, C, D, E, F. Total of 90 hours field practice.

TVR 128F RADIO PRODUCTION INTERNSHIP

1 unit

Prerequisites: *TVR 014A and maintain enrollment in 7 units or more including internship.*

Supervised, practical experience in an industry related professional environment. **Pass/no pass** grading. **May not be taken concurrently** with TVR 128A, B, C, D, E or TVR 129A, B, C, D, E, F. Total of 90 hours field practice.

TVR 129A TV OPERATIONS INTERNSHIP

2 units

Prerequisites: *TVR 107 and maintain enrollment in 7 units or more including internship.*

Supervised practical experience in an industry related professional environment. **Pass/no pass** grading. **May not be taken concurrently** with TVR 128A, B, C, D, E, F or TVR 129B, C, D, E, F. Total of 180 hours field practice.

TVR 129B RADIO OPERATIONS INTERNSHIP

2 units

Prerequisites: *TVR 002B and maintain enrollment in 7 units or more including internship.*

Supervised practical experience in an industry related professional environment. **Pass/no pass** grading. **May not be taken concurrently** with TVR 128A, B, C, D, E, F or TVR 129A, C, D, E, F. Total of 180 hours field practice.

TVR 129C BROADCAST NEWS/ADMINISTRATION INTERNSHIP

2 units

Prerequisites: *TVR 024 and maintain enrollment in 7 units or more including internship.*

Supervised practical experience in an industry related professional environment. **Pass/no pass** grading. **May not be taken concurrently** with TVR 128A, B, C, D, E, F or TVR 129A, B, D, E, F. Total of 180 hours field practice.

TVR 129D MUSIC RECORDING/AUDIO INTERNSHIP

2 units

Prerequisites: TVR 103A and maintain enrollment in 7 units or more including internship.

Supervised practical experience in an industry related professional environment. **Pass/no pass** grading. **May not be taken concurrently** with TVR 128A, B, C, D, E, F or TVR 129A, B, C, E, F. Total of 180 hours field practice.

TVR 129E TELEVISION PRODUCTION INTERNSHIP

2 units

Prerequisites: TVR 016A and maintain enrollment in 7 units or more including internship.

Supervised practical experience in an industry related professional environment. **Pass/no pass** grading. **May not be taken concurrently** with TVR 128A, B, C, D, E, F or TVR 129A, B, C, D, F. Total of 180 hours field practice.

TVR 129F RADIO PRODUCTION INTERNSHIP

2 units

Prerequisites: TVR 014A and maintain enrollment in 7 units or more including internship.

Supervised practical experience in an industry related professional environment. **Pass/no pass** grading. **May not be taken concurrently** with TVR 128A, B, C, D, E, F or TVR 129A, B, C, D, E. Total of 180 hours field practice.

TVR 141B INTERMEDIATE DIGITAL NON-LINEAR VIDEO EDITING

3 units

Prerequisite: TVR 141A or placement based the TVR assessment process.

Intermediate theory and application of editing techniques using the Avid Editing System. Critical analysis of the editing process. Editing complex scenes. Creating visual effects. Introduction to editing system troubleshooting. Total of 36 hours lecture and 54 hours laboratory.

TVR 142 ADVANCED NON-LINEAR EFFECTS EDITING

3 units

Prerequisite: TVR 141A.

Advanced visual effects editing using the Avid Editing System. Create, enhance, modify and treat stills, motion graphics and titling sequences (Adobe Photoshop, Boris-FX). Troubleshoot system and peripheral devices and software. Total of 36 hours lecture and 54 hours laboratory.

TVR 143 DIGITAL AUDIO WORKSTATION SKILLS

3 units

Prerequisite: TVR 002A.

Theory and application of digital audio workstations used in media production and postproduction. Developing pro-

iciency using Digidesign's Pro Tools in a project based learning environment. Total of 36 hours lecture and 54 hours laboratory.

TVR 144 DIGITAL NON-LINEAR ASSISTANT EDITING

3 units

Introductory theory and application of assistant editing techniques using the Avid Editing System. Study and practical application of the assistant editing process. System setup, project setup, various inputting techniques, transcoding, project organization skills, various online mixing, exporting and outputting skills and techniques. Total of 36 hours lecture and 54 hours lecture.

THEATER ARTS

(Visual Arts and Media Studies Division)

THRT 001 INTRODUCTION TO THEATER

3 units

Introduction to theatre as an art form through exploration of theatre in production, with an emphasis on the collaborative role of theatre artists and the active role of the audience. Understanding of, and access to, live theatrical events and enhanced appreciation of the value of theatre to society; development of critical skills through consideration of representative examples of theatrical productions from numerous genres and time periods. Attendance at selected college-sponsored and professional theatre events required. **Required** instructional trips. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: THTR 111*

THRT 002A ACTING I

3 units

This course prepares a student to apply basic acting theory to performance and develops the skills of interpretation of drama through acting. Special attention is paid to skills for performance: memorization, stage movement, vocal production, and interpretation of text. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: THTR 151*

THRT 002B ACTING II

3 units

Prerequisite: THRT 002A.

This course follows Acting I and continues the exploration of theories and techniques used in preparation for the interpretation of drama through acting. The emphasis will be placed on deepening the understanding of the acting process through character analysis, monologues, and scenes. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: THTR 152*

*Course Identification Numbering System (C-ID)

THRT 002C ADVANCED ACTING FUNDAMENTALS

3 units

Prerequisite: THRT 002B.

Application of performance techniques and support activities for stage and camera productions. Advanced character development and the study of period styles and genres. **Recommended** enrollment in THRT 029 and 030. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

THRT 004A MIME FUNDAMENTALS

2 units

Fundamental work in developing the body as an expressive tool for non-verbal communication, ensemble work and exploration and use of space through basic pantomime technique. **No credit** if taken after THRT 004. Total of 27 hours lecture and 27 hours laboratory.

Transfer Credit: CSU; UC

THRT 004B MIME FOR THE ACTOR

2 units

Prerequisite: THRT 004A.

Advanced work in mime technique for the development of period or style movement for actors and performance level mime work. Total of 27 hours lecture and 27 hours laboratory.

Transfer Credit: CSU; UC

THRT 005 HISTORY OF THEATER ARTS

3 units

The study of the history of theatre from the Origins of Theatre through the Present Day. The history and development of theatre and drama are studied in relationship to cultural, political and social conditions of the time. Plays are read for analysis of structure, plot, character and historical relevance. **Recommended** ENGL 060. Total of 54 hours lecture.

Transfer Credit: CSU; UC

THRT 005A THEATRE HISTORY I

3 units

History of theatre from the Origins of Theatre to 1660. History and development of theatre and drama in relationship to cultural, political and social conditions of the time. Plays are read for analysis of structure, plot, character and historical relevance. **No credit** if taken after THRT 005. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: THRT 113*

THRT 005B THEATRE HISTORY II

3 units

Recommended Preparation: THRT 005A.

History of theatre from the Restoration Theatre to Contemporary times. History and development of theatre

and drama in relationship to cultural, political and social conditions of the time. Plays are read for analysis of structure, plot, character and historical relevance. **No credit** if taken after THRT 005. Total of 54 hours lecture.

Transfer Credit: CSU; UC

THRT 006 PLAY WRITING

3 units

Basic view of dramatic structure in play writing designed to develop writing skills through study of professional models, writing scenes and plays, and workshop reading of material in progress. **Recommended** THRT 002A. Total of 54 hours lecture.

Transfer Credit: CSU

THRT 008 VOICE AND MOVEMENT FOR THE PERFORMER

3 units

The development of vocal and physical expression of the performer in theater, film and television. Total of 54 hours lecture.

Transfer Credit: CSU; UC

THRT 009 SCRIPT ANALYSIS

3 units

Prerequisite: THRT 002A.

Techniques for analyzing a play or film script. This class will explore a variety of methods for investigating the interrelationship of the many parts of a script (theme, structure, characters, plot, setting, etc.). The perspectives gained will guide the students in their discovery of production alternatives for all artists; actors, directors, designers, etc. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: THTR 114*

THRT 010A MAKEUP FOR STAGE AND SCREEN

3 units

Instruction and practice in a lecture/laboratory setting in all phases of makeup specifically designed for theatrical and cinematic use. Theory and practical application of makeup for stage, television and cinema. **Required** stage crew activity. Total of 54 lecture and 18 hours laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: THTR 175*

THRT 010B ADVANCED MAKEUP FOR STAGE AND SCREEN

1 unit

Prerequisite: THRT 010A.

Recommended Preparation: THRT 030.

Students will receive instruction and practice in a lecture/laboratory setting in all phases of makeup specifically designed for theatrical and cinematic use. Theory and application of advanced techniques of makeup including hair

**Course Identification Numbering System (C-ID)*

makeup, principles of design for non-realistic makeup, mask construction and introduction to prosthesis. **Required** stage crew activity. Total of 54 hours laboratory.
Transfer Credit: CSU; UC

THRT 012A TECHNICAL THEATER

4 units

An introduction to technical theatre and the creation of scenic elements involved in department productions. Includes basic concepts of design, set movement, prop construction and procurement, backstage organization and career possibilities. Also includes stage management, lighting and/or sound techniques. Beginning practical application. **Required** stage crew activity. **Recommended** enrollment in THRT 030. Total of 54 hours lecture and 54 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: THTR 171*

THRT 012B ADVANCED TECHNICAL THEATER

4 units

Prerequisite: THRT 012A.

Advanced practical application of technical theatre and in the creation of scenic elements involved in department productions. Includes continuing concepts of design, set movement, prop construction and procurement, backstage organization and career possibilities. Students are required to assume technical and production responsibility for all department productions approved by instructor. Also includes stage management, lighting and/or sound techniques. Beginning practical application. **Required** stage crew activity. Total of 54 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC

THRT 013 INTRODUCTION TO SCENIC DESIGN

3 units

Recommended Preparation: THRT 030 and THRT 012A.

Aspects of Theatrical Design; problems of translating a dramatic idea into stage production. Students will be offered a survey of Theatrical design and construction techniques through demonstration and lecture. Total of 54 hours lecture.

Transfer Credit: CSU; UC

THRT 015 COSTUME CRAFTS

3 units

Recommended Preparation: THRT 030.

Students will study costume history, design, and basic construction techniques as an introduction to basic theatrical costuming. Fabrics and their various uses will be investigated. Total of 36 hours lecture and 72 hours laboratory.

This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: THTR 174*

THRT 016 COMEDIC PERFORMANCE

1 unit

Prerequisite: THRT 002A.

Exploration of techniques unique to comedy acting that include character development, emotional range, over-emphasis, under-emphasis, distortion, surprise and free association. Total of 18 hours lecture and 36 hours laboratory.

Transfer Credit: CSU; UC

THRT 26 IMPROVISATION TECHNIQUES

2 units

Prerequisite: THRT 002A.

Principles of improvisation techniques, development of scenes, characterization and ensemble work. Total of 27 hours lecture and 27 hours laboratory.

Transfer Credit: CSU; UC

THRT 027 MUSICAL THEATRE PRODUCTION

3 units

Enrollment Limitation: Audition.

Experience in all aspects of musical theatre: rehearsal and performance for cast, technical crew and instrumentalists in production of a large-scale musical. **Maximum credit:** 12 units, 3 units each semester. **Maximum of 4 enrollments** allowed in the **Musical Theater Production Family:** MUSC 067, 074, 075, THRT 075, 027. Total of 54 hours lecture and 108 hours laboratory.

Transfer Credit: CSU; UC

THRT 028 STUDIO PRODUCTION – REHEARSAL AND PERFORMANCE

1 unit

Enrollment Limitation: Audition.

Performance participation in small-scale dramatic productions. **Maximum credit** 4 units, 1 unit each semester. Total of 72 hours laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: THTR 191*

THRT 029 REHEARSAL AND PERFORMANCE

3 units

Enrollment Limitation: Audition.

Performance in film, television and theater performance. **Maximum credit** 12 units, 3 units each semester. Total of 144 hours of laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: THTR 191*

*Course Identification Numbering System (C-ID)

THRT 030 STAGE TECHNIQUES

1 unit

Students will gain practical experience in the application of production responsibilities in any of the following: stage management, house management, construction, scenery, properties, costume, lighting, sound, and running crews for Theatre Department productions. **Maximum credit** 4 units, 1 unit each semester. Total of 54 hours laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: THTR 192*

THRT 041 FUNDAMENTALS OF STAGE LIGHTING

3 units

This course involves the study and execution of stage lighting with emphasis on equipment, control, color and their relationship to design. Required participation in rehearsals and performances. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: THTR 173*

THRT 042 INTRODUCTION TO DESIGN FOR THEATER

3 units

Introduction to theater design with an emphasis on the design and technical elements concerned with staging live theatrical events. Survey of scenery, lighting, sound, costumes, makeup, properties, theatrical equipment and construction techniques. **Required** instructional trips and attendance of PCC productions. Total of 54 hours lecture.

Transfer Credit: CSU; UC credit under review.

THRT 075 MUSICAL THEATER WORKSHOP

2 units

Prerequisite: *Retention based on successful audition.*

Interdisciplinary course: Music, Theater Arts

Techniques, skills, theory and practice of musical theater performance and audition. The practice of songs, scenes and dance for performance on the live stage. **May not be taken concurrently** with or after MUSC 075. **Maximum credit** 8 units, 2 units each semester. **Maximum of 4 enrollments** allowed in the **Musical Theater Production Family:** MUSC 067, 074, 075, 076, THRT 075, 027. Total of 72 hours laboratory, 36 hours "To Be Arranged" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: MUS 180*

THRT 105 BEGINNING SHAKESPEARE WORKSHOP

2 units

Scansion, interpretation, poetry, prose and performance techniques related to Shakespearean drama. Total of 27 hours lecture and 27 hours laboratory.

THRT 130 PRACTICAL ACTING STUDIES

2 units

Prerequisite: THRT 002A.

The investigation and practical application of contemporary theories of acting as they relate to preparing for a role and their use in solving individual acting problems in film, television and theater. **Maximum credit** 6 units, 2 units each semester. Total of 27 hours lecture and 27 hours laboratory.

THRT 131 INTERSESSION PRODUCTION WORKSHOP

2 units

Prerequisite: *Retention based on successful audition.*

Practical experience in theatrical or television production: acting, directing, costuming, makeup, set design and construction. **Six weeks. Summer and winter** intersessions. Total of 108 hours laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

THRT 132 INTERSESSION PERFORMANCE TECHNIQUES WORKSHOP

1 unit

Various performance techniques in theater film or television. **Six weeks. Summer and winter** intersessions. Total of 54 hours laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

WELDING

(Engineering and Technology Division)

WELD 044A INTRODUCTION TO GAS WELDING

1 unit

Survey of major welding processes, nomenclature, types of joints. Study of oxy-acetylene welding, brazing and cutting. Welding safety. Total of 54 hours laboratory.

Transfer Credit: CSU

WELD 044B INTRODUCTION TO ELECTRIC ARC WELDING

1 unit

Fundamentals of shielded metal arc welding; equipment, electrodes and basic procedures. Oxygen cutting. Arc welding safety. Total of 54 hours laboratory.

Transfer Credit: CSU

WELD 044C ADVANCED ARC WELDING, FCAW, SMAW

1 unit

Prerequisite: WELD 044B, WELD 200A or WELD 200B.

Techniques of out-of-position SMAW and FCAW arc welding. Emphasis will be placed on AWS D 1.1, Structural Steel

*Course Identification Numbering System (C-ID)

SMAW and FCAW, Unlimited Thickness groove welds, in the vertical and overhead positions. Total of 54 hours laboratory.

Transfer Credit: CSU

WELD 145 INTRODUCTION TO TIG WELDING

1 unit

Prerequisite: *WELD 044A or WELD 044B.*

Fundamentals of the Tungsten Inert Gas (TIG) or Gas Tungsten Arc (GTAW) welding process, equipment, welding of aluminum and other special metals. Filler rod selection and TIG welding safety. Total of 54 hours laboratory.

WELD 150D TUNGSTEN INERT GAS (TIG) WELDING

5 units

Prerequisite: *WELD 150C.*

Practical application of the TIG (heli-arc) and MIG welding processes. TIG welding of steel, stainless steel and aluminum. Filler metal selection and production welding techniques. Welding safety. Total of 54 hours lecture and 126 hours laboratory.

WELD 200A INTRODUCTION TO WELDING

10 units

Introduction to welding fabrication for the career welding student. Development of basic skills in oxy-acetylene welding, brazing and cutting. Emphasis on practical Shielded Metal Arc Welding (SMAW) in all positions. Blueprint reading, shop math and welding safety. **Required** instructional trips. Total of 90 hours lecture and 270 hours laboratory.

WELD 200B CONSTRUCTION TRADE WELDING

10 units

Prerequisite: *WELD 200A.*

Structural steel welding for the construction trades. Performance of groove welds, in all positions, using Shielded Metal Arc Welding (SMAW) and Flux Cored Arc Welding (FCAW). Class preparation for the written and practical structural certification tests. Study of welding code, destructive testing of welds, layout and fabrication practice, shop math and welding safety. **Required** instructional trips. Total of 90 hours lecture and 270 hours laboratory.

