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It’s a great time to come to San José City College, the smartest choice you can make for your education. No matter what your goals are, we have a place for you. You can earn an AA degree, take courses to transfer to a university, upgrade your technical skills, learn English, improve your ability to communicate, tone your body, and much more. Our counselors will help you select the programs that best meet your needs.

City College continues its dynamic transformation with our new Cesar E. Chavez Library/Learning Resource Center where students study in the comfort of quiet niches, take advantage of computer learning assistance and tutoring, and experience easy access to the Internet. Our new Technology Center provides a great setting for learning about computers and other current technologies. And our new Student Center makes it even easier than ever to take care of all of your business from admissions to financial aid, from counseling to enrollment — all under one roof. By Fall of ’06, we will have completed the construction of our new Science Center.

What do these changes mean for our students? They mean that we now have facilities to match the excellent caliber of teaching that is offered at SJCC. Our stellar Science faculty, for example, will have cutting-edge labs to conduct their instruction. As these changes take place, we will continue to strive to find new ways to help our students learn.

For example, along with our traditional courses, we have established four innovative learning initiatives: project based learning, service learning, peer-led team learning, and learning communities. These programs offer choices for students to make use of their best learning style.

But not everything will change. San José City College still remains one of Silicon Valley’s best and most affordable educational resources. As a college with great diversity, we bring a global, cosmopolitan worldview to our students. We are exposed to and cherish different languages and different cultures, and that exposure helps our students succeed when they enter Silicon Valley’s multi-cultural workplaces. We have connections to high tech companies, universities, and science related organizations such as NASA and Lawrence Livermore Lab. These connections help keep us up to date and provide great opportunities for advancement for our students.

Best of all, San José City College is a friendly place with a nurturing environment where students enjoy the intimacy of small classes. It is a place where you will feel safe to express your opinions, to ask questions, and to learn from others. You will be able to learn using new technologies, learn in an environment of pristine walls, and experience the historic tradition of warmth and support provided by our faculty and staff. I invite you to be part of the exciting change taking place in the heart of San Jose.

Sincerely,

Chui L. Tsang
President
Dear Students and Community Members,

Welcome to San José City College, home of great teaching and much enthusiasm over the magnificent facilities that are gracing our wonderful campus! I hope that you find the contents of our college catalogue to be informative and evidence of the valuable instruction and services available at our City College.

With many higher education options available, what makes San José City College stand out as a top choice for students in Silicon Valley? SJCC’s reputation for excellence has been earned by its success in preparing students to transfer to universities, in preparing them to enter a variety of interesting careers, and in positively responding to the learning needs and interests of the diverse communities surrounding the college. We also strongly value student leadership and service learning. Our College President, Dr. Chui Tsang, is a leader in our local community that has earned a reputation for building a college that is both academically distinguished and committed to each educational student’s goals and dreams.

You will find that at San José City College faculty emphasize the importance of critical thinking, ethics, and interpersonal skills as they prepare students to succeed in the global workplace. The college also enjoys strong relationships and partnerships with numerous cutting edge businesses industries in the Silicon Valley and it stays connected with the evolving employment opportunities in our region. The San Jose/Evergreen Community College District is committed to developing strategic partnerships with local school districts, especially middle schools and high schools, offering programs that address the needs of academically prepared students who are ready to accelerate their college enrollment as well as designing collaborative programs for students who are immigrants, low-income and unfamiliar with the college environment that they will soon enter.

Those of us who work at San José City College are proud to bring you top quality education at a public community college. We are honored to serve you and will do all we can to make your experience with us successful.

Rosa G. Perez
Chancellor
San Jose/Evergreen Community College District
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CHAPTER 1 - GENERAL INFORMATION

Section 58100. The District, shall be fully open to enrollment and participation by any person who has been admitted to the College(s) and it is the policy of this District that, unless specifically exempted by statute, every course, course of instruction, or program of instruction, together with any rule, regulation, policy, and procedure, consistent with applicable laws.

The San Jose/Evergreen Community College District and San Jose City College have made every reasonable effort to determine that all information in this catalog is accurate. Courses and programs offered, together with other matters contained herein, are subject to change without notice by the Administration of the San Jose/Evergreen Community College District or San Jose City College for reasons related to student enrollment, level of financial support, or for any other reason, at the discretion of the District and the College. The District and the College further reserve the right to add, amend, or repeal any of the Rules, Regulations, Policies and Procedures, consistent with applicable laws.

Open Enrollment Policy: It is the policy of this District that, unless specifically exempted by statute, every course, course section, or class, the average daily attendance of which is to be reported for state aid, wherever offered and maintained by the District, shall be fully open to enrollment and participation by any person who has been admitted to the College(s) and who meets such prerequisites as may be established pursuant to Title V of the CA Administrative Code, commencing with Section 58100.
CHAPTER 1 — GENERAL INFORMATION

OUR COMMITMENT TO YOUR EDUCATION

San José City College offers an educational experience that is challenging, informative, useful, and relevant. The College views learning as more than just acquiring information. Learning is an active process that occurs through many different styles and methods. San José City College promotes quality in learning by providing learning environments that stress the acquisition of skills to obtain and synthesize knowledge as well as to apply that knowledge both wisely and successfully.

Valuable learning experiences occur in the classroom and the laboratory. However, learning is not limited to classroom or to laboratory settings. Learning can occur in a variety of settings. For example, the interaction with a counselor, a tutor, or other staff member may also result in a learning experience that is critical for academic success. Consequently, San José City College supports learning through both quality academic programs and quality student support services. The College continues to be a leader in the development of innovative and effective learning programs.

At a minimum, all students at San José City College are expected to demonstrate proficiency in reading, writing, and mathematics. The successful completion of college level reading, writing, and mathematics courses is required of all degree candidates. Special courses and assistance are provided to students through the various learning skills centers at the College. Additionally, faculty and staff are always ready to provide help, encouragement, and direction to students. Each course in the degree programs offered by the College provides students with opportunities to develop critical thinking and other skills demanded by the universities and by most employers. By the time students have completed their associate degree objectives at San José City College, they will have a firm foundation of knowledge and skills that will lead to success in future pursuits.

HISTORY OF THE COLLEGE

Celebrating an existence, which spans three-quarters of a century, San José City College provides San Jose and Milpitas residents with community college education of the highest quality. From its modest beginnings in 1921, San José City College has delivered its educational mission with integrity and vitality.

For many years, San José City College operated in downtown San Jose. San Jose Unified School District took over the College’s operation in 1953, moving it to its present Moorpark Avenue location. A decade later, an independent San Jose Junior College District was created. In 1958, the name was changed to San José City College.

Today, the San Jose/Evergreen Community College District (formed in 1963) serves more than seven hundred thousand residents within its 303 square mile boundaries, including the San Jose and Milpitas Unified School Districts and East Side Union High School District.
CHAPTER 1 — GENERAL INFORMATION

As a result of a 1965 Citizen's Advisory Committee Study, a long-range plan resulted in the acquisition of two campus sites on the district's east side. Evergreen Valley College opened its doors to students in 1975 at its 155-acre campus in southeast San Jose.

Currently, San José City College enrolls more than 10,000 day and evening students, contrasted with 86 in 1921. The number of graduates has also increased. In 2002-2003, over 500 students received Associate in Arts or Science degrees; in 1923, the number was 10. The student body is diverse, reflecting the changing demography of California's major racial/ethnic groups: 30% Asian, 7% African American, 29% Hispanic, 3% other, and 17% Caucasian. Comprehensive programs targeting the following student populations further reflect diversity: disabled, re-entry, socioeconomically disadvantaged, and immigrant and international students from over 70 countries.

San José City College offers a two-year lower division college program paralleling four-year colleges and universities. For students who plan to pursue a baccalaureate degree, the College provides a strong core of general education and majors' courses required for transfer. The College also offers a variety of one- and two-year technical, occupational, and pre-professional courses of study, leading to employment.

**COLLEGE MISSION STATEMENT**

"The mission of San José City College is to prepare and empower students for success in a global multicultural society. Our primary focus is to foster student learning by providing continuous access to a wide range of comprehensive and flexible post secondary academic and occupational programs that prepare Silicon Valley residents of all ages and backgrounds for balanced and productive lives and successful careers. To reach these educational goals, the college provides the appropriate support services to meet the needs of an increasingly diverse student population.

To fulfill our commitment to student learning with appropriate assessment at each level, and to assist students in achieving their educational, employment, and lifelong learning goals, we offer the following:

- Two-year college degrees
- Lower-division transfer and general education courses
- Certificates
- Basic skills instruction
- English as a Second Language courses
- Distance learning opportunities
- Technology and career training
- Economic development
- Community services
- Adult non-credit courses

Our mission is, and shall remain, in accordance with all legislation enacted by the State of California."

Adopted by the College Planning Council February 6, 2004
Approved by the Board June 8, 2004

**COLLEGE PHILOSOPHY**

We believe our student body reflects a wide range of individual interests, achievements and potential. We further believe that growth toward full recognition and use of individual abilities is the right of every citizen and is enhanced by the professional counseling and guidance of the faculty and staff.

We believe that learning occurs in many ways and in many places and that it is not limited to the classroom; that a broad range of experiences can be related to learning and may be used to gain knowledge and appreciation.