WELD 200C SEMI-AUTOMATIC AND GAS TUNGSTEN WELDING

10 units

Prerequisite: *WELD 200A.*

Study of advanced structural steel and aerospace welding. Class preparation of the semi-automatic light gage certification using Gas Metal Arc Welding (GMAW). Aero-space welding of steel, stainless steel and aluminum using Gas Tungsten Arc Welding (GTAW). Study of welding metallurgy,

inspection and nondestructive testing, fabrication practice and welding safety. **Required** instructional trips. Total of 90 hours lecture and 270 hours laboratory.

WELD 303 LAC WELDING LICENSE WRITTEN EXAM PREP

3 units

Preparation for the LAC Structural Weld License, written exam. No 'hands on' welding in this class. Emphasis on the AWS D 1.1 Structural Steel Code, welding symbols, joint design, electrode classification and general principals of FCAW and SMAW arc welding processes. At the end of the course you will need to go through the LAC Application process to pay for and schedule your test. Total of 54 hours lecture.

WELD 411 ADAPTIVE WELDING

2 units

Enrollment Limitation: *All students must have a registered disability with DSP&S.*

Introduction to welding adapted to fit the needs of students with documented physical and learning disabilities. Includes a review of the American Welding Society (AWS) D1.1 welding codebook, in preparation for taking the written portion of the L.A. City welding examination, and one-on-one guidance in developing ability to create sound welds in preparation for the practical portion of the L.A. City welding examination. Total of 18 hours lecture and 54 hours laboratory.

PASADENA CITY COLLEGE
CATALOG
2017-2018

Noncredit Division



SECTION VIII

NONCREDIT DIVISION

Administration Office
3035 East Foothill Boulevard
Pasadena, California 91107
(626) 585-3000
<http://www.pasadena.edu>

GENERAL INFORMATION

OVERVIEW

Pasadena City College's Noncredit Division offers noncredit classes and certificate programs for students seeking self-improvement, increased literacy and job skills, and access to higher education and employment.

The Board of Governors for California Community Colleges established noncredit classes and programs to provide an "educational gateway" or a "portal to the future." It serves as a key contributor to "open access" for students with diverse backgrounds and those seeking ways to improve their earning power, literacy skills, and access to higher education. For many, particularly immigrants, the economically disadvantaged, and low-skilled adults, it is the first point of entry into a college.

STUDENT SERVICES

Admissions and Records

The Admissions and Records Office admits and enrolls students into noncredit classes at the CEC. No enrollment fees are required. The office provides a variety of services that include transcript requests, verification letters, grade reports, and issuance of high school diplomas and noncredit ESL and noncredit short-term Career and Technical Education certificates. The office maintains all student records and files. Students who intend to enroll must submit a completed online application to the Admissions and Records Office and upon acceptance, they will receive a Permit to Register, confirming the admissions process.

Students must be 18 years of age, or older, for admission to any noncredit program. A student who is younger than 18 can be admitted by filing a Student Petition, which can be obtained from the Counseling Office. A completed petition, along with an official high school transcript and letter of recommendation from a school counselor should be returned to the Counseling Office. Qualified students

who have not yet graduated from high school may be admitted for concurrent enrollment. Credit(s) granted will be forwarded to the student's high school. Forms may be obtained in the Counseling Office.

Placement Tests and Assessment

Students are required to take a placement test if they are planning to enroll in one of the following programs: Adult High School Diploma, or English as a Second Language (ESL). Following the placement test a counselor will meet with the student to discuss test scores, transcript evaluation, and proper placement in a program.

Counseling

Counselors can advise students regarding educational plans, career goals, academics, and personal issues. They interpret test results, analyze interests and abilities, and refer students to needed services within the college and in the community. Although counselors assist students in long term planning and in checking specific requirements, *responsibility for meeting graduation requirements, course prerequisites or requirements for transfer to other colleges or universities, is one which must be assumed by each student.*

INSTRUCTION

The Noncredit Division offers quality programs for students seeking self-improvement, enhanced earning power, increased literacy skills and access to higher education and employment. These include courses in English as a Second Language, Immigrant Education, Elementary and Secondary Basic Skills (Adult High School Diploma, General Education Development (GED), or Adult Basic Education), Parenting Education, Programs for Individuals with Substantial Disabilities, Education Programs for Older Adults, and Short-term Career and Technical Education (CTE) Certificates.

I. EDUCATION PROGRAMS FOR OLDER ADULTS

Older adult education consists of a course, a course of study, or an organized sequence of courses specifically designed to offer lifelong education that provides opportunities for personal growth and development, community involvement, skills for mental and physical well-being, and economic self-sufficiency.

II. EDUCATION PROGRAMS FOR PERSONS WITH SUBSTANTIAL DISABILITIES

Education programs for persons with substantial disabilities consists of a course, a course of study, or an organized sequence of courses specifically designed to provide individuals with life-skill proficiencies that are essential to the fulfillment of academic, vocational and personal goals.

Basic Workforce Readiness for Developmentally Disabled Certificate of Completion

The Basic Workforce Readiness for Developmentally Disabled Adults program prepares students for job search opportunities and transition to other noncredit functional skills courses or credit certificate programs. Students gain knowledge in the job application process, employee rights, interviewing techniques, time management, importance of teamwork, workplace diversity, fundamental social skills, maintaining good workplace habits and basic workplace expectations. It is recommended but not required to have a working knowledge of basic reading, writing, and math skills.

Required Courses

DSPS 2201 - Finding the Job That's Right for You
DSPS 2202 - Getting the Job You Want
DSPS 2203 - Basic Social Skills: Getting Along With Others in the Workplace
DSPS 2204 - Introduction to Your Rights and Responsibilities in the Workplace

Student Learning Outcomes:

1. Listen actively, respectfully, and critically; correctly interpret verbal instructions.
2. Identify, understand, and discuss workplace problems/situations and possible solutions.
3. Locate, discuss, and evaluate print and online resources related to workplace issues.
4. Analyze external and internal motivating factors of successful employees.

III. ELEMENTARY AND SECONDARY BASIC SKILLS

Elementary and secondary basic skills consists of a course, a course of study, or an organized sequence of courses to provide instruction for individuals in elementary and second-level reading, writing, computation, and problem-solving skills in order to assist them in achieving their academic, vocational, and personal goals. Elementary-level is generally recognized to mean that, where appropriate, the coursework addresses the content and proficiencies at levels through eighth grade. Secondary-level is generally recognized to mean that the coursework addresses the content and proficiencies at levels through the twelfth grade and may incorporate a high school diploma.

Noncredit Adult Secondary Education Program Certificates

Adult Basic Education Certificate of Competency

The Adult Basic Education program prepares students with the essential skills for academic advancement to the adult high school diploma (AHSD) or General Educational Development (GED) programs. Student gain knowledge in language arts and mathematics. Students may advance to develop skills for the workplace and to prepare for future educational opportunities.

Required Courses

ABE 3001 - Language Arts
ABE 3002 - Mathematics

Student Learning Outcomes:

1. Demonstrate understanding of the concepts in English language arts and mathematics that prepare students to enter the adult high school diploma or high school equivalency such as GED certificate programs.
2. Demonstrate critical thinking skills to observe, analyze, synthesize, and evaluate ideas and information.
3. Demonstrate study skill habits that enable students to make the transition to adult high school, GED coursework and credit programs.
4. Demonstrate familiarity with subjects and concepts that are part of the adult high school or GED placement exam.
5. Demonstrate interpersonal skills to interrelate and collaborate in the workplace.
6. Demonstrate effective and ethical use of technology.

GED Certificate of Competency

The General Education Development program prepares students for the General Education Development (GED) exam. The curriculum also prepares students for a pathway to other noncredit or credit programs. Students gain knowledge in college and career readiness, including career exploration and study skills. Services include test-taking strategies, hands-on computer practice testing, academic counseling, individual follow-up, and easy access to local GED testing center. The GED Certificate of Competency recognizes student achievement in GED preparation; however, students must pass the GED test in order to receive high school equivalency.

Required Courses

GED 4001 - Language Arts
GED 4002 - Mathematics
GED 4003 - Science
GED 4004 - Social Studies

The GED courses prepare students in four subjects (language arts, math, social studies, and science) to be able to pass the GED high school equivalency exam, which is the equivalent of a high school diploma for those who did not finish high school. It is highly recommended that students see a counselor before enrolling in the GED program to determine student level of readiness; some students may be better served in the Adult Basic Education program prior to enrolling in GED.

Student Learning Outcomes:

1. Demonstrate understanding of the concepts in language arts, mathematics, science, and social science that prepare students to pass the General Education Development (GED) exam.
2. Demonstrate critical thinking skills to observe, analyze, synthesize, and evaluate ideas and information.
3. Read with understanding and convey ideas effectively in writing.
4. Demonstrate knowledge of mathematical concepts and procedures to answer a question, solve a problem, make a prediction, or carry out a task that has a mathematical dimension.

GED Certificate of Competency (Bilingual)

The General Education Development-Bilingual program prepares students for the General Education Development (GED) Spanish exam.

Required Courses

GED 4101 - Language Arts-Bilingual
GED 4102 - Mathematics-Bilingual
GED 4103 - Science-Bilingual
GED 4104 - Social Studies-Bilingual

Student Learning Outcomes:

1. Demonstrate understanding of the concepts in language arts, mathematics, science, and social science that prepare students to pass the General Education Development (GED) Spanish exam.
2. Demonstrate critical thinking skills to observe, analyze, synthesize, and evaluate ideas and information.
3. Read with understanding and convey ideas effectively in writing.
4. Demonstrate knowledge of mathematical concepts and procedures to answer a question, solve a problem, make a prediction, or carry out a task that has a mathematical dimension.

ADULT HIGH SCHOOL DIPLOMA

The Adult High School Diploma requires students to complete 160 units for graduation, which includes coursework in Natural Sciences, Social and Behavioral Sciences, Humanities, English, Mathematics, and a selection of listed electives. Based on information such as student's high school grades, test scores, work experience, and other multiple measures, the counselor may recommend placement at the level which meets the student's needs. Students are awarded a high school diploma upon completion of the course of study prescribed by the State of California and the Pasadena Area Community College District.

AHSD 6401
AHSD 6402
AHSD 6403
AHSD 6404
AHSD 6405
AHSD 6406
AHSD 6407
AHSD 6411
AHSD 6412
AHSD 6413
AHSD 6414
AHSD 6415
AHSD 6416
AHSD 6417
AHSD 6421
AHSD 6422
AHSD 6423
AHSD 6424

AHSD 6426
AHSD 6427
AHSD 6428
AHSD 6429
AHSD 6432
AHSD 6436
AHSD 6439

Recommended Electives

AHSD 6400
AHSD 6409
AHSD 6430
AHSD 6431
AHSD 6433
AHSD 6434
AHSD 6435
AHSD 6437
AHSD 6438

Program Outcomes:

1. Develop critical thinking skills to observe, analyze, synthesize, and evaluate ideas and information orally and in writing.
2. Identify concepts that are part of the exit exam.
3. Develop interpersonal skills to interrelate and collaboratively work with others.
4. Integrate effective and ethical use of technology in personal practices.
5. Utilize study skill habits that will enable students to make the transition to college level coursework.
6. Apply concepts learned in core subjects that will prepare students to earn a high school diploma and transition to the community college and into the workplace.

Certificate of Completion in Secondary Education

Students who complete the Adult High School Diploma Program are also eligible for a Certificate of Completion in Secondary Education.

IV. ENGLISH AS A SECOND LANGUAGE (ESLN)

ESLN consists of a course, a course of study, or an organized sequence of courses. There are six new certificate programs of competency organized in a sequence to provide instruction in the English language to adult, non-native English speakers with varied academic, vocational, and personal goals. Individuals whose primary language is not English may also prepare with stand-alone courses in the integrated skills of listening, speaking, reading, and writing.

Program Outcomes:

1. Students will be able to relate in various types of oral performance, conversation, and presentation.
2. Students will be able to interpret various types of literature, including authentic materials.
3. Students will be able to compose grammatically correct, well organized paragraphs and summaries of reading materials.

The Noncredit ESL Program curriculum provides intensive English Language instruction in Literacy to High-Intermediate level integrated courses (Levels 0-5). The program also offers four elective courses including Grammar, Conversation, American Culture, and Writing. The program provides students with increased opportunities for successful employment and academic achievement. The ESL Bridge Program helps students seamlessly transition to credit ESL classes.

Noncredit ESL Program Certificates

ESL Literacy Certificate of Competency

This curriculum provides intensive English as a Second Language integrated instruction in reading, writing, listening and speaking to low literacy to high literacy students. The program introduces basic English components such as the alphabet, numbers, basic grammatical functions, pronunciation and production of short and simple phrases. It prepares students for the ESL Level 1 Program.

Required Courses

ESLN 1060A – English as a Second Language, Literacy Level A
ESLN 1060B – English as a Second Language, Literacy Level B

Student Learning Outcomes:

1. Students will be able to select and verbally produce appropriate simple phrases to answer simple questions given orally.
2. Students will be able to collect print media needed to solve problems.
3. Students will be able to compose simple phrases in response to oral directions or simple questions.

ESL Level 1 Certificate of Competency

This curriculum provides intensive English as a Second Language integrated instruction in reading, writing, listening and speaking to high literacy students to low beginning level students. The program prepares students to participate in simple conversations, complete basic forms and write simple sentences. It prepares students for the ESL Level 2 Program.

Required Courses

ESLN 1061A – English as a Second Language, Level 1A
ESLN 1061B – English as a Second Language, Level 1B

Student Learning Outcomes:

1. Students will be able to evaluate information being presented and requested while participating in basic conversations about personal experiences.
2. Students will be able to decipher basic print and predict or select responses to questions in text, forms or in oral discourse.
3. Students will be able to formulate simple sentences based on personal experience or simple themes.

ESL Level 2 Certificate of Competency

This curriculum provides intensive English as a Second Language integrated instruction in reading, writing, listening and speaking for low beginning to high beginning students. The program instructs students in simple oral and written communication form such as listening for specific information, writing simple paragraphs and asking clarifying questions. It prepares students for the ESL Level 3 Program.

Required Courses

ESLN 1062A – English as a Second Language, Level 2A
ESLN 1062B – English as a Second Language, Level 2B

Student Learning Outcomes:

1. Students will be able to assess meaning from simple recordings and conversations.
2. Students will be able to estimate meaning from text presented in a variety of written media.
3. Students will be able to produce compound sentences to write simple paragraphs on different themes.

ESL Level 3 Certificate of Competency

This curriculum provides intensive English as a Second Language integrated instruction in reading, writing, listening and speaking for high beginning to low intermediate students. The program introduces complex language functions such as identifying problems and discussing solutions, writing a descriptive paragraph and using comprehensive language to fulfill tasks. It prepares students for the ESL Level 4 Program.

Required Courses

ESLN 1063A – English as a Second Language, Level 3A
ESLN 1063B – English as a Second Language, Level 3B

Student Learning Outcomes:

1. Students will be able to select information presented in a conversation and correlate it to solutions to problems.
2. Students will be able to apply scanning skills in written text to determine theme or topic.
3. Students will be able to formulate complex sentences into a paragraph using appropriate verb tense.

ESL Level 4 Certificate of Competency

This curriculum provides intensive English as a Second Language integrated instruction in reading, writing, listening and speaking for low intermediate to high intermediate students. The program helps student develop extended oral fluency and written competency beyond that of personal experiences to global situations. It prepares students for the ESL Level 5 Program.

Required Courses

ESLN 1064A – English as a Second Language, Level 4A
ESLN 1064B – English as a Second Language, Level 4B

Student Learning Outcomes:

1. Students will be able to engage in and initiate conversations with native speakers.
2. Students will be able to identify and solve problems presented in passages containing complex sentences.
3. Students will be able to compose and vary the content of written paragraphs a real-world contexts.

ESL Level 5 Certificate of Competency

This curriculum provides intensive English as a Second Language integrated instruction in reading, writing, listening and speaking to high intermediate students. The program prepares students to organize and use correct grammatical functions in oral and written communication in academic, work and life situations.

Required Courses

ESLN 1065A – English as a Second Language, Level 5A
ESLN 1065B – English as a Second Language, Level 5B

Student Learning Outcomes:

1. Students will be able to differentiate correct sentence structure from incorrect structure when communicating orally with native speakers.
2. Students will be able to analyze different types of written materials using reading strategies.
3. Students will be able to write organized paragraphs using correct syntax.

ESL Family Literacy Certificate of Competency

The ESL Family Literacy program prepares beginning-high to intermediate-low ESL students to participate more effectively in their children's education. Topics include reading with children, parental involvement in local schools, importance of school attendance, kinder readiness, helping children with homework, and basic college readiness and financial aid information.

Required Courses

ESLN 2050 - ESL Family Literacy Module, A
ESLN 2051 - ESL Family Literacy Module, B

Student Learning Outcomes:

1. Demonstrate understanding of the K-12 educational system.
2. Demonstrate proficiency in oral and written skills necessary for interaction in an English-speaking school environment.
3. Read with an understanding to assist school-age children with homework.
4. Demonstrate basic knowledge of college and financial aid terminology.

ESLN Intermediate Oral Communication Skills Certificate of Competency

The ESLN Intermediate Oral Communication Skills certificate program is designed for beginning-high to intermediate ESLN students who seek to improve their listening and speaking skills in American English in order to achieve more effective communication at work, school and in the community. The program includes targeted instruction and practice in listening comprehension, pronunciation, and conversation strategies.

Required Courses

ESLN 1072 - Intermediate Conversation
ESLN 1082 - Introduction to Pronunciation

Student Learning Outcomes:

1. Demonstrate ability to comprehend spoken English in a variety of real-life situations and recorded media, involving basic to intermediate vocabulary and grammatical structures.
2. Express ideas orally in a clear manner using appropriate pronunciation, non-verbal cues, grammatical structures and vocabulary.
3. Recognize and utilize the fundamental features of stress, rhythm, intonation and connected speech to effectively communicate in everyday situations at work, school and in the community.

ESLN Intermediate Written Communication Skills

Certificate of Competency

The ESLN Intermediate Written Communication Skills certificate is designed for beginning-high to intermediate ESLN students who seek targeted instruction in vocabulary, reading, grammar and writing in order to achieve more effective formal and informal written communication skills for academic, employment and personal purposes.

Required Courses

ESLN 1092 - Intermediate Grammar Review
ESLN 1102 - Basic-Intermediate Writing Skills
ESLN 1112 - Intermediate Reading & Vocabulary

Student Learning Outcomes:

1. Correctly identify and use basic English grammar and sentence structures.
2. Demonstrate effective use of vocabulary decoding and retention strategies.
3. Demonstrate effective use of reading comprehension skills with short, simple readings in a variety of genres.
4. Create complete, well-constructed and well-organized sentences and paragraphs for use in a variety of informal and formal contexts.
5. Type written work using computer software, including word processing, email, and the PCC Learning Management System.

ESLN Advanced Oral Communication Skills Certificate of Competency

The ESLN Advanced Oral Communication Skills certificate program is designed for intermediate to advanced ESLN students who seek to improve their listening and speaking skills in American English in order to achieve more effective communication at work, school and in the community. The program includes targeted instruction and practice in advanced skills in listening comprehension, pronunciation, conversation strategies, and oral presentations, within the context of advanced vocabulary and grammar structures.

Required Courses

ESLN 1074 - Advanced Conversation
ESLN 1084 - Advanced Pronunciation

Student Learning Outcomes:

1. Demonstrate ability to comprehend spoken English in a variety of real-life situations and recorded media.
2. Express simple and complex ideas orally in a clear manner using appropriate pronunciation, grammar, vocabulary, and interpersonal and intercultural communication strategies.

- Effectively use prosodic features, such as stress, rhythm, prominence, thought groups, intonation, linking and reduced speech, in informal and formal speech contexts involving intermediate to advanced vocabulary and structures.

ESLN Advanced Written Communication Skills

Certificate of Competency

The ESLN Advanced Written Communication Skills certificate is designed for intermediate to advanced ESLN students who seek targeted instruction in advanced vocabulary, reading, writing, and grammar in order to achieve more effective formal and informal written communication skills for academic, employment and personal purposes.

Required Courses

ESLN 1094 - Advanced Grammar Review

ESLN 1104 - Advanced Writing Skills

ESLN 1114 - Advanced Reading & Vocabulary

Student Learning Outcomes:

- Recognize and use advanced grammar rules, usage patterns and sentence structures to effectively communicate complex ideas.
- Demonstrate vocabulary decoding and retention strategies for learning advanced vocabulary for academic, employment, and personal contexts
- Create a well-organized paragraph and a complete, well-constructed 5-paragraph standard essay.

Additional Noncredit ESL Courses:

ESLN 1010	ESL Level 1
ESLN 1010A	ESL Level 1 Condensed
ESLN 1015	ESL Level 2
ESLN 1015A	ESL Level 2 Condensed
ESLN 1020	ESL Level 3
ESLN 1020A	ESL level 3 Condensed
ESLN 1030	ESL Level 4
ESLN 1030A	ESL Level 4 Condensed
ESLN 1031	ESL Level 5
ESLN 1040	ESL Conversation
ESLN 1040A	ESL Level 5 Condensed
ESLN 1050	ESL American Culture
ESLN 1051	ESL Basic Writing Skills
ESLN 1052	ESL Grammar Review and Vocabulary Development
ESLN 2052	ESL for Health Sciences

V. VOCATIONAL ENGLISH AS A SECOND LANGUAGE (ESLV)

ESLV consists of a course, a course of study, or set of courses. There are five new certificate programs of competency to provide instruction in the English language to adult, non-native English speakers with specific vocational goals.

Noncredit ESLV Program Certificates

VESL Child Care Provider Certificate of Competency

The VESL Child Care Provider program prepares beginning-high to intermediate-low ESL students for careers in child care. The curriculum also serves as a pathway to other noncredit CTE certificates, and credit child development programs. Students gain knowledge in essential vocabulary for understanding basics of child growth and development, communicating with parents or future employers, health and safety, and duties of child care providers.

Required Courses

ESLV 3000 - VESL: Child Care Provider, Module A

ESLV 3001 - VESL: Child Care Provider, Module B

Student Learning Outcomes

- Identify basic child care terminology such as common child care items, hazards, reporting incidents, health and safety.
- Incorporate child development vocabulary, speaking and writing to be prepared to work in a child centered environment.
- Summarize appropriate developmental stages to effectively orally communicate in a child care setting.
- Understand basic work ethics such as teamwork and appropriate workplace behavior.
- Engage in basic interviewing and job search skills for a child care setting.

VESL Green Construction Certificate of Competency

The VESL Green Construction program prepares beginning-high to intermediate-low ESL students for careers in green construction. The curriculum also serves as a pathway to noncredit and credit CTE programs. Students gain knowledge in essential vocabulary for communicating in a building trades and construction industry job, understanding verbal and written directions, worker rights, and safety on the job.

Required Courses

ESLV 1012 - VESL: Green Construction, Module A

ESLV 1013 - VESL: Green Construction, Module B

Student Learning Outcomes:

1. Identify basic job terminology such as safety rules, construction equipment and worker rights.
2. Demonstrate effective communication skills between employees, employer or clients.
3. Analyze construction plans for best practices in green construction.
4. Understand basic work ethics such as teamwork and appropriate workplace behavior.
5. Engage in basic interviewing and job search skills for the building trades and construction industry.

VESL Green Housekeeping Certificate of Competency

The VESL: Green Housekeeping program prepares beginning-high to intermediate-low ESL students for careers in green housekeeping. The curriculum also serves as a pathway to other noncredit programs. Students gain knowledge in essential vocabulary for communicating in a housekeeping industry job, understanding verbal and written directions, worker rights, and safety on the job.

Required Courses

ESLV 1014 - VESL: Green Housekeeping, Module A

ESLV 1015 - VESL: Green Housekeeping, Module B

Student Learning Outcomes:

1. Identify basic job terminology such as safety rules, housekeeping equipment and worker rights.
2. Demonstrate effective communication skills between employees, employer or clients.
3. Identify best practices in green housekeeping.
4. Understand basic work ethics such as teamwork and appropriate workplace behavior.
5. Engage in basic interviewing and job search skills for green housekeeping.

VESL Green Landscaping and Gardening Certificate of Competency

The VESL: Green Landscaping and Gardening program prepares beginning-high to intermediate-low ESL students for careers in landscaping and gardening. The curriculum also serves as a pathway to noncredit and credit CTE programs. Students gain knowledge on essential vocabulary used in

communicating in the landscaping and gardening industry, understanding verbal and written directions, plant identification and placement, and safety on the job.

Required Courses

ESLV 2030 - VESL: Green Landscaping and Gardening, Module A

ESLV 2031 - VESL: Green Landscaping and Gardening, Module B

Student Learning Outcomes:

1. Appropriately use landscaping terminology such as plant identification, power tool safety, and landscape design.
2. Comprehend and respond to verbal and written directions when interacting with landscape personnel and customers.
3. Analyze landscaping plans and describe best practice plant placement.
4. Understand basic work ethics such as teamwork and appropriate workplace behavior.
5. Engage in basic interviewing and job search skills for the landscaping and gardening industry.

VESL Health Care Certificate of Competency

The VESL Health Care program prepares beginning-high to intermediate-low ESL students for careers in healthcare. The curriculum also serves as a pathway to noncredit and credit CTE programs. Students gain knowledge on essential vocabulary used in communicating in the healthcare field, understanding verbal and written directions, medical emergencies, CPR/First Aid, safety, and basic patient needs.

Required Courses

ESLV 4000 - VESL: Health Care, Module A

ESLV 4001 - VESL: Health Care, Module B

Student Learning Outcomes:

1. Identify basic job terminology such as that related to HIPPA (Health Insurance Portability and Accountability Act), basic life stages of humans, and duties and skills of medical assistants and personal care attendants.
2. Effective communication skills between employees, with employer or with patients.
3. Understand basic work ethics such as teamwork and appropriate workplace behavior.
4. Demonstrate English language job readiness skills through job application and interviewing skills.

VESL Work Readiness And Communication Skills

Certificate of Competency

The VESL Work Readiness and Communication Skills certificate program provides instruction in the English language and cultural skills needed to successfully obtain and maintain employment and achieve career success in the United States. Students will improve their listening, speaking, reading, writing, grammar, vocabulary, critical thinking and problem solving skills by engaging in a variety of hands-on learning activities as well as individual and team projects. The program is designed for individuals at an intermediate to advanced level of English (ESLN Levels 4, 5 and above) who plan to seek employment within 3 to 6 months.

Required Courses

ESLV 5000 - VESL Work Readiness and Communication Skills, Module A

ESLV 5001 - VESL Work Readiness and Communication Skills, Module B

Student Learning Outcomes:

1. Demonstrate effective job application skills at the career planning, job search, application, and interview stages.
2. Read, interpret and complete common workplace documents and forms.
3. Demonstrate effective on-the-job communication and cultural competency skills in interactions with employers, co-workers and clients/customers.
4. Understand and successfully engage in activities involving teamwork, critical thinking, problem solving, conflict resolution and ethics.

VI. IMMIGRANT EDUCATION

Immigrant Education consists of a course, a course of study, or an organized sequence of courses specifically designed to provide immigrants and their families with the opportunity to become active and participating members of economic and civic society, and may include preparation for citizenship.

VII. PARENTING EDUCATION

Parenting education consists of a course, a course of study, or an organized sequence of courses specifically designed to offer lifelong education in parenting (parent and child relationships, parent cooperative preschools), child growth and development, and family relations in order to enhance the quality of home, family, career, and community life.

VIII. SHORT-TERM CAREER AND TECHNICAL EDUCATION

Short-term CTE programs with high employment consist of a course of study or an organized sequence of courses leading to a vocational/career technical objective, certificate, or award that prepares students for immediate employment or transition into credit CTE upon completion of the program.

Basic Graphic Design Certificate of Completion

The Basic Graphic Design program provides students with the essential skills and workforce preparation needed for careers in graph design. The curriculum also prepares students for a pathway to credit graphic design programs. Students gain knowledge in fundamentals of typography, design principles, website creation, project management, digital techniques, workplace diversity, and portfolio development.

Required Courses

GRFN 3001 - Basic Graphic Design

GRFN 3002 - Fundamentals of Graphics and Production

Student Learning Outcomes:

1. Understand the basic digital workflow for graphic design projects.
2. Learn basic copyright laws for the visual arts.
3. Develop a professional resume, business cards and letterhead design.
4. Produce and design a logo, a newsletter, a poster, and folded brochure, and multiple page publication from concept to completion.
5. Conduct a job search and gain familiarity with the types of jobs available in the graphic design industry.

Child Care Provider Certificate of Completion

The Child Care Provider Program provides introductory training and education in child development for students interested in a career in early childhood education, and working with children ages birth through five. The curriculum also prepares students for a pathway to credit child development programs. Students gain knowledge in developmentally appropriate practices, creating lesson plans, optimal learning environments, health and safety guidelines, culturally relevant curriculum development, and CPR/First Aid training.

Required Courses

CHDN 1100 - Introduction to Teaching Young Children
CHDN 1101 - Introduction to Home, School and
Community Relations
CHDN 1102 - Basic Skills for Child Care Provider

Student Learning Outcomes:

1. Create a safe, healthy, developmentally appropriate learning environment.
2. Develop positive relationships with diverse families, school and community.
3. Support developmentally appropriate practices and all relevant curriculum standards.
4. Demonstrate knowledge of basic principles of child growth and development.
5. Identify components and work ethic required for professional participation in an early childhood setting.

Family Home Child Care Provider Certificate of Completion

The Family Home Child Care Provider program provides students with the essential skills and workforce preparation needed for careers in child care. The curriculum also prepares students for a pathway to credit child development programs. Students gain knowledge in procedures for developing and licensing diverse family child homes, culturally relevant curriculum, child development theories and, CPR/First Aid training.

Program Outcomes:

1. Understand California State requirements for opening and operating a quality family home child care.
2. Design a safe, healthy, developmentally appropriate family home child care environment.
3. Develop positive relationships with diverse families, children and community.
4. Support developmentally appropriate practices and all relevant curriculum standards.
5. Demonstrate knowledge of basic principles of child growth and development.
6. Identify components and work ethic required for professional participation in a family home child care setting.

Required Courses

CHDN 4000 - Family Home Child Care Provider:
Introduction to Child Development
CHDN 4001 - Family Home Child Care Provider:
Culturally Relevant Curriculum
CHDN 4002 - Family Home Child Care Provider:
Licensing and Workforce Readiness

Family Home Child Care Provider Certificate of Completion - Bilingual

The Family Home Child Care Provider-Bilingual program provides students with the essential skills and workforce preparation needed for careers in child care. The curriculum also prepares students for a pathway to credit child development programs. Students gain knowledge in procedures for developing and licensing diverse family child homes, culturally relevant curriculum, child development theories, and CPR/First Aid training.

Required Courses

CHDN 4100 - Family Home Child Care Provider:
Introduction to Child Development-
Bilingual
CHDN 4101 - Family Home Child Care Provider:
Culturally Relevant Curriculum-Bilingual
CHDN 4102 - Family Home Child Care Provider:
Licensing and Workforce Readiness-
Bilingual

Student Learning Outcomes:

1. Understand California State requirements for opening and operating a quality family home child care.
2. Design a safe, healthy, developmentally appropriate family home child care environment.
3. Develop positive relationships with diverse families, children and community.
4. Support developmentally appropriate practices and all relevant curriculum standards.
5. Demonstrate knowledge of basic principles of child growth and development.

Introduction: Legal Interpretation & Translation Certificate of Completion

The Introduction: Legal Interpretation/Translation Program provides students with the essential skills and workforce preparation needed for careers in the legal field. The curriculum also prepares students for a pathway to credit paralegal, legal or administration of justice programs. Students gain knowledge in legal translation and interpretation for court proceedings, working in a multilingual legal system, simultaneous translations, and judicial certification requirements.

Required Courses

PLGN 1001 - Introduction: Legal Interpretation &
Translation, Module A
PLGN 1002 - Introduction: Legal Interpretation &
Translation, Module B

Student Learning Outcomes:

1. Interpret and formulate vocabulary used in legal translation and interpretation during court proceedings.
2. Demonstrate basic sight translation, simultaneous, and consecutive interpretation skills.
3. Identify career and job opportunities as translator/interpreter in different fields, and plan for professional judicial certifications.

Introduction: Medical Interpretation & Translation Certificate of Completion

The Introduction: Medical Interpretation/Translation program provides students with the essential skills and workforce preparation needed for careers in medical interpretation. The curriculum also prepares students to transition to credit health programs. Students gain knowledge in medical translation and interpretation for medical visits and procedures, working in a multilingual medical system, simultaneous translations, and medical translation certification requirements.

Required Courses

- MAN 1001 - Introduction: Medical Interpretation & Translation, Module A
MAN 1002 - Introduction: Medical Interpretation & Translation, Module B

Student Learning Outcomes:

1. Interpret and formulate vocabulary used in medical translation and interpretation during medical visits and procedures.
2. Demonstrate basic Sight Translation, Simultaneous, and Consecutive Interpretation skills.
3. Identify career and job opportunities as translator/interpreter in different fields, and plan for professional state or federal medical translation certifications.

Medical Front Office Clerk Certificate of Completion

The Medical Front Office Clerk program provides students with the necessary preparation for entry-level positions in a medical front office setting. The curriculum also prepares students for a pathway to credit medical assisting programs. Student gain knowledge in medical terminology, medical billing and coding, software applications, administrative duties, legal requirements on reporting and patient privacy, communication, customer service, medical transcription, and workplace diversity.

Required Courses

- MAN 5000 - Medical Front Office Clerk: Office Procedures
MAN 5001 - Software Applications for Medical Front Office Settings

Student Learning Outcomes:

1. Apply critical thinking as it is used in a medical management program for a medical front office setting.
2. Demonstrate use of a computer, software programs, copier, facsimile machine and security.
3. Utilize computer software to maintain office systems and patient demographic information used in a medical front office setting.
4. Demonstrate basic clerical functions and work ethics applicable in a medical front office setting.
5. Establish and maintain confidential medical records and document administrative information for a medical front office setting.

Personal Care Attendant Certificate of Completion

The Personal Care Attendant program provides students with the essential skills and workforce preparation needed for careers as personal care attendants. The curriculum also prepares students for a pathway to credit health programs. Student gain knowledge in causes of dementia, principles of end-of-life care, cultural diversity, caregiver ethics and skills, medical guidelines, and utilizing key community resources.