We believe that high quality instruction must be offered in all courses and programs and that a faculty guarantees such standards, continuously critical of its personal teaching standards and of its instructional programs, imbued with intellectual tolerance and a respect for learning.

We believe a wide variety of curricula must be available to provide students with different interests and the opportunity and motivation to succeed at a high scholarship level.

We believe that we must stimulate students to think critically and creatively, to recognize and accept personal capabilities, and to participate effectively in a dynamic society.

We believe that we have an obligation to respond to the academic and cultural needs of our community; to maintain a leadership role in defining and clarifying the needs and aspirations of the community; to provide for their realization through services within the functions of this college as an educational institution; and to warrant community support through dedication to excellence in learning.

**GENERAL EDUCATION PHILOSOPHY**

All students who complete a degree program at San José City College will engage in an organized program of general education that:

- fosters personal growth and lifelong learning
- presents them with, and helps them to interrelate a broad range of human knowledge and thought
- expands their range of scientific, intellectual, and aesthetic experiences, interests, and abilities
- develops effective personal, interpersonal, and social skills
- assists in the process of clarifying and applying values in their daily lives
- fosters a sense of civic responsibility
- expands their understanding of national and global affairs
- fosters the student's sense of individuality in the context of the larger world
- fosters an appreciation of the oneness of human kind
Helping our students achieve these general education learning outcomes is a shared responsibility in all coursework. General education learning outcomes include a specific focus on such topics as:

- aesthetic sensitivity
- civic responsibility and involvement
- civility
- computer competency
- critical analysis/logical thinking
- individual, cultural and international diversity
- ethical principles
- historical sensitivity
- information competency
- personal integration
- interpersonal skills
- oral communication
- political awareness
- scientific and quantitative reasoning
- social responsibility
- working in groups
- written communication
- critical reading skills
- economic theory

All students will achieve these learning outcomes, in part, through participation in a general education core curriculum that includes work in:

- Written Communication
- Oral Communication
- Critical Thinking
- Physical Sciences
- Life Sciences
- Quantitative Reasoning
- Fine Arts, Humanities
- Social and Behavioral Science
- Lifelong Understanding and Self Development
- Physical Health and Activity
- Cultural Diversity/Ethnic Studies

A concentration of major courses combined with general education will comprise an Associates Degree.

Approved by SJCC and EVC Senates Spring 2004; Approved by Governing Board June 8, 2004

**ACCRREDITATION**

San José City College is accredited by the Accrediting Commission for Community and Junior Colleges — Western Association of Schools and Colleges, and operates by authority of the Board of Governors of the California Community Colleges, and the Board of Trustees of the San Jose/Evergreen Community College District. Accreditation information may be found in the Library, Deans’ offices and the President’s Office.

**GRANTING OF DEGREES**

San José City College is authorized by the Board of Governors of the California Community Colleges to grant the Associate in Arts degree and the Associate in Science degree.

**ACADEMIC SENATE**

On July 7, 1964, the Board of Trustees of the San Jose/Evergreen Community College District authorized the establishment of an academic senate at San Jose City College. Our Senate became operative during the Fall of 1964.

The San Jose City College Academic Senate represents faculty in all academic and professional matters. As provided by The California Educational Code, Title V, and District Policy, the District’s Governing Board normally accepts all recommendations from the Academic Senate regarding such matters as curriculum, accreditation, professional development, and program review. In other words, the Academic Senate, actually shares in the governance of our district in the case of academic and professional matters.

The Senate also shares responsibility for the development of all other District policies with the Associated Students, the administration, and classified staff through the quadripartite procedure.

The Senate appoints all faculty members to the District committees and task forces, exclusive of collective bargaining committees.

The Academic Senate normally meets on the first and third Tuesday of each month at 2:10 pm in the Community Conference Room, SC204. All staff and students are invited to attend our meetings.

**CLASSIFIED SENATE**

The purpose of the Classified Senate is to participate in the quadripartite system by representing the needs of the classified staff on the San Jose City College campus. Also, Classified Senate is a representative body that provides consultation to the Governing body as it relates to the classified staff. It provides an avenue toward mutual respect, camaraderie, and admiration through shared involvement and provides a cross-campus connection unifying the classified staff through participation, leadership, and professional development, always working towards a better learning environment. All classified staff are eligible to serve as members of the Senate.

**ORGANIZATION OF THE COLLEGE**

The administrative head of the District is the Chancellor who serves as Secretary of the Board of Trustees. The College President is the Chief Administrative Officer of the campus.

The Director of Administrative Services functions as the Chief Financial Officer of the college. He/she directs the development and administration of the college’s budgeting process and is designated as the Campus Safety Officer. The Director also manages the hourly personnel function and coordinates the administrative operation of the evening, weekend, and off-campus programs.

Instruction is divided into academic divisions, each under the supervision of a Dean who is responsible for coordinating the various departments within the particular division. Career programs are coordinated with cooperation from advisory committees, consisting of representatives from organized labor, the professions, industry, business and where appropriate, State of California licensing agencies. Advisory committees make both course and program recommendations to the staff.
Instructional Technology and Learning Resources provide instructional support to faculty, staff, and students at San José City College. Some of the areas of responsibility are the Library, Campus Technology Support, Staff Development, Instructional Technology, Online Education, Education Technology courses, and the SJCC Web site.

Student Services is divided into two divisions: Counseling and Matriculation and Special Programs. The division of Counseling and Matriculation is primarily responsible for Counseling, the Career/Transfer Center, guidance courses, Financial Aid, Assessment, and International Students. The division of Special Programs has the responsibility for EOP&S, DSP&S, Middle College, CHALUI follow-up, and College Information and Recruitment.

Appropriate committees of the faculty, student body, and administration review all new course and program proposals, as well as recommendations for modifications. If found feasible and in accordance with the philosophy of the College, they are recommended to the Chancellor and the Board of Trustees for adoption.

**Divisions and Programs**

**Applied Science, Technology and Physical Education**
- Advanced Manufacturing Technology
- Air Conditioning/Refrigeration (HVACR)
- Computer Technology
- Construction Technology
- Electronics Technology
- Facilities Maintenance Technology
- Glazing Apprenticeship
- Laser Technology
- Machine Technology
- Meatcutting Apprenticeship
- Microwave Technology
- Telecommunications
- Work Experience

**Athletics and Physical Education**
- Physical Education
- Intercollegiate Athletics
  - Baseball (Men's)
  - Basketball (Men's & Women's)
  - Cross Country (Men's & Women's)
  - Football (Men's)
  - Golf (Men's)
  - Softball (Women's)
  - Track & Field (Men's & Women's)
  - Volleyball (Women's)

**Business and Service Careers**
- Business Education
  - Accounting
  - Business
  - Computer Applications
  - Computer Information Systems
  - Marketing
  - Real Estate
- Service Careers
  - Cosmetology
  - Dental Assisting
  - Health Education
  - Health Sciences (Emergency Medical Technician, Clinical Technician and Polysomnographic Technology)

**Counseling and Matriculation**
- Assessment
- Career/Transfer Center
- Counseling
- Financial Aid
- Guidance courses
- Health Services
- Honors Program
- International Students
- Veterans
- Student Life
  - Student Government
  - Student Activities
  - Student Conduct
  - Student Grievances
  - Student Government course

**Instructional Technology and Learning Resources**
- Campus Technology Support & Services
- Educational Technology courses
- Faculty and staff technology training
- Instructional Technology
- SJCC Library
- Library Studies
- Online Education
- Staff Development
- Technology planning on campus
- SJCC Web Page – Internet and Intranet

**Humanities and Social Sciences**
- Administration of Justice
- Alcohol and Drug Studies
- Anthropology
- Art
- Communication Studies
- Dance
- Early Childhood Education
- Economics
- Education
- Ethnic Studies
- Family and Consumer Studies
- Foreign Languages
- Geography
- History
- Humanities Labor Studies
- Multimedia/Digital Arts
- Music
- Philosophy
- Photography
- Political Science
- Psychology
- Sign Language
- Social Sciences
- Sociology
- Theatre Arts

**Language Arts**
- English
- English as a Second Language
- Journalism
- Learning Skills
- Puente Program
- Reading
- Writing

**Mathematics and Science**
- Anatomy
- Astronomy
- Biology
- Botany
- Chemistry
- Computer Science
- Environmental Science
- Geology
- Mathematics
- Meteorology
- Microbiology
- Oceanography
- Physical Science
- Physics
- Physiology

**Special Programs**
- Adaptive Physical Education
- EOP&S/CARE
- Disabled Students Program & Services (DSP&S)
- CHALUI
- Middle College
- College Information and Recruitment

**Workforce Initiative Network (WIN) Program**
- AmeriCorps
- CalWORKS
- Job Placement
- Service Learning
CHAPTER 2  —  ADMISSIONS AND REGISTRATION PROCEDURES

INTRODUCTION
To be eligible for admission, the applicant shall be a high school graduate or be 18 years of age or older. High school students who wish to attend San José City College must be attending high school at least part-time and have an Attendance Approval for Special Part-time High School Students form (R-40) completed and filed in the Office of Admissions and Records. High school students must be in the 9th through 12th grade to attend.

A parent or legal guardian of a student who is under 18 and not attending high school or of a student who has not completed the 8th grade may directly petition San José City College for special admissions as a part-time student. Special Part-Time Student forms (R-42) for this purpose are available in the Office of Admissions and Records.