Required Courses

- PCAN 3000 - Personal Care Attendant I: Basic Care
PCAN 3001 - Personal Care Attendant Ii: Dementia and End of Life Care

Student Learning Outcomes:

1. Apply health care related terms and procedures comfortably in situations commonly encountered during employment as a personal care assistant.
2. Differentiate between responses to dementia, including Alzheimer's disease, and scenarios to select the course most beneficial to the patient.
3. Categorize local health care facilities based on their resources for patients and the families of patients.

Pre-Apprenticeship in Building Trades and Construction Industry Certificate of Completion

The Pre-Apprenticeship in Building Trades and Construction Industry program provides students with the essential skills and workforce preparation needed for careers in the building trades and construction industry. The curriculum also prepares students for a pathway to credit construction programs. Students gain knowledge in reading construction plans, material handling equipment, green construction, interpreting trade technical calculations, and practicing safety construction techniques according to Occupational Safety and Health Administration (OSHA) standards.

Required Courses

- BLDN 2300 - Introduction to Occupational Safety and Health for the Building Trades
- BLDN 2301 - Introduction to the Building Trades and Construction Industry
- BLDN 2302 - Basic Construction Math for the Building Trades and Construction Industry
- BLDN 2303 - Introduction to Plan Reading for the Building Trades and Construction Industry
- BLDN 2304 - Basic Material Handling and Rigging

Student Learning Outcomes:

1. Safely handle basic construction material and equipment in the workplace.
2. Explain, demonstrate, and utilize the basic elements of tools related to building and construction.
3. Understand basic arithmetic and apply basic geometry in solving for construction quantities.
4. Describe and explain plan reading and interpret building codes used in construction.
5. Perform effective job searching skills through networking, outreach services and trade unions.

Pre-Apprenticeship in Building Trades and Construction Industry – Bilingual Certificate of Completion

The Pre-Apprenticeship in Building Trades and Construction Industry program provides students with the essential skills and workforce preparation needed for careers in the building trades and construction industry. The curriculum also prepares students for a pathway to credit construction programs. Students gain knowledge in reading construction plans, material handling equipment, green construction, interpreting trade technical calculations, and practicing safety construction techniques according to Occupational Safety and Health Administration (OSHA) standards.

Program Outcomes:

1. Safely handle basic construction material and equipment in the workplace.
2. Explain, demonstrate, and utilize the basic elements of tools related to building and construction.
3. Understand basic arithmetic and apply basic geometry in solving for construction quantities.
4. Describe and explain plan reading and interpret building codes used in construction.
5. Perform effective job searching skills through networking, outreach services and trade unions.

Required Courses

- BLDN 4300 - Introduction to Occupational Safety and Health for the Building Trades - Bilingual
- BLDN 4301 - Introduction to the Building Trades and Construction Industry - Bilingual
- BLDN 4302 - Basic Construction Math for the Building Trades and Construction Industry - Bilingual
- BLDN 4303 - Introduction to Plan Reading for the Building Trades and Construction Industry - Bilingual
- BLDN 4304 - Basic Material Handling and Rigging - Bilingual

NONCREDIT BUSINESS PROGRAM

The curriculum prepares students for entry/intermediate-level clerical jobs and/or transitions into a credit business information technology program. Program will also enable students to make a seamless transition into a credit course or program.

Noncredit Business Program Certificates

Business Office Systems Certificate of Completion

Required courses:

- BUSN 2601A
- BUSN 2601B
- BUSN 7301
- BUSN 7302
- BUSN 7303
- BUSN 7304
- BUSN 7305
- BUSN 7306
- BUSN 7307
- BUSN 7308

Student Learning Outcomes:

1. Demonstrate knowledge of effective study skills, workplace skills, and interviewing techniques
2. Effectively communicate, verbally and in written form, in a business office setting.
3. Efficiently use and/or integrate the Microsoft Office Suite of products in a business office environment.

Computer Keyboarding Certificate of Completion

The Computer Keyboarding program provides students with the essential skills and workforce preparation needed for careers in office administration. The curriculum also prepares students for a pathway to a credit business programs. Students gain knowledge in learning correct fingering, speed, accuracy, editing, proofreading and formatting skills.

Required Courses

BUSN 2601A - Computer Keyboarding A
BUSN 2601B - Computer Keyboarding B
BUSN 7301 - Computer Microsoft Windows Applications

Student Learning Outcomes:

1. Use Microsoft Windows to organize, retrieve, and manipulate digital stored on a computer.
2. Demonstrate proper keyboarding techniques using the touch method.
3. Develop ore touch-typing speed (35-45 wpm) and accuracy.

Computer Keyboarding Certificate of Completion – Bilingual

The Computer Keyboarding-Bilingual program provides students with the essential skills and workforce preparation needed for careers in office administration. The curriculum also prepares students for a pathway to credit business programs. Students gain knowledge in learning correct fingering, speed, accuracy, editing, proofreading and formatting skills.

Required Courses

BUSN 7310 - Computer Microsoft Windows Applications-Bilingual
BUSN 2611A - Computer Keyboarding A - Bilingual
BUSN 2611B - Computer Keyboarding B - Bilingual

Student Learning Outcomes:

1. Use Microsoft Windows to organize, retrieve and manipulate digital data stored on a computer.

2. Demonstrate proper keyboarding techniques using the touch method.
3. Develop more touch-typing speed (35-45 wpm) and accuracy.

Computer Skills Certificate of Completion

The Computer Skills program provides students with the essential skills and workforce preparation needed for careers in office administration. The curriculum also prepares students for a pathway to credit business programs. Students gain knowledge in learning MS Office applications, such as WORD, Excel and Keyboarding.

Required Courses

BUSN 7301 - Computer Microsoft Windows Applications
BUSN 7302 - Business Office Computer Applications / Basic Word
BUSN 7303 - Business Office Computer Applications/ Basic Excel
BUSN 2601A - Computer Keyboarding A

Student Learning Outcomes:

1. Use Windows software applets effectively.
2. Create, format, save, print and organize documents using files folders.
3. Prepare, edit and print and format workbooks.
4. Demonstrate proper keyboarding techniques using the touch method.

General Office Clerk Certificate of Competency

The General Office Clerk program provides students with the essential skills and workforce preparation needed for careers in office administration careers. The curriculum also prepares students to transition to credit business programs. Students gain knowledge in learning MS Office applications, office records management, business English and communications, and keyboarding.

Required Courses

BUSN 7301 - Computer Microsoft Windows Applications
BUSN 7304 - Office Records Management and Filing
BUSN 7305 - Basic Business English and Communications
BUSN 2601A - Computer Keyboarding A

Student Learning Outcomes:

1. Use Windows software applets effectively.
2. Index, code and file cards and correspondence in alphabetic, numeric, subject, and geographic systems.

- Evaluate a variety of business letters, memorandum, and emails, applying effective and appropriate business writing principles, psychological approaches, and languages.
- Touch type 25-30 words per minute, with five or fewer errors in a document

Introduction to Starting a Small Business Certificate of Completion

The Introduction to Starting a Small Business program provides students with the essential skills and workforce preparation to start and manage a small business. The curriculum also prepares students for a pathway to credit business programs. Students gain knowledge in fundamentals of starting a small business, workplace diversity, business management, financing and business plan development.

Required Courses

BUSN 4001 - How to Start Your Own Small Business
 BUSN 4002 - Managing a Small Business
 BUSN 4003 - Financing a Small Business
 BUSN 4004 - Developing a Small Business Plan

Student Learning Outcomes:

- Demonstrate knowledge of a small business operations and procedures.
- Define and explain the major management functions of a small business.
- Identify the costs required for small business startup.
- Demonstrate steps of effective business plan preparation

Introduction to Starting a Small Business Certificate of Completion – Bilingual

The Introduction to Starting a Small Business Bilingual program provides students with the essential skills and workforce preparation to start and manage a small business. The curriculum also prepares students for a pathway to credit business programs. Students gain knowledge in fundamentals of starting a small business, workplace diversity, business management, financing and business plan development.

Required Courses

BUSN 4401 - How to Start Your Own Small Business - Bilingual
 BUSN 4402 - Managing a Small Business - Bilingual
 BUSN 4403 - Financing a Small Business - Bilingual
 BUSN 4404 - Developing a Small Business Plan - Bilingual

Student Learning Outcomes:

- Demonstrate knowledge of a small business operations and procedures.
- Define and explain the major management functions of a small business.
- Identify the costs required for small business startup.
- Demonstrate steps of effective business plan preparation

Workplace Readiness Certificate of Completion

The Workplace Readiness program provides students with the essential tools and techniques for entering the workforce and/or improving employability skills. Student gains knowledge in effective job searches, writing resumes and cover letters, interviewing techniques, appropriate workplace behaviors, diversity in the workplace, effective communication skills, customer service, and fundamental academic skills. The curriculum also prepares students for pathways to other noncredit or credit certificate programs.

Required Courses

WRKP 2101 - Workplace Readiness: Basic English
 WRKP 2102 - Workplace Readiness: Basic Math
 WRKP 2103 - Workplace Readiness: Basic Job Skills

Student Learning Outcomes:

- Listen actively, respectfully, and critically; correctly interpret verbal instructions in the workplace.
- Write clearly using accurate diction, forming grammatical sentences free from major errors in mechanics, punctuation and spelling.
- Demonstrate a conceptual understanding of whole numbers, fractions, decimals and percents and how they are used in the workplace.
- Perform basic addition, subtraction, division and multiplication operations on whole numbers, fractions, decimals, and percents without the use of a calculator to solve workplace problems.
- Demonstrate a basic understanding of the purpose and structure of chronological, functional and scannable resumes and in what situations each is appropriate.

DESCRIPTION OF COURSES

This section presents a description of Noncredit courses offered. Each description is self-contained, i.e., each contains important information of prerequisites, hours, limitations on enrollment, recommendations, scheduling

by semesters and other data which may be required in making a decision to include the course in the student's program of studies.

Prerequisites/Corequisites/Recommended Preparation

A **“prerequisite”** is a condition of enrollment, such as satisfactory completion of another course (defined as a grade of A, B, C, or CR), that must be met **BEFORE** a student can register for a course or an educational program in order to demonstrate readiness for that course or program. By meeting the prerequisite, the student shows that he or she has certain skills, concepts, and/or information without which the College considers success in the subsequent course or program highly unlikely.

A **“corequisite”** is a course in which a student is required to enroll **AT THE SAME TIME** that he or she is enrolled in another course. In the corequisite course, the student acquires certain skills, concepts, and/or information without which the College considers success in the concurrent course highly unlikely.

A **“recommended preparation”** statement in a course description means that a student is advised, but not required, to complete the identified course(s) prior to enrollment in another course or educational program. The skills, concepts, and/or information gained in the “recommended preparation” in another course or educational program will prepare students for success in the subsequent course or program.

All prerequisites, corequisites, and recommendation preparation statements listed in the course descriptions are periodically reviewed. Students – especially those new to Pasadena City College – should consult the Schedule of Classes and Counseling Services for the most current information.

Students are expected to meet valid and necessary course prerequisites and corequisites.

ELEMENTARY AND SECONDARY EDUCATION

ADULT BASIC EDUCATION

ABE 3000 ADULT BASIC EDUCATION

Review and reinforcement of basic skills in reading (to 8th grade level), writing, math (through ratios and percents), grammar and spelling. Brush up on conversational English and pronunciation for those in need. General survival skills reviewed. Total of 108 hours lecture.

ABE 3001 LANGUAGE ARTS

Basic skills preparation in the language arts for academic advancement to the adult high school diploma (AHSD) or

General Educational Development (GED) programs. Upon completion and demonstration of competence in the course, students may advance to develop skills for the workplace and to prepare for future educational opportunities. Total of 52 hours lecture.

ABE 3002 MATHEMATICS

Review and reinforcement of arithmetic skills for academic advancement to the adult high school diploma (AHSD) or General Educational Development (GED) programs. Upon completion and demonstration of competence in the course, students may advance to develop skills for the workplace and to prepare for future educational opportunities. Total of 52 hours lecture.

ADULT HIGH SCHOOL DIPLOMA

AHSD 6400 PRACTICAL ENGLISH SKILLS

A review of grammar, spelling, reading, composition, and essay writing in preparation for taking the Adult High School Diploma Program exit exam or the General Education Development (GED) exam. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. Total of 72 hours lecture.

AHSD 6401 FUNDAMENTALS OF GRAMMAR A

Review of parts of speech, spelling, basic sentence structure, mechanics, and vocabulary skill building. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. Meets the diploma requirement for English. Total of 72 hours lecture.

AHSD 6402 FUNDAMENTALS OF GRAMMAR B

Comprehensive study of English usage, spelling, and mechanics. Improvement in basic writing skills with more complex sentence structures and writing models. Increased vocabulary skill building. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. Meets the diploma requirement for English. Total of 72 hours lecture.

AHSD 6403 ESSENTIALS IN WRITING A

Sentence and paragraph composition. Vocabulary building and review of language mechanics and grammar. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. Meets the diploma requirement for English. Total of 72 hours lecture.

AHSD 6404 ESSENTIALS IN WRITING B

Review steps of the writing process, outlining, style exploration and introduction to research paper writing. Strengthen skills in grammar, vocabulary, and oral presentation skills. Successful completion of this course

will meet requirements for five (5) Adult High School Diploma credits. Meets the diploma requirement for English. Total of 72 hours lecture.

AHSD 6405 U.S. LITERATURE

A survey of the literature of the United States (fiction and non-fiction) from the colonial period to contemporary times focusing on social, cultural and literary contexts. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. Meets the diploma requirement for English. Total of 72 hours lecture.

AHSD 6406 BRITISH LITERATURE

A survey of British literature (fiction and non-fiction) focusing on cultural, literary, and social contexts. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. Meets the diploma requirement for English. Total of 72 hours lecture.

AHSD 6407 READING FUNDAMENTALS

An introduction to building vocabulary, reading comprehension, and critical thinking skills. A basic review of English language usage. Successful completion of this course will meet requirements for adult high school credit. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. Total of 72 hours lecture.

AHSD 6408 LITERATURE IN A MULTICULTURAL SOCIETY

Survey of multicultural literature (fiction and non-fiction) focusing on social, cultural, and literary context. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. Meets the diploma requirement for English. Total of 72 hours lecture.

AHSD 6409 INTRODUCTION TO CREATIVE WRITING

Creative literary expression through poetry, drama, and short story. Individual creative writing in various forms. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. Meets the diploma requirement for English. Total of 72 hours lecture.

AHSD 6411 U.S. HISTORY: PRE-COLONIALISM TO THE CIVIL WAR

An analysis of social, economic, and political factors in United States history from the period of Pre-Colonialism to Reconstruction. Successful completion of this course will meet the requirements for five (5) Adult High School Diploma credits. Meets diploma requirements for United States history and the social sciences. Total of 72 hours lecture.

AHSD 6412 U.S. HISTORY: RECONSTRUCTION TO PRESENT

An analysis of social, economic, and political factors in United States history from the period of Reconstruction to the present. Successful completion of this course will meet the requirements for five (5) Adult High School Diploma credits. Meets diploma requirements for United States history and the social sciences. Total of 72 hours lecture.

AHSD 6413 INTRODUCTION TO AMERICAN GOVERNMENT

An introduction to American government and its relevance to understanding the democratic process. Study of the rights and responsibilities of the citizens of the United States on local, state, and federal levels. Successful completion of this course will meet the requirements for five (5) Adult High School Diploma credits. Meets diploma requirements for American government and the social sciences. Total of 72 hours lecture.

AHSD 6414 INTRODUCTION TO ECONOMICS

An introduction to events that influence the American economy, including inflation, purchasing power, taxes, balance of payments, technology, deficit spending, and the cost of living. A review of foreign and domestic exchange, consumerism, GNP, and banking and currency. Successful completion of this course will meet the requirements for five (5) Adult High School Diploma credits. Meets diploma requirements for economics and the social sciences. Total of 72 hours lecture.

AHSD 6415 CONTEMPORARY AMERICAN SOCIAL ISSUES

Analysis and discussion of contemporary American social issues: market systems, consumerism, criminal justice system, class inequality, gender inequality, racial inequality, and militarism. Successful completion of this course will meet the requirements for five (5) Adult High School Diploma credits. Total of 72 hours lecture.

AHSD 6416 GLOBAL AFFAIRS

Survey of a wide range of global topics: 20th century world history, contemporary world history, customs, cultural hegemony, decision making, war and peace, global economy, and diplomacy. Successful completion of this course will meet the requirements for five (5) Adult High School Diploma credits. Meets diploma requirements for the social sciences. Total of 72 hours lecture.

AHSD 6417 WORLD GEOGRAPHY

Study of people, places, and environments. A survey of the major cultural and physical regions of the world. Successful completion of this course will meet the requirements for

five (5) Adult High School Diploma credits. Meets diploma requirements for world geography and the social sciences. Total of 72 hours lecture.

AHSD 6421 MATH BASICS

Master basic arithmetic skills and operations with integers, fractions, decimals, and percentages; solve word problems. Successful completion of this course will meet the requirements for five (5) Adult High School Diploma credits. Total of 72 hours lecture.

AHSD 6422 PREALGEBRA

Prerequisite: AHSD 6421 or placement based on the math assessment process.