"...unless specifically exempted by statute or regulation, every course, course section, or class, reported for state aid, wherever offered and maintained by the District, shall be fully open to enrollment and participation by any person who has been admitted to the college(s) and who meets prerequisites" established in accordance with state regulations.

Per Title 5 Section 51006

RESIDENCE REQUIREMENTS
At the time of registration, all students are required to complete a statement of legal residence. They are qualified to attend San José City College according to the following standards:

1. Anyone who is a legal resident of the State of California (see Legal Residence) may attend classes in the San Jose/ Evergreen Community College District. See exceptions in #3.

2. Students who have completed three (3) or more years in a California high school and have received a high school diploma, or its equivalent, may be exempt from non-resident tuition. Please check with the Office of Admissions and Records.

3. Non-residents and undocumented students may attend, but must pay full tuition, enrollment, and health fees at time of registration. No personal checks are accepted in payment of tuition.

4. An international student who has met the special admission procedures and enrollment priorities may attend, but must pay full tuition, enrollment, and health fees at time of registration. No personal checks are accepted in payment of tuition.

5. Tuition for non-California residents is set annually by the District Board of Trustees. For the 2005-2006 academic year, tuition will be $169 per unit.

LEGAL RESIDENCE
Individuals are legal residents of California if they fulfill one of the following requirements:

1. They are at least 19 and have been a legal resident of California for more than one year immediately preceding the day before the first day of instruction (residency determination date) for the semester/session they propose to attend San José City College.*
2. Unmarried persons who are between 18 and 19 years of age shall have their residency classification determined by considering (a) the residency status of their parent or legal guardian while they are under 18 and (b) their own residency after they become 18. The total time (a plus b) must be more than one year as in number 1 above. (See Item #16 for exception).

3. Unmarried persons who are under 19 years of age and can prove they have been entirely self-supporting and actually present in California for more than one year immediately preceding the residence determination date, with the intention of acquiring a residence therein, shall be entitled to resident classification until the student has attained the age of majority and has resided in California the minimum time necessary to become a resident.*

4. Military Personnel: A student who is a member of the armed forces of the United States stationed in California on active duty, except a member of the armed forces assigned for educational purposes to state-supported institutions of higher education, shall be entitled to resident classification until the student has resided in California the minimum time necessary to become a resident.*

5. Dependent of Military Personnel: A student who is a natural or adopted child, stepchild, or spouse who is a dependent of a member of the armed forces of the United States stationed in California on active duty and not assigned for educational purposes to state-supported institutions of higher education shall be entitled to resident classification.

"An undergraduate student who is a natural or adopted child, stepchild or spouse who is a dependent of a member of the armed forces of the United States stationed in California on active duty and not assigned for educational purposes to state-supported institutions of higher education shall be entitled to resident classification for purposes of determining the amount of tuition and fees so long as the member remains stationed in California with the armed forces, and thereafter, for no longer than a one year period."

Per Chancellor’s Office recommendation related to Ed Code Section 68074

6. Parent was California Domiciliary Who Left: A student who remains in this state after his or her parent, who was theretofore domiciled in California for at least one year immediately prior to leaving and has, during the student’s minority and within one year immediately prior to the residency determination date established residence elsewhere, shall be 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 full-time attendance at an institution.*

7. Two-Year Care and Control: A student shall be entitled to resident classification if, immediately prior to enrolling at an institution, he or she has lived with and 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 been domiciled in California during the year immediately prior to the residence determination date. This exception shall continue until the student has attained the age of majority and has resided in California the minimum time necessary to become a resident, so long as continuous full-time attendance is maintained at an institution. *

8. Non-resident Employees and/or Their Dependents: A student who is a full-time employee of an institution or of any state agency (see definitions below), or a student who is a spouse or child of a full-time employee of an institution or of any state agency, may be entitled to resident classification until he or she has resided in the state the minimum time necessary to become a resident. *

9. Employees of Public Schools: A student holding a valid public school credential authorizing service in the public schools of this state and who is employed by a school district in a full-time position requiring certification qualifications for the college year in which the student enrolls in an institution shall be entitled to resident classification.*

10. Students employed by a Public Agency: A student who has been hired by a "public agency" may be classified as a resident for enrollment in and completion of police academy training courses.

"Public agency" as defined by this section means the state or any city, county, district, or other local authority or public body of or within the state of California.*

11. Apprentices: A student claiming resident status as an apprentice shall provide evidence such as a card or certification from the Joint Apprenticeship Committee or the student's employer, evidencing such apprenticeship status.*

12. Adult Dependent Child of California Resident: A student who has not been an adult resident of California for more than one year and is the dependent child of a California resident shall be entitled to resident classification until the student has resided in California the minimum time necessary to become a resident so long as continuous attendance is maintained at the college. Thereafter, the student must meet the requirements for establishing residency.*

13. Graduate of School Operated by Bureau of Indian Affairs: A student who, prior to enrollment in a community college, graduated from any school located in California that is operated by the United States Bureau of Indian Affairs, is entitled to resident classification, so long as continuous attendance is maintained at the college.*

14. Agricultural Employment: A district may classify a student as a resident if he or she lives with a parent (who is not precluded from establishing residence by Immigration and Naturalization Service) as a resident if he or she earns a livelihood primarily by performing agricultural labor for hire in California and other states and the parent has performed such labor in this state for at least two months per year in each of the two preceding years, the parent lives within the district which maintains the community college attended by the student, and the parent claims the student as a dependent on his or her state or federal personal income tax returns if he or she has sufficient income to have a personal income tax liability.*

A district may also classify a student (who is not precluded from establishing residence by Immigration and Naturalization Services) as a district resident if he or she earns a livelihood primarily by performing agricultural labor for hire in California and other states and he or she has performed such labor in California for at least two months per year in each of the two preceding years.*

15. Alien Students: A student who is an alien may establish his or her residence if not precluded by the Immigration and Nationality Act from establishing domicile in the United States; provided that the student has had residence in the state the minimum time necessary to become a resident.*
California for more than one year prior to the residence determination date for the semester, quarter or other session for which attendance at an institution is proposed.*

Aliens—must bring Visas or Alien Registration cards to the Office of Admissions and Records when submitting applications. Persons holding the following visas are precluded from establishing residency: B-1, B-2, C, D-1, D-2, F-1, F-2, H-2, H-3, J-1, J-2, M-1, M-2, O-2, P-1, P-2, P-3, P-4, Q, TD, and TN.*

16. An Unmarried Minor Child of Undocumented Parents: who is a United States citizen, is eligible to establish residency.*

17. All others shall be classified as nonresident students and will be required to pay the nonresident tuition at the time of registration.

18. Classifications are to be based on evidence presented in residence questionnaires and further evidence deemed necessary by the College. The student may be required to certify these residency statements under penalty of perjury or certify them under oath to an employee of the College who is authorized to receive oaths by the governing board.

* Please consult with the Admissions Clerk in the Office of Admissions and Records for specific residency requirements.

**APPLICATION FOR ADMISSION**

The first step for all persons desiring to enroll in classes at San José City College is to complete an Application for Admission. This application is available on our website, www.sjcc.edu, or in the Office of Admissions and Records. If you wish an application and related information be mailed to you, call our Outreach Department at (408) 288-3708.

**SUPPLEMENTAL APPLICATION - COSMETOLOGY**

Because of special department requirements or enrollment limitations for Cosmetology, this department has established screening procedures and supplemental applications for their candidates. Information regarding these applications is available in the Office of Admissions and Records, the Counseling Office, and the Cosmetology Department.

**INTERNATIONAL STUDENTS**

It is the policy of San José City College to select a representative number of international students for admission each year.

International Student Application forms may be obtained by year-round; however, the application, application fees, TOEFL scores, transcripts of secondary work, previous college work, and required documentation must be filed by April 15 for the fall semester and by October 15 for the spring semester.

International students are required to pay the non-resident tuition, enrollment fees, and health fees at time of registration. It is highly recommended that students purchase health insurance to cover their medical needs. Information about various health insurance plans can be obtained through the Student Health Services Office. Failure to pay the tuition charge results in a denial of registration.

All international students must follow United States Immigration Services guidelines.

Prospective students interested in attending San José City College should request an International Student Application form from the Counseling Office at San José City College. For more information, call (408) 288-3750 or visit the Web site, www.sjcc.edu.

**TRANSCRIPTS FROM OTHER COLLEGES**

Transfer credit may be allowed for work done at other accredited post-secondary education institutions. To receive such credit at San José City College, the student must have official transcripts of the prior work sent directly to the Office of Admissions and Records, and must be on file six weeks prior to registration. These transcripts will be evaluated and acceptable credit included in the student’s permanent records. Credit is granted in accordance with the recommendations in “Transfer Credit Practices” published by the American Association of Collegiate Registrars and Admission Officers (AACRAO). Students whose transfer Grade Point Average is less than 2.0 on a 4.0 point scale will be admitted on probation.

All persons who plan to be candidates for the Associate in Arts or Science degree must file official transcripts from all colleges attended with the Office of Admissions and Records a minimum of eight weeks prior to graduation. These transcripts are to be sent directly from the former institutions to the Office of Admissions and Records and cannot be accepted directly from the student. All transcripts become the permanent property of San José City College.