Introduction to the structure and concepts of Algebra, including variables, expressions, equations, absolute value, inequalities, and properties of real numbers; and the techniques of Algebra, including solving equations and inequalities, graphing linear equations, and solving word problems. Successful completion of this course will meet the requirements for five (5) Adult High School Diploma credits. Meets diploma requirements for mathematics. Total of 72 hours lecture.

AHSD 6423 ALGEBRA 1A

Prerequisite: AHSD 6422 or placement based on the math assessment process.

Study of the language, concepts, and techniques of basic algebra, including signed numbers, expressions and equations, formulas, powers and roots, and inequalities. This course lays a foundation for upper level math and science courses. Successful completion of this course will meet the requirements for five (5) Adult High School Diploma credits. Meets diploma requirements for mathematics. Total of 72 hours lecture.

AHSD 6424 ALGEBRA 1B

Prerequisite: AHSD 6423 or placement based on the math assessment process

Study of the language, concepts, and techniques of algebra, including exponents, systems of equations, quadratic and exponential functions, rational and irrational numbers, and polynomials. Lays a foundation for upper level math and science courses. Successful completion of this course will meet the requirements for five (5) Adult High School Diploma credits. Meets diploma requirements for mathematics. Total of 72 hours lecture.

AHSD 6425 INTRODUCTION TO GEOMETRY

Prerequisite: AHSD 6424 or placement based on the math assessment process.

Overview of the elements of geometry and the properties of those elements. Use of properties in proofs to develop logical reasoning. Geometer's Sketchpad used to develop

skills and understanding. Course integrates basic algebra into geometry and builds skills for upper level math. Successful completion of this course will meet the requirements for five (5) Adult High School Diploma credits. Meets diploma requirements for mathematics. Total of 72 hours lecture.

AHSD 6426 LIFE SCIENCE – BIOLOGY

Introduction to the study of life, including biological chemistry, cells, organisms and classification, and ecology. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. Meets the diploma requirements for biological science. Total of 72 hours lecture.

AHSD 6427 LIFE SCIENCE – PHYSIOLOGY

Introduction to the study of physiology and genetics, with a focus on human systems. Structure and function of basic human organ systems are the focus, supplemented with contrasts to simple organisms, plant physiology, and basic genetics. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. Meets the diploma requirements for biological science. Total of 72 hours lecture.

AHSD 6428 PHYSICAL SCIENCE – CHEMISTRY

Introduction to the study of chemistry, including atomic structure, substances, and reactions. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. Meets the diploma requirements for physical science. Total of 72 hours lecture.

AHSD 6429 PHYSICAL SCIENCE – PHYSICS

Introduction to the study of physics, including energy, optics, and forces. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. Meets the diploma requirements for physical science. Total of 72 hours lecture.

AHSD 6430 ENVIRONMENTAL SCIENCE – ECOLOGY

Introduction to the study of environmental science, including ecological systems of abiotic and biotic factors and current environmental challenges. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. Total of 72 hours lecture.

AHSD 6431 COMPUTER BASICS

Overview of computer hardware, software, operating systems, and file management; Internet and E-mail. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. Total of 72 hours lecture.

AHSD 6432 ART HISTORY

A survey of visual arts including painting, print making, sculpture, architecture and photography. Historical and contemporary art forms; perspective design, composition and color theory. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. This course meets requirements for the humanities. Total of 72 hours lecture.

AHSD 6433 WORKPLACE SKILLS FOR THE 21ST CENTURY

Workplace preparation and skills for the 21st century. Decision-making and life-long learning skills. Build competency in written and oral communication and basic math and computer skills. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. Total of 72 hours lecture.

AHSD 6434 PLANNING FOR ACADEMIC AND CAREER SUCCESS

Successful methods for improving academic and career strategies and skills. A survey of educational and occupational opportunities and requirements. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. Total of 72 hours lecture.

AHSD 6435 HEALTH

An informed use of health-related information and an overview of positive attitudes and responsible behaviors for making decisions to promote lifelong health. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. Total of 72 hours lecture.

AHSD 6436 MUSIC APPRECIATION

Introduction to classical and popular music. Development of music, explorations of composer's lives and historical and social contexts of the times. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. This course meets requirements for the humanities. Total of 72 hours lecture.

AHSD 6437 GRAPHIC ART DESIGN

An introduction to the field of graphic design. Covers key design elements such as typography, creativity, visualization, composition, and web design. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. Total of 72 hours lecture.

AHSD 6438 COMPUTER APPLICATIONS

Use of applications software for database management, word processing, spreadsheet, and slideshow presentation.

Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. Total of 72 hours lecture.

AHSD 6439 CONTEMPORARY SPANISH

An introduction to Spanish. Practice in Spanish language pronunciation, grammar and vocabulary in a contemporary context. Exploration of culture in both contemporary and historical contexts. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. This course meets requirements for the humanities. Total of 72 hours lecture.

GED 4001 LANGUAGE ARTS

Preparation in the language arts for students preparing for the General Educational Development (GED) exam. Provides instruction in reading comprehension, grammar, and writing the extended response essay, using successful test-taking strategies and hands-on online testing practice. Upon completion and demonstration of competence in the course, students may continue GED preparation or advance to develop skills for the workplace and to prepare for future educational opportunities. Total of 36 hours lecture.

GED 4002 MATHEMATICS

Preparation in mathematics for students preparing for the General Education Development (GED) exam in Mathematics. Provides instruction in quantitative and Algebraic problem solving. Skill building in test taking strategies to respond to questions on the GED exam in mathematical reasoning. Upon completion and demonstration of competence in the course, students may continue GED preparation or advance to develop skills for the workplace and to prepare for future educational opportunities. Total of 36 hours lecture.

GED 4003 SCIENCE

Preparation in science for students preparing for the General Education Development (GED) exam in science. Provides instruction in biology, physiology, chemistry, earth, and space science. Skill building in test taking strategies for multiple choice and short answer response questions on the GED exam. Upon completion and demonstration of competence in the course, students may continue GED preparation or advance to develop skills for the workplace and to prepare for future educational opportunities. Total of 36 hours lecture.

GED 4004 SOCIAL STUDIES

Preparation in social studies for students preparing for the General Education Development (GED) exam. Provides review in U.S. history, global history, economics, civics and government, and geography using successful test-taking strategies and hands-on online testing practice for mul-

multiple choice and extended response questions. Upon completion and demonstration of competence in the course, students may continue GED preparation or advance to develop skills for the workplace and to prepare for future educational opportunities. Total of 36 hours lecture.

GED 4101 LANGUAGE ARTS - BILINGUAL

Preparation in the language arts for students preparing for the General Education Development (GED) Spanish exam. Provides instruction in reading comprehension, grammar, and writing the extended response essay, using successful test-taking strategies and hands-on online testing practice. Upon completion and demonstration of competence in the course, students may continue GED preparation or advance to develop skills for the workplace and to prepare for future educational opportunities. Total of 36 hours lecture.

GED 4102 MATHEMATICS - BILINGUAL

Preparation in mathematics for students preparing for the General Education Development (GED) Spanish exam in Mathematics. Provides instruction in quantitative and Algebraic problem solving. Skill building in test taking strategies to respond to questions on the GED exam in mathematical reasoning. Upon completion and demonstration of competence in the course, students may continue GED preparation or advance to develop skills for the workplace and to prepare for future educational opportunities. Total of 36 hours lecture.

GED 4103 SCIENCE - BILINGUAL

Preparation in science for students preparing for the General Education Development (GED) Spanish exam in science. Provides instruction in biology, physiology, chemistry, earth, and space science. Skill building in test taking strategies for multiple choice and short answer response questions on the Spanish GED exam. Upon completion and demonstration of competence in the course, students may continue GED preparation or advance to develop skills for the workplace and to prepare for future educational opportunities. Total of 36 hours lecture.

GED 4104 SOCIAL STUDIES - BILINGUAL

Preparation in social studies for students preparing for the General Education Development (GED) Spanish exam. Provides review in U.S. history, global history, economics, civics and government, and geography using successful test-taking strategies and hands-on online testing practice for multiple choice and extended response questions. Upon completion and demonstration of competence in the course, students may continue GED preparation or advance to develop skills for the workplace; and to prepare for future educational opportunities. Total of 36 hours lecture.

LEARNING ASSISTANCE CENTER

LAC 3031 SUPERVISED TUTORING

Individualized or small group tutoring for students needing additional knowledge and study skills to succeed in regular course work.

LAC 3033 LEARNING ASSISTANCE

Skills development for individual students through the use of technology in supervised learning centers. Designed to supplement classroom instruction through activities suggested by faculty to improve learning.

EDUCATION PROGRAMS FOR OLDER ADULTS

OLAD 2900 SEWING TECHNIQUES FOR OLDER ADULTS

Designed for adult students with beginning and limited sewing abilities, and students with some sewing experience ranging from intermediate to advanced. Emphasizes good sewing techniques, including the appropriate application of some speed-sewing techniques; the use of commercial patterns; and proper fit. **Short term class.** Total of 48 hours lecture.

OLAD 2901 CREATIVE STITCHERY FOR OLDER ADULTS

Designed to cover a wide range of hand embroidery and stitchery techniques for seniors which include making wall hangings, pictures, pillows, and other decorative items. To enhance stitchery as an art form, various threads and materials will also be used in the finished item. **Short term class.** Total of 32 hours lecture.

OLAD 3120 LIFE REVIEW

Importance of life review, journaling for preservation of family history. Techniques for writing a life journal. Provides mental/memory stimulation for older adults. **Short term class.** Total of 24 hours lecture

OLAD 3371 MUSIC APPRECIATION AND PARTICIPATION FOR OLDER ADULTS

Music appreciation and participation for seniors residing at retirement homes. Emphasis on development of music, relationship to art, culture, history and popular music. **Short term class.** Total of 32 hours lecture.

OLAD 3379 HISTORY OF EUROPEAN ART FOR OLDER ADULTS

A comprehensive survey of Europe's cultural achievements from Charlemagne and the Middle Ages, to World War II. This visually stimulating course meets a need for adventure

while providing numerous opportunities to expand memory retention. **Short term class.** Total of 24 hours lecture.

OLAD 3380 TAI-CHI CHU'AN FOR OLDER ADULTS

This course introduces older adults to a Chinese health exercise which is neither vigorous nor strenuous. It is suitable for older adults who want to exercise to gain or maintain good health. It will strengthen the muscles and organs, relax the mind and body, improve blood circulation, and increase memory and concentration. **Short term class.** Total of 24 hours lecture.

EDUCATION PROGRAMS FOR PERSONS WITH SUBSTANTIAL DISABILITIES (DSPS)

DSPS 2201 FINDING THE JOB THAT'S RIGHT FOR YOU

Fundamental course designed for adults with developmental disabilities who have an interest in finding realistic and meaningful employment. Emphasis on looking for different job opportunities that support the adult learner's interests, values, and skills. Recommended working knowledge of basic reading, writing, and math skills. Total of 16 hours lecture.

DSPS 2202 GETTING THE JOB YOU WANT

Fundamental course designed for adults with developmental disabilities who have an interest in finding realistic and meaningful employment. Emphasis on filling out job applications, creating resumes and cover letters, and learning interviewing techniques. Recommended working knowledge of basic reading, writing, and math skills. Total of 16 hours lecture.

DSPS 2203 BASIC SOCIAL SKILLS: GETTING ALONG WITH OTHERS IN THE WORKPLACE

Fundamental course designed for adults with developmental disabilities with an interest in maintaining realistic and meaningful employment. Emphasis on learning the skills needed to create good working habits, workplace diversity, communicate needs, and interact appropriately with co-workers and supervisors. Recommended working knowledge of basic reading, writing, and math skills. Total of 16 hours lecture.

DSPS 2204 INTRODUCTION TO YOUR RIGHTS AND RESPONSIBILITIES IN THE WORKPLACE

Fundamental course designed for adults with developmental disabilities with an interest in maintaining realistic and meaningful employment. Focus on learning the skills needed to make good decisions and understand rights in the workplace. Recommended working knowledge of basic reading, writing, and math skills. Total of 16 hours lecture.

DSPS 2205 WORKPLACE READINESS FOR STUDENTS WITH DISABILITIES

Introduction to skills and strategies needed for adults with disabilities to develop pathways to college, career technical training, or enter the workforce. Topics include the job application process, employee rights, interviewing skills, time management, importance of teamwork, diversity in the workplace, and basic workplace expectations. Total of 30 hours lecture.

DSPS 3320 FUNCTIONAL LIVING FOR DEVELOPMENTALLY HANDICAPPED ADULTS

Functional living skills for adults residing in residential care facilities. Designed for adults with special needs as they relate to living at home, within a group home, and transferring to independent living. Emphasis on health and safety, personal hygiene and grooming, and social interaction and conversation skills. Total of 32 hours lecture.

DSPS 3323 WORKPLACE SKILLS FOR DEVELOPMENTALLY DISABLED ADULTS

This course is primarily for developmentally disabled students employed, or wish to become employed, in a workshop environment. This course covers independent living and basic employment techniques including resume writing and interviewing. **Short term class.** Total of 32 hours lecture.

DSPS 3370 MUSIC APPRECIATION AND PARTICIPATION/PHYSICALLY DISABLED ADULTS

Music appreciation and participation for physically disabled adults residing in a residential care facility. Emphasis on singing, rhythm, timing and listening. **Short term class.** Total of 24 hours lecture.

DSPS 3374 ADAPTIVE ART FOR DISABLED ADULTS

Adaptive art techniques for disabled adults residing in a residential care facility. Emphasis on techniques to encourage the creative and artistic process for adults who experience physical and emotional challenges. **Short term class.** Total of 24 hours lecture.

ENGLISH AS A SECOND LANGUAGE (ESLN)

ESLN 1010 ENGLISH AS A SECOND LANGUAGE – LEVEL 1

Introduction to basic grammatical functions with an emphasis on the development of the language skills of listening with understanding and speaking to be

understood. Listening, speaking, reading, and writing skills are integrated in basic life skills and basic work skills themes encountered in everyday context. Total of 216 hours lecture.

ESLN 1010A ENGLISH AS A SECOND LANGUAGE – LEVEL 1 – CONDENSED

Introduction to basic grammatical functions with an emphasis on the development of language skills for listening with understanding and speaking to be understood. Listening, speaking, reading, and writing skills are integrated in basic life skills and basic work skills themes encountered in everyday context. Total of 72 hours lecture.

ESLN 1015 ENGLISH AS A SECOND LANGUAGE – LEVEL 2

Further practice of basic grammatical functions by emphasizing accurate oral and written communication at the high-beginning level. Listening, speaking, reading, and writing skills are integrated for better understanding of English used in daily life and everyday work/job skills. Total of 216 hours lecture.

ESLN 1015A ENGLISH AS A SECOND LANGUAGE – LEVEL 2 – CONDENSED

Further practice of basic grammatical functions by emphasizing accurate oral and written communication at the high- beginning level. Listening, speaking, and reading skills (some writing) are integrated for better understanding of English used in daily life and everyday work/job skills. Total of 72 hours lecture.

ESLN 1020 ENGLISH AS A SECOND LANGUAGE – LEVEL 3

Emphasis on increased oral and written communication skills required to function independently in most situations beyond life and work-skills. Complex language functions and forms in listening, speaking, reading and writing are integrated with more general vocational and academic subjects. Total of 216 hours lecture.

ESLN 1020A ENGLISH AS A SECOND LANGUAGE – LEVEL 3 – CONDENSED

Introduction to high-intermediate level English language basic skills in reading and writing. Emphasis continues to be fluency in communication for extended conversation on a variety of subjects. Total of 72 hours lecture.

ESLN 1030 ENGLISH AS A SECOND LANGUAGE – LEVEL 4

Introduction to high-intermediate level English language basic skills in reading and writing. Emphasis continues to be fluency in communication for extended conversation on a variety of subjects. Total of 216 hours lecture.

ESLN 1030A ENGLISH AS A SECOND LANGUAGE – LEVEL 4 – CONDENSED

Introduction to high-intermediate level English language basic skills in reading and writing. Emphasis continues to be fluency in communication for extended conversation on a variety of subjects. Total of 72 hours lecture.

ESLN 1031 ENGLISH AS A SECOND LANGUAGE – LEVEL 5

Advanced English proficiency level in listening, speaking, reading, and writing to meet most life and work-related demands with little problem. Emphasis is on increased use of grammatical functions to prepare students for greater academic success at both high school and college levels. Total of 216 hours lecture.

ESLN 1040 ENGLISH AS A SECOND LANGUAGE CONVERSATION

Oral communication skill development with emphasis on increased fluency in English conversation. Speaking and listening practice for daily future needs and academic goals is presented in a student-centered approach. Total of 54 hours lecture.

ESLN 1040A ENGLISH AS A SECOND LANGUAGE – LEVEL 5 – CONDENSED

Advanced English proficiency level in listening, speaking, reading, and writing to meet most life and work-related demands with little problem. Emphasis is on increased use of grammatical functions to prepare students for greater academic success at both high school and college levels. Total of 72 hours lecture.

ESLN 1050 ESL AMERICAN CULTURE

Basic knowledge of American culture required for non-native speakers. Emphasis is on cultural aspects that enable students to adjust to the American way of life. Total of 54 hours lecture.