At the time of graduation, the grade point average of all work attempted at all other accredited institutions of higher education is calculated into the grade point average at San José City College to determine eligibility for graduation.

**ASSESSMENT**

All students are required to take the Assessment in English and Math unless they submit official college transcripts showing completion of equivalent English and Math courses. See the above section on transcripts from other colleges.

The Assessment is given several times a week throughout the year. However, it is necessary for students to obtain an admissions appointment to the examination from the Office of Admissions and Records at the time they submit an Application for Admission. Students will be given a choice of dates and times. Results of the Assessment are to assist in the proper placement of students in courses according to the level of course difficulty and student objectives. Success in initial college courses is a very important first step in mastering college.

After taking the Assessment, students may discuss the results with a counselor. If the student thinks their test results do not reflect their true ability, they may decide to retake the test, or make an appropriate course selection based on a discussion with the counselor.

Students who do not receive approval for the course level in which they would like to be placed, may challenge the prerequisites for that placement. Documentation of experience or other comparable coursework may be needed.
CHAPTER 2 — ADMISSIONS AND REGISTRATION PROCEDURES

CREDIT BY EXAMINATION

Department/Discipline Subject Examinations shall be comprehensive. Projects, term papers, reading reports, laboratory exercises and/or written examinations may be required as evidence that the student has performed to the extent and level of students regularly enrolled in the class.

Credit by Examination shall be granted to a maximum of 12 units.

Credit by Examination “may be granted only to a student who is registered at the college and in good standing and only for a course listed in the catalog of the community college.”

Per Title 5 Section 55753

An application to be examined for Credit by Examination must be approved both by the student’s counselor and by the appropriate Dean.

A student is permitted only one attempt to challenge each course.

A full description of the regulations and procedures for Credit by Examination is available in the Counseling Office.

COLLEGE ENTRANCE EXAMINATION BOARD ADVANCED PLACEMENT PROGRAM (CEEB) AND COLLEGE LEVEL EXAMINATION PROGRAM (CLEP)

College credit will be granted to students who provide the college with official test results showing minimum passing scores for either CEEB or CLEP examinations. Credit shall be posted on the college transcript when a student has completed 12 units of study in the San Jose/Evergreen Community College District.

NON-COLLEGIATE COURSES

Upon presentation of certificates from non-collegiate agencies, credit may be granted. Credit will be granted according to the recommendation approved or listed in the Instructional Guide for Non-Credit Courses published by the American Council on Education. The total number of units that can be earned through Credit for Military Service, Credit by Examination, CEEB, CLEP, and non-collegiate courses shall not exceed 30 units.

LIMITS ON PRE-COLLEGIATE BASIC SKILLS UNITS

“No student shall receive more than 30 semester units (or 45 quarter units) of credit for remedial coursework. Students having exhausted the unit limitation shall be referred to appropriate adult noncredit education services provided by college, adult school, community-based organization, or other appropriate local provider with which the district has an established referral agreement.”

“The following students are exempted from the limitation on remedial coursework described in subsection of the section:

(1) Students enrolled in one or more courses of English as a Second Language (ESL);

(2) Students identified by the district as having a learning disability...

(3) … any student who shows significant, measurable progress toward the development of skills appropriate to his or her enrollment in college-level courses.” Such students need to petition for a waiver of the limitation on remedial coursework with the Counseling Administrator on the campus.

“A student who does not attain full eligibility status for college-level work...shall, unless provided with a waiver, be dismissed and referred to adult noncredit education courses.”

“A student may, upon successful completion of appropriate “remedial coursework,” or upon demonstration of skills levels which will reasonably assure success in college-level courses, request reinstatement to proceed with college-level coursework.” The request should be made to the Counseling Administrator on the campus.

Per Title 5 Section 55756.5 (b)

CREDIT FOR MILITARY SERVICE

Upon submission of a copy of the DD-214 (Discharge), persons who have completed a minimum of 185 days of active duty in the United States Armed Forces may receive two units of credit for Physical Education, two units for Health Education, and two units for Military Service. Additional units, for certain military technical schools, may be granted upon evaluation of the DD-214. Veterans receiving V.A. benefits must file the DD-214 with the Office of Veterans’ Affairs within the first eight weeks of the semester. Credit granted for military schools is based upon recommendation of the American Council on Education.

ADMISSION GUIDE

New, First-Time College Student (reached 18 years of age or high school graduate):

1. Complete and submit an Application for Admission to the Office of Admissions and Records.
2. Schedule and take the Assessment.
3. After you complete the Assessment, you will be directed to the Counseling Office for advisement.
4. Register for class(es) by calling (408) 223-0300.
5. Obtain a basic ID card (free) or a photo ID card for a small fee in the Learning Resource Center. You will need this card to check out books and for other services.

Returning Student – Not on Probation or Dismissal:

1. Complete and submit an Application for Admission to the Office of Admissions and Records.
2. Obtain a registration date.
3. Clear any holds you may have before registering.
4. Register for class(es) by calling (408) 223-0300.
5. Obtain a basic ID card (free) or a photo ID card for a small fee in the Learning Resource Center. You will need this card to check out books and for other services.

Returning Student – On Probation and/or Dismissal Status:

1. Complete and submit an Application for Admission to the Office of Admissions and Records.
2. Schedule a required counseling appointment by calling (408) 288-3750.
3. Obtain a registration date.
4. Clear any holds you may have before registering.
5. Register for class(es) by calling (408) 223-0300.
6. Obtain a basic ID card (free) or a photo ID card for a small fee in the Learning Resource Center. You will need this card to check out books and for other services.
CHAPTER 2 — ADMISSIONS AND REGISTRATION PROCEDURES

New Transfer College Student (student who has attended another college):

1. Complete and submit an Application for Admission to the Office of Admissions and Records.
2. Submit official transcripts to the Office of Admissions and Records.
3. Obtain a registration date.
4. Register for class(es) by calling (408) 223-0300.

Academic counseling is not required for transfer students. However, to avoid delay in registering for classes (especially if you have taken the prerequisites at other colleges) and the possibility of taking unnecessary classes, we strongly recommend that you make a counseling appointment. It is important that you bring unofficial transcripts to the counseling appointment. The counselor will determine if the required course prerequisites have been met and enter them in the computer system.

High School Student (R-40):

1. Complete and submit an Application for Admission to the Office of Admissions and Records.
2. Complete and submit the Special Part-Time Student Admission form (R-40).
3. Schedule and take the Assessment.
4. After you complete the Assessment, you will be directed to the Counseling Office for advisement.
5. Register for class(es) by calling (408) 223-0300.
6. Obtain a basic ID card (free) or a photo ID card for a small fee in the Learning Resource Center. You will need this card to check out books and for other services.
7. High school students are required to complete and submit a new Application for Admission for every term/semester of enrollment and an Attendance Approval for Special Part-Time High School Students form (R-40). This information applies to new, returning, and continuing students.

Students under 18 and Not in High School (R-42) and Have Not passed the California Proficiency Exam or G.E.D.:

1. Complete and submit an Application for Admission to the Office of Admissions and Records.
2. Complete and submit the Special Part-Time Student Admission form (R-42). This form will require a letter of recommendation from the principal of the school of attendance indicating your maturity and ability to benefit from advanced scholastic or vocational work.
3. Schedule an Assessment before you submit your application and the R-42 form.
4. Upon completion of the Assessment, you will meet with a counselor for advisement.
5. If approved by the counselor, return to the Office of Admissions and Records to submit your application and R-42 and for a registration date and time.
6. Register for class(es) by calling 408-223-0300.
7. Get a basic ID card (free) or a photo ID card for a small fee in the Learning Resource Center. The card will be needed for checking out books from the library and for other services.
8. Students wishing to register for the next semester/session are required to complete a new Application for Admission and a R-42 form.

Open Curriculum Class(es) only for students over 18 years of age or High School Graduates*:

1. Complete and submit an Application for Admission in the Office of Admissions and Records.
2. Obtain a registration date.
3. Clear any holds you may have before registering.
4. Register for class(es) by calling (408) 223-0300.
5. Obtain a basic ID card (free) or a photo ID card for a small fee in the Learning Resource Center. You will need this card to check out books and for other services.

If you need assistance, call:
College Information and Recruitment at (408) 288-3708

*An open curriculum class is one that has no prerequisites of any kind. However, some courses such as ESL 342 and Math 310 may require that Assessment results be on file prior to the first day of class.

ASSessment AND ADVIseMEnT INFORmATIOn

1. New, first time college students are required to take the Assessment prior to their registering for class(es). This will ensure that they will be able to register, in most cases, after their advisement sessions.
2. Students who wish assistance in choosing their classes may contact the Counseling Office.
3. Students who enroll in Open Curriculum classes ONLY or EMT classes ONLY are exempted from the Assessment and advisement. All high school students (R-40), junior high and special admit students (R-42) are required to take the Assessment and attend an advisement session.
4. A student may be exempted from the Assessment if the student has one of the following:
   • A transcript indicating an A.A./A.S., B.A./B.S., M.A./M.S. or a higher degree.
   • A transcript indicating completion of college-level English or Math needed as prerequisites.
   • Life experience that requires basic skills, e.g., a journalist would not have to take a writing exam.
   • Occupational experience that would substitute for a course prerequisite, e.g., several years of tune-up experience might exempt you from certain automotive classes.