ESLN 1051 ESL BASIC WRITING SKILLS

Development of basic writing skills to the 8th grade level using computers and software. Emphasis is on basic proficiency in writing a directly developed cohesive paragraph and/or multiple paragraphs to increase success in future academic or other vocational goals. Total of 54 hours lecture and 36 hours laboratory.

ESLN 1052 ESL GRAMMAR AND VOCABULARY DEVELOPMENT

Basic grammar and vocabulary review. Emphasis is on basic grammatical forms and functions. Vocabulary development consists of identifying key words and phrases for increased expression, especially in speaking, writing and reading. Total of 54 hours lecture.

**ESLN 1060A ENGLISH AS A SECOND LANGUAGE
LITERACY LEVEL A**

Development of beginning literacy in the basic components of the English language and basic grammatical functions. Emphasis on spelling and pronunciation and mastering the English alphabet and numbers. Total of 108 hours lecture.

**ESLN 1060B ENGLISH AS A SECOND LANGUAGE
LITERACY LEVEL B**

Prerequisite: *ESL 1060A or placement based on the ESL assessment process.*

Functioning at beginning literacy by talking about language components using grammar terms and understanding grammar functions. Emphasis is on generating short and simple phrases and establishing basic listening, speaking, reading and writing skills. Total of 108 hours lecture.

**ESLN 1061A ENGLISH AS A SECOND LANGUAGE,
LEVEL 1A**

Prerequisite: *1060B or placement based on the ESL assessment process.*

Development of high-literacy grammatical functions. Emphasis on recognizing conversation and passage patterns and expanding writing competency within the context of basic life and work skills. Total of 108 lecture hours.

**ESLN 1061B ENGLISH AS A SECOND LANGUAGE,
LEVEL 1 B**

Prerequisite: *ESL 1061A or placement based on the ESL assessment process.*

Functioning at high literacy by employing basic grammatical functions. Emphasis on writing and speaking in complete sentences and on reading and listening competencies within the context of basic life and work skills. Total of 108 lecture hours.

**ESLN 1062A ENGLISH AS A SECOND LANGUAGE,
LEVEL 2A**

Prerequisite: *ESL 1010 or ESL 1061B or placement based on the ESL assessment process.*

Development of low-beginning grammatical functions. Emphasis on simple oral and written communication form and on gathering general ideas through listening and reading in daily life and work. Total of 108 lecture hours.

**ESLN 1062B ENGLISH AS A SECOND LANGUAGE,
LEVEL 2B**

Prerequisite: *ESL 1062A or placement based on the ESL assessment process.*

Functioning at low-beginning proficiency by employing accurate grammatical forms. Emphasis on increasing listening, speaking, reading and writing organization and development skills in daily life and work. Total of 108 lecture hours.

**ESLN 1063A ENGLISH AS A SECOND LANGUAGE,
LEVEL 3A**

Prerequisite: *ESL 1015 or ESL 1062B or placement based on the ESL assessment process.*

Development of high-beginning reading, writing, listening, speaking English communication skills using complex language functions and forms. Total of 108 hours lecture.

**ESLN 1063B ENGLISH AS A SECOND LANGUAGE,
LEVEL 3B**

Prerequisite: *ESL 1063A or placement based on the ESL assessment process.*

Functioning independently at high-beginning proficiency in most situations. Emphasis on building listening, speaking, reading and writing skills within life, work and educational settings. Total of 108 hours lecture.

**ESLN 1064A ENGLISH AS A SECOND LANGUAGE,
LEVEL 4A**

Prerequisite: *ESL 1020 or ESL 1063B or placement based on the ESL assessment process.*

Development of low-intermediate English language skills in reading and writing. Emphasis on extended oral fluency and editing of incorrect language form. Total of 108 hours lecture.

**ESLN 1064B ENGLISH AS A SECOND LANGUAGE,
LEVEL 4B**

Prerequisite: *ESL 1064A or placement based on the ESL assessment process.*

Functioning with low-intermediate proficiency in many real-world situations requiring listening and reading, some involving technology. Emphasis on producing correct complex language forms in speaking and writing. Total of 108 hours lecture.

**ESLN 1065A ENGLISH AS A SECOND LANGUAGE,
LEVEL 5A**

Prerequisite: *ESL 1030 or ESL 1064B or placement based on the ESL assessment process.*

Development of high-intermediate English proficiency in listening, speaking, reading, and writing to meet many life and work-related demands. Emphasis is on reducing miscommunication through the correct use of grammatical functions and content organization. Total of 108 hours lecture.

**ESLN 1065B ENGLISH AS A SECOND LANGUAGE,
LEVEL 5B**

Prerequisite: *ESL 1065A or placement based on the ESL assessment process.*

Functioning at high-intermediate English proficiency in life-skills listening, reading, speaking and writing to transition into academic English environments. Emphasis is on

increased use of grammatical functions and formal writing styles. Total of 108 hours lecture.

ESLN 1072 INTERMEDIATE CONVERSATION

Increased ability and confidence to integrate into the English-speaking community through the development of intermediate level listening and speaking skills. Topics include small talk, telephone communication, asking for/giving directions, and discussing personal interests and plans. For students at a beginning high to intermediate-low level of ESL (noncredit Levels 2 and 3). Total of 54 hours lecture.

ESLN 1074 ADVANCED CONVERSATION

Advanced instruction and training in effective American English listening and speaking skills. Topics include effective listening comprehension, communication strategies, interpersonal and intercultural competence, discussion of high-interest topics, and oral presentations. Designed for students at an intermediate to advanced level of ESL (noncredit levels 4, 5 and above). Total of 54 hours lecture.

ESLN 1082 INTRODUCTION TO PRONUNCIATION

Introduction to effective pronunciation of American English. Topics include fundamental components of stress, rhythm, intonation, and connected speech, as well as recognizing and producing key individual speech sounds (vowels and consonants), within the context of beginning to intermediate vocabulary and grammar structures. Total of 54 hours lecture.

ESLN 1084 ADVANCED PRONUNCIATION

Advanced instruction and training in effective pronunciation of American English. Topics include word stress, rhythm, intonation, thought groups, prominence and connected speech, as well as recognizing and producing complex features of vowels and consonants, within the context of advanced vocabulary and sentence structures. Designed for students at an intermediate to advanced level of ESL (noncredit levels 4, 5 and above). Total of 54 hours lecture.

ESLN 1092 INTERMEDIATE GRAMMAR REVIEW

Designed to strengthen the existing grammar skills of beginning high to intermediate ESLN students (levels 2 and 3). Topics include basic English sentence structures and the appropriate use of verbs, nouns, adjectives and adverbs. Total of 54 hours lecture.

ESLN 1094 ADVANCED GRAMMAR REVIEW

For intermediate to advanced ESLN students (levels 4, 5 and above) who seek to improve their grammar skills in American English in order to achieve more effective communication at work, school and in the community. Topics include the

advanced use of verbs, adjectives, adverbs, and nouns, and the development of complex sentence structures. Total of 54 hours lecture.

ESLN 1102 BASIC-INTERMEDIATE WRITING SKILLS

Focus on basic writing skills and computer literacy skills relevant to producing sentences and paragraphs in both formal and informal contexts. Targeted at beginning to intermediate ESLN students (Levels 2 and 3) who want to strengthen their basic writing skills. Total of 72 hours lecture.

ESLN 1104 ADVANCED WRITING SKILLS

Focus on advanced writing skills and computer literacy skills relevant to producing effective paragraphs and essays. Targeted at intermediate to advanced ESLN students (Levels 4, 5 and above) who want to strengthen their writing skills in preparation for further academic work or employment. Total of 72 hours lecture.

ESLN 1112 INTERMEDIATE READING & VOCABULARY

Designed to build vocabulary development and reading comprehension strategies of beginning to intermediate ESLN students (levels 2 and 3). Instruction focuses on reading strategies useful in academic, employment, and personal contexts. Heavy emphasis on learning basic vocabulary in context, and using various reading strategies to increase reading comprehension. Total of 54 hours lecture.

ESLN 1114 ADVANCED READING & VOCABULARY

Designed to build vocabulary development and reading comprehension strategies of intermediate to advanced ESLN students (levels 4 and 5). Instruction focuses on reading strategies useful in academic, employment and personal contexts. Heavy emphasis on learning advanced vocabulary in context, and using various reading strategies to increase reading comprehension. Total of 54 hours lecture.

ESLN 2050 ESL FAMILY LITERACY, MODULE A

Development of speaking, reading, and writing skills of limited English speaking parents with children in local elementary, middle and high schools. Family literacy emphasis covering reading with children, parental involvement, kinder readiness, school attendance, and assisting children of all ages with homework. Total of 36 hours lecture.

ESLN 2051 ESL FAMILY LITERACY, MODULE B

Development of speaking, reading, and writing skills of limited English speaking parents with children in local elementary, middle and high schools. Family literacy emphasis on academic skills, school attendance, assisting children with homework, basic college readiness, and financial aid information. Total of 36 hours lecture.

ESLN 2052 ESL FOR HEALTH SCIENCES

Introduction to the health care field for non-native speakers of English aimed at the development of language skills for careers in health care. Consists of communication skills and medical terminology. Total of 50 hours lecture.

VOCATIONAL ENGLISH AS A SECOND LANGUAGE**ESLV 1012 VESL: GREEN CONSTRUCTION, MODULE A**

Development of reading, speaking, listening and writing skills of beginning-high to advanced ESL students for careers in green construction. Emphasis on occupation-specific terminology and communication skills with common phrases for interacting with clients or future employers. Topics include basic tools and equipment, units of measurement, construction materials, and workplace readiness. Total of 54 hours lecture.

ESLV 1013 VESL: GREEN CONSTRUCTION, MODULE B

Development of reading, speaking, listening, and writing skills of beginning-high to advanced ESL students for careers in green construction. Emphasis on occupation-specific terminology and communication skills with common phrases for interacting with clients or future employers. Topics include communicating with supervisors and co-workers, basic safety, protective clothing and gear, safety signs, and worker rights. Total of 54 hours lecture.

ESLV 1014 VESL: GREEN HOUSEKEEPING, MODULE A

Development of vocabulary, listening, speaking, reading, and writing skills of beginning-low to intermediate-high ESL students interested in careers in green housekeeping. Emphasis on occupation-specific terminology and communication skills for interacting with employers in residential settings. Topics include "going green," household items, cleaning supplies and equipment, eco-friendly cleaning solutions, following directions, using checklists, and communicating about tasks, problems, repairs and work schedules. Total of 54 hours lecture.

ESLV 1015 VESL: GREEN HOUSEKEEPING, MODULE B

Development of vocabulary, listening, speaking, reading, and writing skills of beginning-low to intermediate-high ESL students interested in careers in green housekeeping. Emphasis on occupation-specific terminology and communication skills for interacting with employers in both residential and institutional settings. Topics include housekeeping tasks, laundry, job safety, workers' rights, marketing a business, job search, applications, resumes and interviews. Total of 54 hours lecture.

ESLV 2030 VESL: GREEN LANDSCAPING AND GARDENING, MODULE A

Development of vocabulary, listening, speaking, reading, and writing skills of beginning-high to advanced ESL students interested in careers in green gardening and landscaping. Emphasis on occupation-specific terminology and communication skills for interacting with clients or employers. Topics include landscape planning, plant identification, selection and care, soil, fertilizer, compost, mulch, turf removal and IPM (Integrated Pest Management). Total of 54 hours lecture

ESLV 2031 VESL: GREEN LANDSCAPING AND GARDENING, MODULE B

Development of vocabulary, listening, speaking, reading, and writing skills of beginning-high to advanced ESL students interested in careers in green gardening and landscaping. Emphasis on occupation-specific terminology and communication skills for interacting with clients or employers. Topics include landscape planning, irrigation systems, graywater and stormwater capture, tools, air quality, workplace safety, and employment opportunities. Total of 54 hours lecture.

ESLV 3000 VESL: CHILD CARE PROVIDER, MODULE A

Development of vocabulary, listening, speaking, reading, and writing skills of beginning-high to advanced ESL students interested in careers in child care, child development, or early childhood education. Emphasis on occupation-specific terminology and communication skills for interacting with children, families, and co-workers. Topics include basic child care vocabulary, effective communication in child care settings, health and safety in home and center-based programs, daily schedules, completing reports, and using children's books, games, and songs effectively. Total of 54 hours lecture.

ESLV 3001 VESL: CHILD CARE PROVIDER, MODULE B

Development of vocabulary, listening, speaking, reading, and writing skills of beginning-high to advanced ESL students interested in careers in child care, child development, or early childhood education. Emphasis on occupation-specific terminology and communication skills for interacting with children, families, and co-workers. Topics include developmental milestones for infants, toddlers and preschoolers, strategies for working with children at different stages of development, effective observations of child care programs, and career pathways. Total of 54 hours lecture

ESLV 4000 VESL: HEALTH CARE, MODULE A

Development of vocabulary, listening, speaking, reading, and writing skills of intermediate to advanced ESL students interested in careers in health care. Emphasis on occupation-specific terminology and communication skills for interacting in a health care environment. Topics include basic medical terminology, basic anatomy, health problems and remedies, and health care occupations and career pathways. Total of 108 hours lecture.

ESLV 4001 VESL: HEALTH CARE, MODULE B

Development of vocabulary, listening, speaking, reading, and writing skills of intermediate to advanced ESL students interested in careers in health care. Emphasis on occupation-specific terminology and communication skills for interacting in a health care environment. Topics include entry-level health care worker job duties such as the activities of daily living, standard precautions, vital signs, nutrition, safety, emergencies, and navigating health care facilities. Total of 108 hours lecture.

ESLV 5000 VESL WORK READINESS AND COMMUNICATION SKILLS, MODULE A

Language, communication and cultural skills for successful employment. Topics include workplace vocabulary, career planning, goal setting, self-assessment, job search, applications, resumes, and cover letters. Total of 72 hours lecture.

ESLV 5001 VESL WORK READINESS AND COMMUNICATION SKILLS, MODULE B

Language, communication and cultural skills for successful employment. Topics include workplace vocabulary, job interviews, employee benefits, employment forms, workplace culture and etiquette, workers' rights, oral and written on-the-job communication skills, critical thinking, team building and problem solving. Total of 72 hours lecture.

IMMIGRANT EDUCATION**IMME 1000 CITIZENSHIP**

Preparation of non-citizens for naturalization. **Short term class.** Total of 32 hours lecture.

IMME 3000 CITIZENSHIP PREPARATION

Preparation for United States citizenship by navigating through the Naturalization process including preparation for taking the four tests for citizenship, the Oath of Allegiance, and by having the language skills and knowledge to live as productive citizens. Total of 40 hours of lecture.

IMME 3001 DEVELOPMENT OF LITERACY SKILLS FOR NATIVE SPANISH SPEAKERS

Development of Spanish literacy skills for native speakers. Includes reading, writing, and survival skills necessary for success in workplace, academic and social settings. Designed for native Spanish speakers. Total of 50 hours lecture and 10 hours laboratory.

IMME 3002 ENGLISH FOR WRITTEN DRIVER'S TEST

Preparation for the written driving test in English while acquiring the essential vocabulary needed to understand the questions and answers. Procedures for taking the test at the Department of Motor Vehicles (DMV) as well as the rules when driving in California. Total of 25 hours lecture.

PARENTING EDUCATION**PAR 7603 PARENT EDUCATION DISCUSSION GROUPS – PRESCHOOL AGE**

Human growth and development with primary emphasis on the preschool age child. Parent roles and self-understanding; parental values and goals; family communication; analysis of varying philosophies of child rearing; health and nutrition; societal influences on the home. Total of 64 hours lecture.

PAR 7608 PARENT EDUCATION DISCUSSION GROUPS – CHILD, FAMILY, SCHOOL

Designed for parents who have a limited background in English. Parents learn and recognize basic daily English so that they can transmit improved literacy skills to their children and family. Provides an environment for adults with small children that promotes effective communication, child rearing, and family development in a contemporary American culture. Encourages a participatory role in the school and the community. Total of 32 hours lecture.

PAR 7617A YOUR GROWING 2-YEAR-OLD

Parents learn about the reality of, and the reasons for the behavior of the two-year old - known as the first adolescence. The unique needs of that child and that child's caring adults, and ways to meet these needs will be discussed. An emphasis will be on communication and listening skills, as well as the uniqueness of each child, adult, and family. The child accompanying the enrolled adult student must be **two years old by September 1 of the current school year.** Total of 32 hours lecture and 16 hours laboratory.

PAR 7617B YOUR GROWING 3-YEAR-OLD

Parents and their three-year old children attend classes together in a supportive, stimulating, age appropriate

environment. Designed to emphasize effective communication and parenting skills that encourage positive family interaction. The child accompanying the adult student must be **three years old as of September 1 of the current school year**. Total of 32 hours lecture and 16 hours laboratory.

PAR 7617C GETTING YOUR 4-YEAR-OLD READY FOR KINDERGARTEN

Parents and their four-year old children attend classes together in a supportive, stimulating, age appropriate environment. The stages of child development of the four-year old, aspects of child self-esteem and effective parenting skills are explored. Designed to emphasize the parental role in the school process and deciding if the child is kindergarten ready. The child accompanying the enrolled adult must be **four years old as of December 2 of the current school year**. Total of 32 hours lecture and 16 hours laboratory.

PAR 7618A STAGES OF DEVELOPMENT: 2 YEARS OLD

Parents and their two-year old children attend classes together in a supportive, stimulating, age appropriate environment. Students will engage in course material that covers child development theory, recognize milestones, create healthy family habits, and support child's optimal growth and development. The child accompanying the adult student must be **two years old as of September 1st of the current school year**. Total of 32 hours lecture and 16 hours laboratory.

PAR 7618B YOUR GROWING FAMILY: 0-5 YEARS OLD

Parents and their children attend classes together in a supportive, stimulating, age appropriate environment to learn effective discipline, sibling relationship strategies, and optimal family dynamics. Total of 32 hours lecture and 16 hours laboratory.

PAR 7680A INFANT PARENTING: 0-6 MONTHS

Parents with infant children participate in weekly class meetings to learn principles of child development, communication, and problem solving, creating positive parent-child interaction. The child accompanying the enrolled adult student must be **birth-6 months by September 1 of the current school year**. Total of 48 hours lecture.

PAR 7680B PARENTING IN THE FIRST YEAR: 0-12 MONTHS OLD

Parents with infant children participate in weekly class meetings to learn principles of child development, communication, and problem-solving, creating positive

parent-child interaction. The child accompanying the enrolled adult student must be **birth-12 months after September 1 of the current school year**. Total of 48 hours lecture.

PAR 7680C INFANT PARENTING: 7-12 MONTHS

Parents observe, record, and discuss the development of the 7- through 12-month-old child to learn principles of child development, communication, and problem solving, creating positive parent-child interaction. The child actively explores every aspect of his/her world. The child accompanying the enrolled adult student must be **7 through 12 months by September 1 of the current school year**. Total of 48 hours lecture.

PAR 7681A PARENTING YOUR TODDLER: 13-17 MONTHS

Parents with children ages 13 through 17 months participate in weekly class meetings to learn principles of child development, discipline philosophies, communication and strengthening family relationships. Particular emphasis will be given to learning to understand the child's emerging motor skills, language acquisition and drive to independence. The child accompanying the enrolled adult student must be **13 through 17 months by September 1 of the current school year**. Total of 32 hours lecture and 16 hours laboratory.

PAR 7681B PARENTING YOUR TODDLER: 18-23 MONTHS

Parents observe, record, and discuss the development of the 18- through 23-month-old child to understand their child's needs and develop stronger and more positive parental skills to help the child build self-esteem and confidence. Parents will discover with the child in an age-appropriate environment the many ways of learning through music, creative activities, play, and social interaction. Parents will share ideas, resources, and information. The child accompanying the enrolled adult student must be **18 through 23 months by September 1 of the current school year**. Total of 32 hours lecture and 16 hours laboratory.

PAR 7682 PARENTING YOUR PRESCHOOL AGE CHILD: 2-4 YEARS OLD

Parents and their pre-school children, **ages two to pre-kindergarten**, attend weekly classes together in a supportive, stimulating, anti-bias environment. Discussion on child growth and development, communication, and problem solving to create positive family interaction. Children accompanying the enrolled adult student must be **2 years to 4 years as of September 1 of the current school year**. Total of 32 hours lecture and 16 hours laboratory.

PAR 7683 MULTI-AGE PARENTING: 0-5 YEARS OLD

Parents with pre-school age children participate in weekly class meetings to learn principles of child development, communication, problem-solving, and family interaction. The child accompanying the enrolled adult student must be **birth to 4 years old by December 2 of current school year**. Total of 32 hours lecture and 16 hours of laboratory.

PAR 7684 PARENT EDUCATION DISCUSSION GROUPS – COURT MANDATED

Designed for parents who have been assigned by the courts to attend a parent education discussion group. Emphasis on family dynamics, developmental stages of children, communication and discipline, developing self-esteem in children, and stress management for parents. Community resources of support and guidance. Meets court requirement. **Short term class**. Total of 32 hours lecture.

PAR 7685 PARENT EDUCATION DAD’S CLASS

Fathers or other male caregivers participate in weekly class meetings with children to learn principles of child development, discipline philosophies, communication and strengthening family relationships. Particular emphasis will be placed on the unique skills men bring to parenting as gender differences, societal expectations and family histories are addressed. Child accompanying the enrolled adult must be **18 months to 4 years old by September 1 of the current school year**. **Short term class**. Total of 32 hours lecture.

PAR 7686 SYSTEMATIC TRAINING FOR EFFECTIVE PARENTING OF PRESCHOOLERS

Designed for parents of pre-school age children, birth to 5 years old. Parents learn to understand children and gain skills for effective parenting. Emphasis on parent interaction with materials and each other to learn sound child-rearing principles. **Short term class**. Total of 16 hours lecture.

PAR 7687 SYSTEMATIC TRAINING/EFFECTIVE PARENTING OF SCHOOL AGE CHILDREN

Designed for parents of pre-school age children, birth to 5 years old. Parents learn to understand children and gain skills for effective parenting. Emphasis on parent interaction with materials and each other to learn sound child-rearing principles. **Short term class**. Total of 16 hours lecture.

PAR 7688 SYSTEMATIC TRAINING FOR EFFECTIVE PARENTING OF TEENS

Designed to provide systematic training for improving parent-teen relationships. Parent learns to understand teenagers and gain skills for effective parenting. The parenting program helps parents find realistic, effective,

and enjoyable ways to relate to the emerging young adults in their family. Total of 16 hours lecture.

PAR 7710 FAMILY HEALTH AND WELL-BEING: DAD’S CLASS

Family health and well-being with emphasis on skills fathers bring to parenting. Group discussions on physical and emotional health, safety, and family quality time. Child accompanying the enrolled adult must be 18 months to 4 years old by September 1 of the current school year. **Short term class**. Total of 18 hours lecture.

PAR 7711 FAMILY HEALTH AND WELL-BEING

Designed to promote family development in contemporary American culture for parents with a limited background in English. Introduction to proper nutrition, exercise, factors affecting physical and emotional growth and development and sleep strategies. **Short term class**. Total of 18 hours lecture.

PAR 7712 FAMILY HEALTH AND WELL-BEING: COURT MANDATED

Development of proactive parenting techniques. Determine and implement a family plan that focuses on health and safety including the physical and emotional factors. **Short term class**. Total of 18 hours lecture.

PAR 7713 FAMILY HEALTH AND WELL-BEING: FAMILY GROUP OBSERVATION

Strategies on how to cohesively address the various needs of multiple family members. Focusing on family health and well-being, nutrition, sleep and stress. The child accompanying the enrolled adult student must be birth to 4 years old by September 1 of the current school year. **Short term class**. Total of 18 hours lecture.

PAR 7714A FAMILY HEALTH AND WELL-BEING: INFANT OBSERVATION

Development of a family health and well-being action plan focusing on proper nutrition, safety precautions, emotional health and how to best use community resources. The child accompanying the adult enrolled student must be birth to 6 months by September 1 of the current school year. **Short term class**. Total of 18 hours lecture.

PAR 7714B FAMILY HEALTH AND WELL-BEING: INFANT OBSERVATION

Development of a family health and well-being action plan focusing on proper nutrition, safety precautions, emotional health and how to best use community resources. The child accompanying the adult enrolled student must be 7 through 12 months by September 1 of the current school year. **Short term class**. Total of 18 hours lecture.

**PAR 7715 FAMILY HEALTH AND WELL-BEING:
MULTIAGE GROUP**

Focus on proper nutrition, age appropriate exercise and effective sleep strategies as part of family health and well-being core content. The child accompanying the enrolled adult student must be 2 to 4 years old as of September 1 of the current school year. **Short term class.** Total of 18 hours lecture.

**PAR 7716A FAMILY HEALTH AND WELL-BEING:
2 YEARS OLD OBSERVATION**

Implement structure, routine and discipline during the “first adolescence” by focusing on family health and well-being. Establish good communication and listening skills, proper nutrition and feeding schedules. The child accompanying the adult enrolled student must be two years old by September 1 of the current school year. **Short term class.** Total of 18 hours lecture.

**PAR 7716B FAMILY HEALTH AND WELL-BEING:
3 YEARS OLD OBSERVATION**

Implement structure, routine and discipline by focusing on family health and well-being. Establish good communication and listening skills, proper nutrition and feeding schedules. The child accompanying the adult enrolled student must be three years old as of September 1 of the current school year. **Short term class.** Total of 18 hours lecture.

**PAR 7716C FAMILY HEALTH AND WELL-BEING:
4 YEARS OLD OBSERVATION**

Create a family plan that focuses on health and well being especially as it relates to school readiness. Discuss social support networks, education resources, and stress management. The child accompanying the adult enrolled student must be four years old as of September 1 of the current school year. **Short term class.** Total of 18 hours lecture.

**PAR 7717A FAMILY HEALTH AND WELL-BEING:
TODDLER OBSERVATION**

Create a safe home environment for toddlers, implement healthy lifestyle models, identify strategies for effective parenting and learn about community resources and organizations. The child accompanying the adult enrolled student must be 13 through 17 months by September 1 of the current school year. **Short term class.** Total of 18 hours lecture.

**PAR 7717B FAMILY HEALTH AND WELL-BEING:
TODDLER OBSERVATION**

Implement structure, routine and discipline during the “first adolescence” by focusing on family health and well-being. Establish good communication and listening skills,

proper nutrition and feeding schedules. The child accompanying the enrolled adult student must be 18 through 23 months by September 1 of the current school year. **Short term class.** Total of 18 hours lecture.

**SHORT-TERM CAREER AND TECHNICAL
EDUCATION**

**BLDN 2300 INTRODUCTION TO OCCUPATIONAL
SAFETY AND HEALTH FOR THE
BUILDING TRADES**

Basic construction safety on an apprenticeship level. Training for workers on the recognition, avoidance, abatement, and prevention of safety and health hazards in workplaces and provides information regarding workers’ rights, employer responsibilities, and how to file a complaint. Total of 28 hours lecture.

**BLDN 2301 INTRODUCTION TO THE BUILDING
TRADES AND CONSTRUCTION
INDUSTRY**

Introduction to the building trades and construction industry, different unions representing crafts, and the wide spectrum of careers. Course integrates academic and technical preparation with an emphasis on career awareness, exploration and skill preparation. Total of 48 hours lecture.

**BLDN 2302 BASIC CONSTRUCTION MATH FOR THE
BUILDING TRADES AND
CONSTRUCTION INDUSTRY**

Introduction to basic mathematical skills required in a variety of construction trades. Emphasis on the basic arithmetic and geometry required to accurately perform routine tasks, estimate simple quantities, and read a standard metric ruler and scale. Total of 48 hours lecture.

**BLDN 2303 INTRODUCTION TO PLAN READING
FOR THE BUILDING TRADES AND
CONSTRUCTION INDUSTRY**

Introduction to the various types of building plans used in the building trades and construction industry. Emphasis on interpreting different types of symbols, abbreviations, and keynotes found on construction drawings. Total of 48 hours lecture.

**BLDN 2304 BASIC MATERIAL HANDLING AND
RIGGING**

Preparation for practice in basic material handling and rigging in the building trades and construction industry. Total of 28 hours lecture.

BLDN 4300 INTRODUCTION TO OCCUPATIONAL SAFETY AND HEALTH FOR THE BUILDING TRADES – BILINGUAL

Basic construction safety on an apprenticeship level. Training for bilingual workers on the recognition, avoidance, abatement, and prevention of safety and health hazards in workplaces and provides information regarding workers' rights, employer responsibilities, and how to file a complaint in a bilingual environment. Total of 28 hours lecture.

BLDN 4301 INTRODUCTION TO THE BUILDING TRADES AND CONSTRUCTION INDUSTRY– BILINGUAL

Introduction to the building trades and construction industry, different unions representing crafts, and the wide spectrum of careers. Course integrates academic and technical preparation with an emphasis on career awareness, exploration and skill preparation in a bilingual environment. Total of 48 hours lecture.

BLDN 4302 BASIC CONSTRUCTION MATH FOR THE BUILDING TRADES AND CONSTRUCTION INDUSTRY – BILINGUAL

Introduction to basic mathematical skills, for bilingual students, required in a variety of construction trades. Emphasis on the basic arithmetic and geometry required to accurately perform routine tasks, estimate simple quantities, and read a standard metric ruler and scale. Taught in a bilingual environment. Total of 48 hours lecture.

BLDN 4303 INTRODUCTION TO PLAN READING FOR THE BUILDING TRADES AND CONSTRUCTION INDUSTRY – BILINGUAL

Introduction to the various types of building plans used in the building trades and construction industry-for bilingual students. Emphasis on interpreting different types of symbols, abbreviations, and keynotes found on construction drawings. Taught in a bilingual environment. Total of 48 hours lecture.

CHDN 1100 INTRODUCTION TO TEACHING YOUNG CHILDREN

Introduction to teaching in a professional early-childhood setting or program serving children under the age of six. Emphasis on writing a lesson plan and creating developmentally and culturally appropriate curriculum. Total of 24 hours of lecture.

CHDN 1101 INTRODUCTION TO HOME, SCHOOL AND COMMUNITY RELATIONS

Introduction to effective communication and best practices for child care providers for optimal home, school and

community relations. Basic concepts of developing strong communication skills when working in a professional child care setting and critical techniques for communicating with diverse parents and co-workers. Total of 24 hours of lecture.

CHDN 1102 BASIC SKILLS FOR CHILD CARE PROVIDER

Introduction to basic theories of child growth and development, health and safety, and nutrition guidelines for infants, toddlers and preschool age children. Emphasis on CPR/First Aid training for child care providers. Total of 24 hours of lecture.

CHDN 4000 FAMILY HOME CHILD CARE PROVIDER: INTRODUCTION TO CHILD DEVELOPMENT

Introduction to stages of child development, best practices in supporting healthy growth and development of children birth to six years of age, and family and community resources. Emphasis on ages and stages of development, and effective communication and guidance for working in a diverse family home care setting. Total of 24 hours lecture.

CHDN 4001 FAMILY HOME CHILD CARE PROVIDER: CULTURALLY RELEVANT CURRICULUM

Introduction to developmentally appropriate and culturally relevant curriculum. Emphasis on developing age appropriate activities and creating effective learning environments for children in a diverse family home day care setting. Total of 24 hours lecture.

CHDN 4002 FAMILY HOME CHILD CARE PROVIDER: LICENSING AND WORKFORCE READINESS

Introduction to requirements for obtaining a license as a family home care provider. Review of the National Association for Education of Young Children (NAEYC) code of ethical conduct and California's licensing procedures. Emphasis on professionalism, health and safety, and licensing regulations. Total of 24 hours lecture.

CHDN 4100 FAMILY HOME CHILD CARE PROVIDER: INTRODUCTION TO CHILD DEVELOPMENT - BILINGUAL

Introduction to stages of child development, best practices in supporting healthy growth and development of children birth to six years of age, and family and community resources for the bilingual student. Emphasis on ages and stages of development, and effective communication and guidance for working in a linguistically diverse family home care setting. Total of 24 hours lecture.

**CHDN 4101 FAMILY HOME CHILD CARE PROVIDER:
CULTURALLY RELEVANT CURRICULUM-
BILINGUAL**

Introduction to developmentally appropriate and culturally relevant curriculum for the bilingual student. Emphasis on developing age appropriate activities and creating effective learning environments for children in a linguistically diverse family home day care setting. Total of 24 hours lecture.

**CHDN 4102 FAMILY HOME CHILD CARE PROVIDER:
LICENSING AND WORKFORCE
READINESS-BILINGUAL**

Introduction to requirements for obtaining a license as a family home care provider for the bilingual student. Review of the National Association for Education of Young Children (NAEYC) code of ethical conduct and California's licensing procedures. Emphasis on professionalism, health and safety, and licensing regulations. Total of 24 hours lecture.

GRFN 3001 BASIC GRAPHIC DESIGN

Introduction to the basic principles of graphic design and design production. Emphasis placed on basic layouts, fundamentals of typography, and scanning software for the pre-press production environment. Total of 36 hours lecture and 14 hours of laboratory.

**GRFN 3002 FUNDAMENTALS OF GRAPHICS AND
PRODUCTION**

Designing graphics, introduction to document creation for print, effective use of graphics and type in web design. Emphasis in exploring strategies for developing personal design portfolios, and careers in graphic design. Total of 36 hours lecture and 14 hours laboratory.

**MAN 1001 INTRODUCTION: MEDICAL
INTERPRETATION & TRANSLATION,
MODULE A**

Introduction to basic skills for translation and interpretation during medical visits and procedures. Topics include medical terminology, discussions of cultural sensitivity and ethics related to the medical interpreter and translator, college academic programs, and job opportunities in interpretation and translation in a medical setting. Total of 20 hours lecture and 40 hours laboratory.

**MAN 1002 INTRODUCTION: MEDICAL
INTERPRETATION & TRANSLATION,
MODULE B**

Introduction to techniques for written translation, simultaneous, consecutive, summary interpreting and sight translation for assisting patients, nurses, doctors, and administrators in a medical setting. Topics include translation techniques, and requirements for state and federal

medical interpretation certification. Total of 20 hours lecture and 40 hours laboratory.

**MAN 5000 MEDICAL FRONT OFFICE CLERK:
OFFICE PROCEDURES**

Introduction to medical office procedures in preparation for entry-level positions in a medical front office setting. Includes medical terminology, medical transcription, medical billing and coding, patient confidentiality, and workforce preparation skills. Keyboarding experience advised. Total of 80 hours lecture and 10 hours laboratory.