CLASSIFICATION OF STUDENTS

While the minimum full-time program that will qualify a student for graduation in two years is 15 units each semester, the following classifications have been established:

Freshman: Fewer than 30 units completed.
Sophomore: 30 or more units completed.

Fall and Spring Semesters:

Full-time student — registered for 12 or more units.
Part-time student — registered for fewer than 12 units.
Half-time student — registered for 6 units or more but fewer than 12 units.

Summer Session:

Full-time student — registered for 4 or more units.
Part-time student — registered for fewer than 4 units.
Half-time student — registered for 2 units or more but fewer than 4 units.

MINIMUM UNIT REQUIREMENTS

To maintain eligible status in the categories listed below, students must carry a minimum program of new work as shown below:

1. International students — 12 units per semester.
2. Social Security, California State Disability, and P.L. 674 — 12 units per semester.
4. Associated Students Officers — 9 units per semester.
5. Varsity athletes — 12 units per semester.

There is no minimum unit requirement for enrollment in the college; it exists only to qualify for benefits or special eligibility.
MAXIMUM UNIT LOAD

Students are restricted to a maximum load of 18 units during the regular registration period for Fall and Spring semesters. The maximum number of units a student can carry during the Summer session is 7 units. The limit is applied to provide all students an opportunity to register for a full program and be successful as students. When space remains in classes during the drop and add periods, the Dean of Counseling and Matriculation may approve additional units.

Students, particularly first time college students, should avoid taking more than 18 units in one semester or 7 units during the summer.

RETENTION OF STUDENT FILES

If a former student does not enroll for three consecutive years, the transcripts from other colleges are destroyed. Transcripts of work at San José City College are kept indefinitely.

Paper Applications for Admission and college transcripts from students who do not enroll are destroyed within 12 months after receipt.

FEES

ENROLLMENT FEES

All students who meet California residency status will be required to pay enrollment fees of $26 per unit. *

* Note: Legislative proposals are being considered to increase enrollment fees (up to $33 or more). Increases may be approved by the Governor and imposed before, during or after the Fall 2005 semester begins or even after the semester ends. These are circumstances, which the District does not control.

STUDENT ID CARD

All students will be issued a basic ID card (without photo) at no cost. If a student wants a photo ID card, a small fee will be assessed. The basic ID card and photo ID card are acceptable for access to the college libraries, Health Services, and other services provided. The small fee for the photo ID card is payable at the time of registration.

Students should retain this card for future semesters. There is a replacement fee for a photo ID card. There are no exceptions to the replacement fee.

STUDENT ACTIVITIES FEE

Associate Student Body (ASB) stickers are required of students who use the Student Accounts Office for loans or scholarships, intercollegiate athletes and all officers of clubs and organizations. This money is used in support of various activities: emergency loans, book loans, athletics, recreation, and community and social welfare. This activity program is a college-wide enterprise. Its operation is not only of direct benefit to each student; it also furnishes an organized representation for all students in various college and community affairs and activities.

All students will be billed a $5 activities fee and issued an ASB sticker to be affixed to their student ID card. Refunds may be requested through the Office of Admissions and Records as described in the class schedule.

HEALTH SERVICES FEE

The District provides a medical doctor and nurse to assist students in health matters. These services include first aid, medical care, health information, health counseling and personal, short-term adjustment counseling. All students will be required to pay a $13 health fee at the time of registration for Fall and Spring classes.

• EXCEPTIONS: Concurrently enrolled high school students with an approved R-40 on file, students taking Friday evening, Saturday or Sunday classes only, students enrolled only for classes meeting off-campus, students taking only short-term classes which meet on-campus seven times or less, with proper documentation, students dependent exclusively upon prayer for healing in accordance with teachings of a bonafide religious sect, denomination or organization, students receiving assistance through the state enrollment fee program (BOGG), and indented apprentices fulfilling related instruction requirements are not required to pay this fee.

NON-RESIDENT/INTERNATIONAL STUDENT TUITION

Tuition for non-residents and international students for the 2005-2006 fiscal year is $169 per unit. In addition, students must pay enrollment fees and health fees. Personal checks are not accepted for tuition. Payments must be made in cash, certified check, travelers’ checks, or Visa/MasterCard.

MATERIALS FEE

Some classes require a materials fee. Please check the individual course offerings for the amount required. This fee is assessed at registration.

PARKING FEE

Fall and Spring

All students may purchase semester permits from the Campus Store. The cost of permits for automobiles is $40 and $14 for motorcycles. Motorcycle students MUST purchase the semester permit and park only in designated areas on campus. Fees are refundable within District policy. Vehicles without semester permits must pay $2 per day. Paid parking is enforced Monday through Saturday. Purchase of a semester permit does not guarantee a parking space; it merely gives the student the convenience of not having to purchase a daily permit. Students must park in student lots only. Please make sure the vehicle is locked. The College District is not responsible for damage or loss to your vehicle. Students on fee waivers (BOGG) will not be charged more than $20 for a parking permit.

If an auto permit is purchased and students desire to ride a motorcycle some days of the week, they may have the motorcycle permit at no charge, provided they show ownership for BOTH vehicles. However, if students initially purchase a motorcycle permit for $14, they may purchase an auto permit for an additional $26 with proper documentation.

Violations of parking rules can result in citations ranging from $27 to $280.

Summer Session

Parking in student lots will require a daily fee of $2 deposited in any of the yellow ticket dispensers located in these lots. Summer session parking permits may also be purchased for $8 for automobiles. These permits will be sold at the Campus Store on a first come, first serve basis. The fee for all motorcycles is $4. Motorcycles are to be parked in designated areas only.

Students must park in student lots, and staff must park in staff lots or pay the required fee for the student lot.
RECORDS FEES

Transcripts
On request, students are provided with two copies of their official transcript free of charge; thereafter, there is a small fee per copy. Transcript requests normally take 7 to 10 days to process. If the students need a transcript immediately, an emergency/rush transcript may be requested for a set charge. Copies of transcripts from other colleges are not provided.

Student’s Schedule
Students are provided with a free copy of their current semester schedule at the time of registration and when classes are added; thereafter, a fee will be assessed per copy.

General Education Certification or the Intersegmental General Education Transfer Curriculum (IGETC) Certification
Upon request, students are provided with two free copies of their General Education Certification or the Intersegmental General Education Transfer Curriculum (IGETC); thereafter, there will be a fee per copy.

Verification of Enrollment
Upon request, students are provided with two copies of their official verifications of enrollment free of charge; thereafter, there is a small fee per copy.

Checks or money orders should be made payable to San Jose/Evergreen Community College District (SJ/ECCD). The colleges also accept Visa and MasterCard.

FEE WAIVER
- Students may file a Board of Governors Fee Waiver (BOGW) in the Financial Aid Office. Approval is based on low income and numbers of dependents.
- Board of Governors Fee Waivers are good for one year. (summer, fall, and spring).

FEE DEFERRAL
- Indentured apprentices fulfilling related instruction are exempt from enrollment, health fees, and nonresident tuition for apprentice-related classes.
- Working students may be eligible to have their college fees reimbursed by their employer. Students are advised to contact a Human Resources representative at their company to determine if a college fee reimbursement plan is offered. If so, students should submit verification of their fee payment to their employer, and follow company procedure for reimbursement. The college will not send a bill to the company and does not accept second party checks.
- California resident high school students taking classes for high school credit and/or college credit will NOT be required to pay enrollment and health fees.
- Non-resident high school students taking courses for college credit are not exempt from the non-resident tuition.

REFUND OF FEES

Any student eligible for and requesting a refund of an enrollment fee, will be refunded any material fee associated with the class.

Students who drop classes before a specified deadline (see schedule of classes) are entitled a refund of fees for those courses. Refund of fees is not automatic.

Students must complete and submit the Refund Request form to the Office of Admissions and Records by the appropriate deadlines. Deadlines are published in the Schedule of Classes each semester. Fees may not be transferred or credited from one semester/session to another. Refunds for the ASB sticker require that the sticker be returned with the refund form.

Fees for classes dropped after the refund deadline cannot be applied to any additional classes added to the student’s schedule. Instead, the student will be charged per unit enrollment fee and/or per unit fee for non-resident tuition. Students who officially add a class after the refund deadline date are not entitled to a refund.

No refunds of any type will be granted until all other financial obligations to the District have been satisfied. Refunds normally take 4 to 6 weeks after the deadline to process; they are mailed to the student.

Students may choose to donate refunds to the District Foundation for student scholarships or college support. Such donations are tax deductible.

Refunds will be made in full for the qualifying amount, minus the processing fee. Processing fees “related to refund requests are limited to enrollment fees only.” The fee is $10.

Per Title 5 Section 18805

- Short Term Credit and Irregularly Scheduled Courses (not 16 week, or late-starting courses)
  Upon written request, refunds for Short Term Credit courses (those that are scheduled to meet fewer than five days) and Irregularly Scheduled Credit courses (those that generally begin after the official start date of the term), will be granted if the student officially drops AND submits the completed refund request form in the Office of Admissions and Records on or before 10% of the class meeting times has elapsed. Completed refund requests must be received in the Office of Admissions and Records on or before the 2nd meeting of the class.
- Canceled Classes
  Students may request in writing a refund for a canceled class any time during the semester/session in which the class was canceled. Monetary credit WILL NOT be transferred to the next semester/session. There is no processing fee for canceled classes.
- Processing Timeline for Refunds
  The refund process usually begins the week following the refund deadline and takes approximately 6 to 8 weeks to be processed and mailed to the student.