**MAN 5001 SOFTWARE APPLICATIONS FOR MEDICAL
FRONT OFFICE SETTINGS**

Introduction to software applications for individuals entering the medical front office setting. Provides a basic introduction to spreadsheets, accounts receivable, insurance entry, patient demographic entry, and scheduling systems as they apply to the medical front office. Keyboarding experience advised. Total of 36 hours lecture and 108 hours laboratory.

**PCAN 3000 PERSONAL CARE ATTENDANT I:
BASIC CARE**

Introduction to entry-level Personal Care Attendant skills, including non-medically directed personal care and home management activities. Emphasis on understanding and working with older patients, care giver ethics and skills, home safety, physical movement, communication, nutrition, medical guidelines, elder and dependent adult abuse, and workforce preparation. Total of 70 hours lecture.

**PCAN 3001 PERSONAL CARE ATTENDANT II:
DEMENTIA AND END OF LIFE CARE**

Introduction to care giving needs for patients with dementia, including Alzheimer's disease, associated with end of life care. Emphasis on types of causes of dementia, principles of end-of-life-care, advance planning, emotional issues related to death and dying, cultural diversity, and community resources to support families and caregivers. Total of 36 hours lecture.

**PLGN 1001 INTRODUCTION: LEGAL
INTERPRETATION & TRANSLATION,
MODULE A**

Introduction to basic skills for interpretation and translation in the legal field. Topics include legal terminology, discussions of cultural sensitivity and ethics related to the legal interpreter and translator, college academic programs, and job opportunities in interpretation and translation in a legal setting. Total of 20 hours lecture and 40 hours laboratory.

PLGN 1002 INTRODUCTION: LEGAL INTERPRETATION & TRANSLATION, MODULE B

Introduction to techniques for written translations, simultaneous, consecutive, summary interpreting, and sight translation for assisting judges, attorneys, law enforcement, and individuals in court proceedings. Topics include translation techniques, and requirements for state and federal judicial interpretation certification. Total of 20 hours lecture and 40 hours laboratory.

BUSINESS (GENERAL)

BUSN 2400 ENTREPRENEUR BUSINESS START-UP BASICS FOR SUCCESS

Prepares students to be able to successfully start-up a small business and provides the skills for success as an entrepreneur. Provides the knowledge and skills to assess a business idea, create an individualized business plan, finance a business, open and market a business, and expand and manage business problems. Total of 32 hours lecture and 48 hours laboratory.

BUSN 2601A COMPUTER KEYBOARDING A

Develop basic skills in keyboarding techniques using the touch method. Emphasis is on mastering keyboarding by touch to improve accuracy and speed to achieve a minimum of 30 net words per minute. Total of 9 hours lecture and 27 hours laboratory.

BUSN 2601B COMPUTER KEYBOARDING B

Emphasis on the development of speed and accuracy, good keyboarding techniques, and correct formatting of business documents to produce documents that meet business standards. **For** students with prior keyboarding experience a speed of 30 to 45 net words per minute is recommended. Total of 9 hours lecture and 45 hours laboratory.

BUSN 2611A COMPUTER KEYBOARDING A-BILINGUAL

General overview of keyboarding techniques using the touch method for bilingual students. Emphasis is on mastering keyboarding by touch to improve accuracy and speed to achieve. Total of 10 hours lecture and 26 hours laboratory.

BUSN 2601B COMPUTER KEYBOARDING B

Emphasis on development of speed and accuracy, good keyboarding techniques, and correct formatting of business documents to produce documents that meet business standards. **For** students with prior keyboarding experience. **Recommended** keyboarding speed of 25 words per minute. Total of 9 hours lecture and 45 hours laboratory.

BUSN 2611B COMPUTER KEYBOARDING B – BILINGUAL

General overview of keyboarding techniques for bilingual students. Emphasis on the development of speed and accuracy, and correct formatting of business documents to produce documents that meet business standards. **For** students with prior keyboarding experience. Recommended keyboarding speed of 25 words per minute. Total of 10 hours lecture and 44 hours laboratory.

BUSN 4001 HOW TO START YOUR OWN SMALL BUSINESS

Overview of knowledge, skills, and requirements for starting a new small business. Emphasis on attitudes, resources, technology, and networks involved in pursuing new business ventures. Total of 20 hours lecture.

BUSN 4002 MANAGING A SMALL BUSINESS

Introduction to managing a small business. Topics include handling workplace conflict, human relations, problem-solving, workplace diversity, marketing, and the role of the manager as leader for small business ownership. Total of 20 hours lecture.

BUSN 4003 FINANCING A SMALL BUSINESS

Introduction to financial aspects of operating a small business. Topics include starting and operating a business, financing a small business, banking, and cash flow management. Total of 20 hours lecture.

BUSN 4004 DEVELOPING A SMALL BUSINESS PLAN

Introduction to essential components of a small business plan. Topics include vision statement, product description, market analysis, management team, marketing, company analysis, cash flow statements, and revenue projections. Total of 20 hours lecture.

BUSN 4401 HOW TO START YOUR OWN SMALL BUSINESS – BILINGUAL

Overview of knowledge, skills, and requirements for starting a new small business for bilingual students. Emphasis on attitudes, resources, technology, and networks involved in pursuing new business ventures in a bilingual environment. Total of 20 hours lecture.
Total of 20 hours lecture.

BUSN 4402 MANAGING A SMALL BUSINESS - BILINGUAL

Introduction to managing a small business for bilingual students. Topics include handling workplace conflict, human relations, problem-solving, workplace diversity, marketing, and the role of the manager as leader for small business ownership in a bilingual environment. Total of 20 hours lecture.

BUSN 4403 FINANCING A SMALL BUSINESS – BILINGUAL

Introduction to financial aspects of operating a small business for bilingual students. Topics include starting and operating a business, financing a small business, banking, and cash flow management. Total of 20 hours lecture.

BUSN 4404 DEVELOPING A SMALL BUSINESS PLAN - BILINGUAL

Introduction to essential components of a small business plan for bilingual students. Topics include vision statement, product description, market analysis, management team, marketing, company analysis, cash flow statements, and revenue projections. Total of 20 hours lecture.

BUSN 2850 PERSONAL FINANCING AND BUSINESS START UP

This course provides the student with resources to identify capital to start a business or focus on a financial road map that can lead to positive business funding strategies. Total of 54 hours lecture.

BUSN 2851 EFFECTIVE BUSINESS PLAN DEVELOPMENT

This course provides the organizational plan for developing a full business plan that can be utilized to identify business goals, growth, and opportunity. The course focuses on each component of a complete business plan that is acceptable to a venture capitalist, lending institution or business partner. Total of 54 hours lecture.

BUSN 2852 BUSINESS OPPORTUNITY VENTURES

Understanding the nature of a business opportunity, how the government regulates them, and the steps for developing, investing, or buying a business opportunity. Students will understand how to become a licensor or seller of a business opportunity and how statutes vary from state to state. Total of 54 hours lecture.

BUSN 7301 MICROSOFT WINDOWS ESSENTIALS

Prepares students to work efficiently within the Microsoft Windows operating system. Topics include Windows desktop, creating, saving and finding files, file and folder management, accessing applications, internet basics and security, and customizing Microsoft Windows. Total of 36 hours lecture and 18 hours laboratory.

BUSN 7302 MICROSOFT WORD ESSENTIALS FOR THE WORKPLACE

Basic hands-on instruction of word processing techniques and features using Microsoft Word to enhance and create a wide variety of documents, such as letters, memoranda, columnar tables, text tables, newsletters, mail merge labels

and letters, and mailing documents. **Targeted** for students who have completed BUSN 7301, type 30 net wpm, or have work experience with the Windows Operating System. Total of 36 hours lecture and 18 hours laboratory.

BUSN 7303 MICROSOFT EXCEL ESSENTIALS FOR THE WORKPLACE

Basic hands-on training of business applications using Microsoft Excel software. Features and functions of the software with emphasis on its use as a data organization, presentation and analysis tool. Includes topics on integrating Excel with other applications. **Targeted** for students who have completed BUSN 7301, type 30 net wpm, or have work experience with the Windows Operating System. Total of 36 hours lecture and 18 hours laboratory.

BUSN 7304 FUNDAMENTALS OF OFFICE RECORDS MANAGEMENT AND FILING

Basic principles and procedures of record storage, control, retrieval and management by manual and electronic methods. Emphasis is also placed on guidelines regarding records storage, disposal, and management. Speed and accuracy in indexing, filing and finding documents in such systems as alphabetic, numeric, geographic, and subject. Total of 36 hours lecture and 18 hours laboratory.

BUSN 7305 BASIC BUSINESS ENGLISH AND COMMUNICATIONS

Introduction to basic business memoranda, letters, e-mail messages, employment documents, and short reports. Creating messages that inform, persuade, and convey negative news is stressed. Emphasis is on the concepts of basic writing style such as organization, coherence, and unity as well as principles of grammar and punctuation of written business documents. Instruction in oral communication, speaking skills, and oral presentations. Communication technology, communication across cultures, listening skills, nonverbal communication, and workplace ethics are included. **Targeted** for students who have completed BUSN 7301, BUSN 7302 or have working experience with the Windows Operating System and/or Word. Total of 36 hours lecture and 18 hours laboratory.

BUSN 7306 CAREER SKILLS FOR THE WORKPLACE

Techniques for effective time-management; goal setting; study skills; proper work habits, attitudes, ethics, teamwork, and standards for presenting a professional image at interviews and in the workplace. Total of 36 hours lecture and 18 hours laboratory.

BUSN 7307 BASIC BUSINESS MATH

Basic math skills and its relevance to everyday applications and transactions. Solving mathematical problems, analyzing and interpreting data, and applying sound decision-making skills. Total of 36 hours lecture and 18 hours laboratory.

BUSN 7308 BASIC BOOKKEEPING

Principles and practices of bookkeeping, including the fundamentals of double entry bookkeeping, worksheets, and preparation of basic financial statements. **Recommended** BUS 7303. Total of 36 hours lecture and 18 hours laboratory.

BUSN 7310 COMPUTER MICROSOFT WINDOWS APPLICATIONS-BILINGUAL

Introduction to the Microsoft Windows operating system for bilingual students. Topics include Windows desktop, help, file and folder management, accessing applications and communicating, and customizing a computer using the control panel. Recommended keyboarding speed of 25 words per minute. Total of 36 hours lecture and 18 hours laboratory.

WRKP 2101 WORKPLACE READINESS: BASIC ENGLISH

Designed for students who are entering or re-entering the workforce with an interest in maintaining meaningful employment. Emphasis on skills needed to develop fundamental oral and written English skills for the workplace. Total of 20 hours lecture.

WRKP 2102 WORKPLACE READINESS: BASIC MATH

Designed for students entering or re-entering the workforce with an interest in maintaining meaningful employment. Emphasis on learning mathematical and computational skills for developing fundamental workplace skills. Total of 20 hours lecture.

WRKP 2103 WORKPLACE READINESS: BASIC JOB SKILLS

Designed for students entering or re-entering the workforce with an interest in maintaining meaningful employment. Emphasis on workplace diversity, and essential skills for searching and finding a new job to succeed in the workplace. Total of 18 hours lecture and 10 hours laboratory.

ADDITIONAL SERVICES

Learning Assistance Center

The Learning Assistance Center (LAC) at CEC offers students individualized support across the curriculum for noncredit instruction. Tutoring, supplemental materials, and independent skill improvement are provided for students, particularly in ESL, Adult Basic Education (ABE), Adult High School Diploma Program (AHSD), GED, and Career-Technical Education programs. Students can utilize tutoring, computerized educational programs, videos, audiocassettes, books, and other multimedia educational resources.

Disabled Student Programs and Services (DSPS)

DSPS provides assistance and guidance for students with hearing, learning, physical, speech, or visual disabilities.

Scholarships

Students should consider applying for PCC-sponsored scholarships. Scholarship eligibility varies. Most scholarships are based on merit (i.e., GPA), but not necessarily 3.0 or better. Normally, the PCC General Scholarship application is available in October and the deadline occurs mid-February.

Parking

Students may purchase semester or intersession parking permits for parking at the Community Education Center (CEC) or at Student Business Services on the main PCC campus. A free shuttle service to and from the Colorado Campus is available.

NOTE: CEC Parking Permits are NOT valid for parking on the PCC campus.

Student Identification Cards

All students are to obtain the LancerCard ID, student identification card. There is no fee for a student's first LancerCard ID. It provides services to: book buy-back and purchasing with checks at the PCC Bookstore, use of computer centers and labs, the Associated Students Computer Café, the Learning Assistance Center, math and music labs, physical fitness facilities, PCC's Shatford Library, and transactions at Student Business Services, Financial Aid, Fiscal Services. Student ID cards are available at the Community Education Center.

Additional Services at PCC Colorado Campus

Noncredit students are encouraged to utilize available services to them at the main campus. A free shuttle service is available for students who wish to travel between the Community Education Center, the Allen Avenue Goldline Station, and the PCC Colorado Campus. The shuttle service operates between the hours of 6:30 a.m. and 10:45 p.m. and departs every 15-30 minutes from each location.

The Colorado Campus shuttle stop is located on the north east of the campus between Lots 6 and 7. The Community Education Center has two shuttle stop locations; one is in Lot C at the north end and one is in Lot D in the center. The shuttle can be met curbside at the Allen Avenue Goldline Station.

Students may want to use main campus services such as Shatford Library (open Monday-Saturday), Campus Bookstore (open Monday-Friday), Child Development Center (open Monday-Friday), and the CalWORKs Office (California Work Opportunities and Responsibility to Kids program).

Pasadena City College Faculty



SECTION IX

PASADENA CITY COLLEGE FACULTY

ABDELKERIM, RICHARD J., Assistant Professor, Division of Mathematics and Computer Science. B.S., UCLA; M.S., CSU Northridge; M.A., Loyola Marymount University, Los Angeles; Ph.D., University of Illinois, Chicago.

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PASADENA CITY COLLEGE
CATALOG
2017-2018

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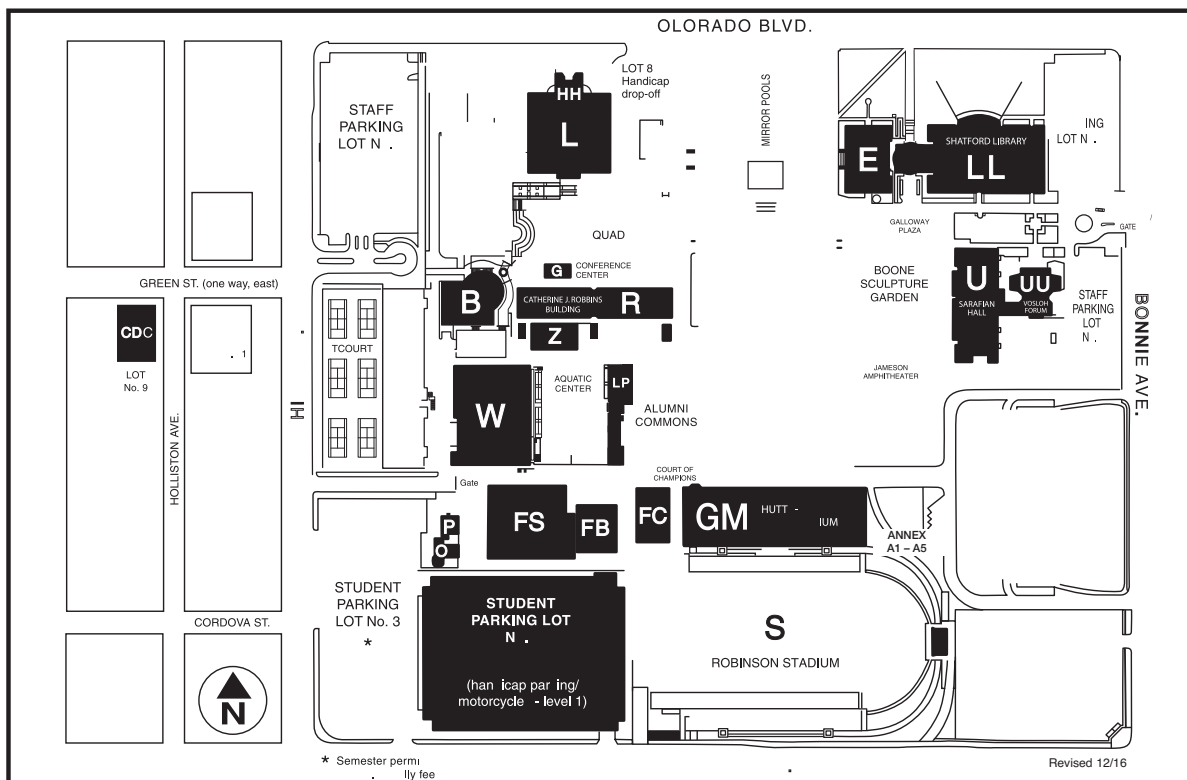
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* Semester permit fee

Revised 12/16

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■ **Community Education Center**

3035 E. Foothill Blvd., Pasadena, CA 91107 • (626) 585-3000

■ **PCC at Rosemead**

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■ **Child Development Center**

1324 E. Green St., Pasadena, CA 91106 • (626) 585-3180

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