PARKING PERMIT REFUND

Refunds for Parking Permits will be accepted, provided the student completes and submits the Refund Request form within the first 10 class days of the semester to the Campus Store. The original Parking Permit must be returned at the time the refund is requested. Refund Request forms are available in the Office of Admissions and Records. There is a $3 Parking Permit refund processing fee.

RETURNED CHECKS
A processing fee of $10 is charged for each returned check.

PLEASE NOTE
All fees are subject to change according to changes in the California Educational Code and the State Legislature. All information relative to enrollment fees and health fees is subject to change as mandated by the California Community College Board of Governors and California law.

17
INTRODUCTION

Student Services provides a variety of approaches to assist students to meet the demands of college. Through the use of online services such as registration, a Web-based catalog and an online schedule of classes, and activities, students are provided with current information about new programs and course offerings.

Resources are available to help students explore possible career options, develop an individualized educational plan and seek out information regarding financial aid and scholarships. San José City College students are able to develop the necessary skills for successful learning and career choices by enrolling in an orientation to college course, and/or a course that is designed to prepare them for college or career success.

Student Services offers assistance in addressing both transfer and non-transfer degrees, certificates, and programs. Students have access to the process for guaranteed admission to selected CSU, UC and private institutions, and online information for specific major and/or transfer requirements. Our comprehensive program has been developed to prepare our students for the challenges and the opportunities that exist in Silicon Valley. Student Services at San José City College is committed to excellence and to striving to meet the challenges of the 21st century.

ACTIVITIES AND CLUBS

A wide range of student activities is encouraged and sponsored by the students, faculty and administration of the college. Organized activities include intercollegiate athletics for men and women, student publications, cultural programs, drama, music, social and recreational events, and radio broadcasting.

Numerous student clubs representing a variety of interests and purposes are active throughout the year. All students are invited to explore the many opportunities available and encouraged to select activities in which their participation may be of individual value and interest.

Detailed information about student activity programs and organizations is available in the Office of the Director of Campus Life, Student Center, or (408) 288-3160.

Current Associated Student Clubs sponsored by the AS are:

- Black Student Union
- Broadcasting Club (KJCC)
- Gay Straight Alliance
- International Students
- Journalism Club
- La Raza Student Alliance
- Psychomedia Club
- Sigma Eta Beta (Cosmetology)
- Students for Social Justice
- Vietnamese Student Association
**AmeriCorps**

AmeriCorps is a National Program that provides an educational award of up to $1,250 to members that commit one year of their time to community service. San Jose/ Evergreen Community College District has two AmeriCorps programs, Jumpstart and A.L.E.R.T.

**Jumpstart**

Jumpstart’s mission is to engage young people in service to work towards the day every child in America enters school prepared to succeed. To this end, we train and support college students to serve as part-time AmeriCorps members, working individually with young children to build skills crucial to school success. Jumpstart focuses on three program areas: building School Success for young children by building their early communication, literacy, and social skills; encouraging strong Family Involvement to help families support children’s learning; and training college students to be Future Teachers and leaders in early childhood education. By becoming a Jumpstart Corps Member, you have the unique opportunity to inspire young children to learn, serve in a local community, work on an AmeriCorps team, and build professional skills. You will join a network of Corps Members that serve young children in more than 50 communities nationwide. Jumpstart serves a diverse population of students in the San Jose and Evergreen districts.

**A.L.E.R.T.**

The ALERT program (AmeriCorps Local Emergency Response Teams) at San José City College is an AmeriCorps program that focuses on helping families and the community become emergency prepared. The activities that we do include, delivering presentations to children and their families and encouraging them to fill out a Family Disaster Plan, handing out “The File of Life” emergency medical cards to people from vulnerable populations, increase the capacity of mainstream disaster preparedness agencies to provide disaster preparedness services to special populations from community and faith based organizations that serve those special populations, and recruit volunteers from special populations who are members of local clubs, associations, or small community or faith based organizations to provide 40 or more hours of volunteer service that will increase safety, disaster, and emergency preparedness in neighborhoods and communities with a high incidence of special populations.

For information about these AmeriCorps programs, please call, e-mail or come by:

Alla Markevitch or Cam Martian
(408) 298-2181 x3586
alla.markevitch@sjcc.edu
Room SC215

or

(408) 298-2181 x3565
cam.martian@sjcc.edu
Room 216E

**Associated Students**

Students at SJCC have the opportunity to participate in shared governance along with faculty, classified staff, and administrators. The Associated Students (AS) is the student part of the governance of the college. The Administrative Council, headed by the Associated Student Body President, is the governing body of the AS and appoints students to serve on various campus and district committees. The Administrative Council provides the student body with a direct voice and vote in determining the operation and direction of the college. Through participation in student government, students will acquire leadership skills, sense of accomplishment, and personal growth.

**CalWORKS Program**

(California Work Opportunities & Responsibility to Kids)
Program Eligibility Requirements: TANF (formerly AFDC) Recipients

Support services offered by the CalWORKS program, in coordination with Santa Clara Social Services CalWORKS Employment Services Program, include childcare, transportation, books, supplies, and other school-related expenses. In conjunction with the Second Harvest Food Bank, a monthly food distribution is provided for our students. In addition, college orientations, assistance with registration, financial aid, academic and personal counseling, referrals to campus and community services, guidance classes, paid work experience, job placement assistance, and employment retention services are provided during training and continue beyond employment.

The CalWORKS support staff at SJCC consists of a CalWORKS liaison, a counselor, a job placement officer, a work experience coordinator, and program assistants who work together to make each student’s school-to-work transition a rewarding experience. Vocational training programs are linked to career ladders, which allow students the opportunity to continue their educational and professional goals while employed.

The CalWORKS office is located in the Student Center. Office hours are Monday – Friday, 8 a.m. – 5 p.m. or call (408) 288-3743.

**Campus Store**

The Campus Store is proud to serve students, faculty and staff. We carry course materials, school supplies, logo products, backpacks, greeting cards, candy and gifts.

We are committed to keeping the cost of textbooks down by making available as many used books as possible. Our textbook buyback program enables students to recycle their books and to receive cash back on the spot. We pay the highest dollar value during finals week but also offer buyback at national wholesale prices every day. We buy back every college textbook for which there is a resale market. To qualify for buyback, a book must be the correct edition, in good condition with all the original pages and components, and have limited highlighting and writing. Please check the store for details.

Students may now order books online from the SJCC Campus Store at [http://campusstore.sjcc.edu](http://campusstore.sjcc.edu). Books can be shipped to students or held in the store for pickup.

The Campus Store is located in the Student Center at Leigh and Moorpark. For more information, contact the Campus Store at (408) 288-3737.
The Career/Transfer Center (CTC) provides students with valuable information on career exploration and college/university requirements. In addition to career exploration resources, the CTC also serves as a center to assist students who are transferring to four-year colleges or universities. The CTC provides transfer reference materials, pamphlets, brochures, college catalogs, and Internet access. Career and transfer workshops are also offered throughout the academic year.

CTC Services include:
- Assistance in exploring majors, colleges/universities and career options
- Access to Admissions Information for Private, State and Independent Colleges and Universities, including CSU and UC Admission Applications
- Extensive resource library with information on careers and four-year institutions
- Scheduled visits from representatives of four-year colleges and universities
- EUREKA- a computer database for researching occupations, majors, colleges and scholarships
- Assistance with online applications
- Internet access for educational research
- Information on how to get guaranteed admission to selected four-year colleges and universities
- Current information about transfer-related events at SJCC and at four-year colleges
- Transfer Preparation Workshops which include:
  - UC/CSU admission requirements
  - UC/CSU admission application procedures
  - Writing the UC essay
  - Financial Aid
  - Pathways to teaching
  - Private college admission requirements
- Fall Transfer Day
- Spring Transfer Night
- Bus tours to selected four-year colleges

The CTC is located in the Student Center. Visit our Web site for updated transfer information and links: www.sjcc.edu/StudentServices/TransferCenter/ (408) 298-2181 ext. 3939

**MISSION STATEMENT**

The San José City College C.A.R.R. Program is committed to providing student athletes with the proper resources necessary to insure their growth and development while maintaining the highest levels of integrity, equity, pride and tradition. San José City College is committed to representing a unit composed of a comprehensive set of student assistance programs designed to facilitate successful student persistence through the completion of the Associate in Arts degree and the Associate in Science degree. The C.A.R.R. Program provides opportunities for academic, athletic, and personal development, which fosters growth in decision making and planning, and the fulfillment of career and life goals.

The main purpose of the C.A.R.R. Program is to provide an alternative learning resource center for San José City College students, with a special emphasis on student-athlete population, a comprehensive array of academic support services and programs designed to enhance academic achievement, cultivated good study habits and skills, and also assess the needs of students. Improving and/or maintaining academic success is the central theme, and resources are designed and implemented with this theme at its core. The C.A.R.R. Program is designed to guide students in the development of their academic potential and motivate them to become self directed learners.

The academic progress of student athletes is encouraged through academic counseling, encouraging compliance, academic eligibility requirements, carefully monitoring degree progress, providing opportunities and support to all student athletes in their integration into the academic community of San José City College.

For more information, contact the C.A.R.R. Program at (408) 288-3739.

**CHILD DEVELOPMENT CENTER**

The San José City College Child Development Center provides a full-day/part-day Preschool Child Development Program for the children of students. Children must be two years to five years of age. Parents must be enrolled in a minimum of six daytime units of coursework. Tuition fees are based on family income and size, with priority given to low-income families. The Center provides a quality developmental program and serves as a laboratory training program for students in the Early Childhood Education program.

For more information, call (408) 288-3759.

**COLLEGE INFORMATION AND RECRUITMENT**

The College Information and Recruitment Office is dedicated to providing information to the community regarding San José City College’s academic and vocational programs. The College Information and Recruitment staff recruits prospective students at local high schools, community agencies, and community events. Our staff provides personal assistance with the admission and registration process.

The College Information and Recruitment Office encourages new students to register for Guidance courses in Orientation to College, College Success, Career and Life Planning, and College Study Techniques.

For assistance, contact the College Information and Recruitment Office located in the Student Center at (408) 288-3708.

**COUNSELING PROGRAM**

The Counseling Program at San José City College strives to help students identify their strengths and achieve their potential. The counseling staff is available to assist students in planning an academic program that meets the requirements for certificates, graduation, transfer to four-year institutions, or supports personal interest. Students at San José City College are encouraged to define their educational objectives and plan how to achieve those objectives. Counselors are available to assist students by appointment or during specific drop-in hours.

In addition to counseling services, guidance courses are offered to support students personal, academic and career success. For more information, contact the Counseling Office at (408) 288-3750.
**DISABLED STUDENTS PROGRAM AND SERVICES (DSP&S)**

The Disabled Students Program and Services (DSP&S) provides support services and instructional classes for students with disabilities attending San José City College. The main purpose of our program is to provide those services the student needs to participate in mainstream academic and vocational programs.

Services offered through the DSP&S are in compliance with Section 504 of the Federal Rehabilitation Act of 1973 as amended, Title V of the State of California Education Code and the Americans with Disabilities Act.

The following services are available to the student: academic, personal and vocational counseling, interpreters, mobility assistance, readers, parking, individual assessment, large print books, registration assistance, tutoring and assessments.

Specialized courses offered through DSP&S are Diagnostic Learning, Writing and Reading Strategies, Introduction to College, Career Planning, Adaptive Physical Education, Adaptive Word Processing and Computer Assisted Instruction.

The DSP&S staff includes a counselor, a Learning Disabilities Specialist, a Certified Corrective Therapist and paraprofessionals who work together to provide quality services for students with a variety of disabilities.

For more information, contact DSP&S in the Student Center or call (408) 288-3746 (Voice), (408) 294-3447 (TTY).

**EDUCATIONAL PLANS**

Upon admission to the College, all students will be required to express a broad educational goal. A specific educational goal with an Educational Plan must be declared by the time the student has completed 15 semester units. It is the responsibility of the student to schedule an appointment with a counselor to complete an educational plan. Failure to specify the goal, complete the Educational Plan, diligently attend classes, complete assignments and maintain progress towards that goal, may result in denial of further services to the student by the College and the District.

**EXTENDED OPPORTUNITY PROGRAM AND SERVICES/COOPERATIVE AGENCIES RESOURCES FOR EDUCATION (EOP&S/ CARE)**

EOP&S and CARE are comprehensive programs designed to assist low-income students with their educational pursuits. The goals of the programs are to provide eligible students the opportunity and support necessary to undertake and complete their education at San José City College. The EOP&S Program provides support with additional financial assistance, application fee waivers, textbook vouchers, tutoring, transfer services, career and academic counseling. The CARE program provides support with subsidized childcare, textbook vouchers, workshops, assistance with transportation, and transfer planning. Students who qualify for these programs are expected to demonstrate satisfactory academic progress toward their educational goals.

All interested students will need to meet program requirements. Contact the EOP&S/CARE Program (408) 289-3788 or TTY (408) 294-3447 (Hearing Impaired) to obtain additional information. The EOP&S/CARE office is located in the new Student Center. The office hours are Monday – Thursday, 9 a.m. – 6 p.m., and Friday, 8 a.m. – 3 p.m.

**HEALTH SERVICES**

The San Jose/Evergreen Community College District provides access to a medical provider (Medical Doctor, Nurse Practitioner or Physician Assistant), mental health counselor, and a public health nurse to assist students in various health-related matters. The Health Services fee is assessed to cover the cost of the medical services that include health information, health and personal counseling, short-term adjustment counseling, family planning, and TB skin tests. Pregnancy tests, STD testing, pap smears, and other medical care are available for a minimal fee. First aid is also offered to students during Student Health Services office hours.

Not included in the Health Fee are X-rays, laboratory services, hospitalization, ambulance, pharmacy services, off-campus care, family coverage or on-going medical care. These are the responsibility of the student and not included in the basic Health Services fee.

**FINANCIAL AND LEGAL LIMITATIONS**

Although the College provides health services for enrolled students, it is in no way financially responsible for the total medical care of the student nor is it legally liable for accidents occurring on campus.

Illness or accidents incurred on campus should be reported immediately to the Student Health Services office. Students with serious chronic health problems are advised to inform the Student Health Services office so that in case of an emergency, the best possible medical care can be administered.

The Student Health Services Office is located in the Student Center. Office hours are Monday – Thursday, 9 a.m. – 3 p.m., 5 p.m. – 8 p.m., closed Fridays. For more information on community links, click on the Services button and choose the Health Services page at www.sjcc.edu.

**HONORS PROGRAM**

The San José City College Honors Program is designed to motivate new and continuing students to excel in an intellectually stimulating environment.

Continuing students with a minimum cumulative GPA of 3.25 and are eligible for English 001A may participate in the Honors Program. Most of the continuing students are referred by the faculty of San José City College. In each case, the students meet with the Honors Program Director to choose honor options in their course work.

San José City College is a chartered member of Phi Theta Kappa International Honor Society. Students who participate in the Honors Program may be eligible to join the chapter. Membership in Phi Theta Kappa expands the student's knowledge in the four hallmarks of excellence: scholarship, leadership, fellowship, and service. In addition to the bond of membership, scholarships are available at many four-year institutions for Phi Theta Kappa transfer students.

For more information, please contact the Office of Student Life at (408) 298-2181, ext. 3837.
INTERNATIONAL STUDENT SERVICES

The International Student Program provides all international students with updated SEVIS and TOEFL information, student status consultation, class scheduling, and academic, personal, and occupational counseling. San José City College offers many programs, services and opportunities for international students to excel in their academic studies and assists our students to transfer to a college or university of their choice.

For more information, contact the International Admissions Advisor, Doriann Tran (408) 288-3751. The international counselor is Dr. Suzanne Gutierrez and the Dean of Counseling and Matriculation is Claudia Consigny.

JOB PLACEMENT

Job Placement services are available to all students seeking full-time permanent employment in their vocational major or part-time positions to assist financially while attending school. Job opportunities from local employers are posted daily on a job board for student self-referrals.

Job Placement also provides information on job search techniques and will assist students in preparing a resume.

The office is open for referrals Monday – Friday, 9 a.m. – 12 p.m. and 1:30 p.m. – 4 p.m., and is located in the Student Center. For 24-hour access, students may also go online to www.monstertrak.com to view daily job listings from MonsterTRAK®. The password is SJCC.

For more information, contact Patricia Greene, Job Placement Officer, (408) 288-3783 or e-mail patricia.greene@sjcc.edu.

LIBRARY SERVICES

The Library offers a highly useful collection of print, audio-visual and electronic resources housed in a state-of-the-art building. Printed materials include a shared collection of library materials with Evergreen Valley College, current subscriptions to print and electronic journals and a large pamphlet collection. The Library also houses a large reserve collection. Other resources include DVD, CD players and VCR stations. Study areas are found throughout the Library with access to hardwired and wireless Internet connection. There is an electronic research area, audiovisual equipment and coin- or card-operated copying machines are also available.

Reference librarians are available to provide instruction and to assist students in locating information. Library orientations and workshops are held in the Electronic Resource Lab. The SJCC Student ID card serves as a Library card and is issued in the Library.

The Library also offers two courses in an online environment: Library Studies 015 (3 units) – Electronic Research and the Internet, and Library Studies 022 (1 unit) – Internet Research Strategies.

PUENTE PROGRAM

Puente means "bridge" in Spanish. The mission of Puente is to increase the number of educationally underserved students who enroll in colleges, earn degrees, and return to the community as leaders and mentors to future generations. Puente was founded in 1981 and created to address the low rate of academic achievement among Mexican-American and Latino community college students. Puente is open to all students but is designed to meet the needs of Latino students.

San José City College’s Puente Program provides an academic and supportive environment in which students can achieve their educational and career goals in partnership with a counselor, culturally sensitive instructors, community professionals, and peer mentors. The program integrates writing, counseling, and mentoring components to provide a focused, sustained and engaging learning environment for students. Puente offers two writing classes that students take in conjunction with a guidance class. A trained counselor works with the English Instructor and follows the students throughout their course work to graduation at San José City College and assists them in transferring to a four-year institution. An important part of the Puente program is the mentoring element where students are paired with professional mentors from the community who act as role models and guides. Mentors share their educational background and career expertise and help students understand how they can achieve their educational goals.

In addition to the English/Counseling/Mentoring components, Puente offers supplementary courses in reading and math. Faculty teaching these classes work with the Puente counselor to provide additional support and educational experiences for the students.

The Puente Program offers students support and guidance, individualized counseling, tutoring, transfer assistance, scholarships, and campus and community involvement.

The Puente Office is located in Room SC 201J. For additional information please call Maricela Martinez at (408) 288-3798.

SERVICE LEARNING PROGRAM

The Service Learning Program was established in Fall 1997 to provide opportunities for voluntary service in the community. Partnerships with over 60 community service agencies and local schools have been formed through this program. These agencies are seen as extensions of the classroom. Instructors give students the option to complete a class project exploring course-related issues through participation in reflective tasks (reports, journals, and presentations) in which classroom theory is related to the real world. This activity prepares today’s students for life-long learning in our rapidly changing world.

Information on the project is available in the Service Learning Office. This includes detailed information on each community agency as well as application forms. The Service Learning Coordinator has scheduled office hours in the Center to advise students. In addition, the Job Placement Officer, Patricia Greene, can help students throughout the day. Interested students are encouraged to ask their instructors if community service is a project option for a class.

Contact the Service Learning Coordinator, Ronald Levesque, at (408) 288-3176, or visit the Service Learning Office located in the Student Center, Room 216H. Office hours for the coordinator are posted each semester. In addition, students can be helped in the nearby Job Placement Office on Monday–Thursday, 11 a.m. – 7 p.m. and Friday, 9 a.m. – 4 p.m. For 24 hour access, go to Web site: www.sjcc.edu/slp.
**Transfer Admission Agreement (TAA)**

San José City College and selected four-year colleges and universities have joined together to enhance the transfer process for students by developing Transfer Admission Agreements (TAA). Students are GUARANTEED admission to selected four-year colleges and universities by completing the requirements of the TAA.

The Career/Transfer Center can help explain the TAA process and requirements. Call (408) 298-2181 ext. 3939. Counselors are located in nearby offices to provide further assistance.

**Veterans Information**

Assistance to veterans on campus is provided by the Veterans’ Affairs Office located in the Student Center. A Veterans’ Representative is available to aid students in obtaining educational benefits for veterans or their dependents and widows.

**Credit for Military Service**

Upon submission of a copy of the DD-214 (Discharge), persons who have completed a minimum of 185 days of active duty in the United States Armed Forces may receive two units of credit for Physical Education, two units for Health Education, and two units for Military Service. Additional units, for certain military technical schools, may be granted upon evaluation of the DD-214.

Veterans receiving V.A. benefits must file the DD-214 with the Office of Veterans’ Affairs within the first eight weeks of the semester. Credit granted for military schools is based upon recommendation of the American Council on Education.

**Workforce Initiative Network (WIN Program)**

San Jose/Evergreen Community College District’s Workforce Initiative Network (WIN) Program offers work force education programs to students. This innovative program provides students an opportunity to obtain an education and earn a certificate or degree in a variety of high demand occupations.

The WIN Program provides free childcare, transportation, academic and personal counseling, guidance classes, paid work study, job placement assistance, High Tech Career Center, and employment retention services. The WIN support staff at SJCC consists of a WIN liaison, job placement officer, work experience coordinator, and program assistant who work together to make each student’s school-to-work transition a rewarding experience. The WIN Program serves CalWORKks and AmeriCorps students. For more information, call (408) 288-3743 or visit the office in the Student Center.

**Financial Aid**

**Mission**

The mission of the Financial Aid Office is to help students pursue their educational goals by making college an affordable experience. We are committed to providing quality service to students and accurate information about the financial aid process. Students are placed at the center of the educational process in order to facilitate a seamless integration between learning and diversity. By communicating with students, faculty, staff, and administrators, we can be successful in accomplishing our goals at San Jose City College. The Financial Aid Office looks forward to assisting students and making the process a positive experience.

The Financial Aid Office (FAO) provides financial assistance, budget guidance, and other finance-related services. Most federal and state aid is based on need. Loans, grants, scholarships and work-study employment are available to full and part-time students who qualify. Students are advised to apply for assistance early.

**Who Can Apply**

Financial aid is awarded when it is established that a student has demonstrated, through an application, that he or she:

- Has financial need
- Is a U.S. citizen or eligible non-citizen
- Has a high school diploma, GED, or has passed an Ability To Benefit test (ATB test)
- Is enrolled in an eligible program leading to a degree or certificate
- Has a valid Social Security Number
- Makes continuous satisfactory academic progress
- Signs a statement of updated information and educational intent
- Registers with Selective Service, if required

Students are referred to the Financial Aid Student Guide, which gives specific program eligibility requirements. It is possible for the eligibility criteria to vary from one program to another. The criteria listed above are meant to give the reader a basic idea of the requirements for financial aid as a whole.

**How To Apply**

To apply for financial aid an applicant must submit the following forms:

- FAFSA – Free Application for Federal Student Aid
- SAR – Student Aid Report (sent to student upon receipt of completed FAFSA)
- Requested documentation to the financial aid office
- Academic transcripts may be required from all previously attended postsecondary institutions. A transcript may be required even if the student did not receive any aid from the other institutions. Transcripts are evaluated, and prior credits applied through the registrar and counseling offices.

Forms are available in the Financial Aid Office and, except for the FAFSA, must be submitted directly to the same office. The FAFSA must be submitted to the address given on the form or online.
CHAPTER 3 — Student Life

WHEN TO APPLY

The priority filing deadline for Fall and Spring is May 31. Applications received after the priority date will be considered subject to the availability of funds.

The Federal Pell Grant deadline is as stated in the FAFSA.

HOW FINANCIAL NEED IS DETERMINED

One of the criteria for qualifying, which causes the most concern, is to “show financial need”. In simple terms, financial need is the difference between the resources a student and his/her family can provide and the cost of the student’s education (tuition, fees, room, food, books, and transportation).

Given the above, it is perhaps easiest to think of “need” as cost minus resources. If educational costs exceed resources, the applicant will be considered for assistance from the college. *

* It is possible to receive a student loan regardless of income or need.

HOW MUCH A STUDENT IS EXPECTED TO PROVIDE

How much a student is expected to contribute, and from what source, is determined through the use of the Free Application for Federal Student Aid (FAFSA). The FAFSA uses a system established by Congress that takes into account such factors as income, assets, liabilities, household size, number in college, and other data to determine “need” (cost of attendance minus resources). See “How to Apply” for further instruction.

HOW EXPENSES ARE ESTABLISHED

In order to treat all students equally, standardized budgets have been established and are applied to all applicants. This means that all students with similar circumstances will receive the same allowances for tuition, fees, room and board, personal expenses, books, supplies, and transportation. Exceptions may be made to the budget on a case-by-case basis. Where the need is shown, the Financial Aid Office will consider adjustments. Usually, exceptions are such things as childcare costs, medical expenses, costs related to a disability, and non-resident tuition. Documentation is required whenever students wish to have additional expenses considered.

COST OF ATTENDING

Below are the expenses included in the budgets that have been approved for the 2004-2005 academic year. The budgets reflect the standardized expenses for a nine-month period.

<table>
<thead>
<tr>
<th></th>
<th>Living At Home (no dependents)</th>
<th>Living Independently</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fees</td>
<td>$ 764</td>
<td>$ 764</td>
</tr>
<tr>
<td>Book/Supplies</td>
<td>$ 1,260</td>
<td>$ 1,260</td>
</tr>
<tr>
<td>Personal/Misc.</td>
<td>$ 2,250</td>
<td>$ 2,250</td>
</tr>
<tr>
<td>Transportation</td>
<td>$ 960</td>
<td>$ 990</td>
</tr>
<tr>
<td>Room and Board</td>
<td>$ 4,050</td>
<td>$ 4,900</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$ 9,284*</td>
<td>$14,264*</td>
</tr>
</tbody>
</table>

Non-Resident Fees: $169 per unit, plus the enrollment fee of $26 per unit. (12 units @ $195 per unit equals $2,340 per semester)

Extenuating circumstances, as documented by the student and approved by the Financial Aid Officer, may result in a Cost of Attendance adjustment. Students attending our summer session will have a prorated budget.

PAYMENT PERIOD

San José City College disburses student financial aid checks twice each semester, usually late August or early September, November, January and April. Federal Work Study checks are paid on the 10th of each month. Cal Grant checks are disbursed once per semester, usually October and March. Federal Stafford Loan checks are sent by lenders directly to the school and are disbursed when received.

TYPES OF AID AVAILABLE

1. Bureau of Indian Affairs Grant (BIAG) – Applications available through the tribal regions.

2. Board of Governors Enrollment Fee Waiver (BOGW) – Application available in the Financial Aid Office.

3. CAL Grants A, B, & C – Must apply by March 2nd for the following year. Support documents are needed along with the FAFSA.

4. Extended Opportunity Program and Services (EOP&S) – Support documents are needed along with the FAFSA.

5. Federal Work Study (FWS) – Support documents are needed along with the FAFSA.

6. Federal PELL Grant (FPELL) – For undergraduate students in an eligible program. Support documents are needed along with the FAFSA.

7. Federal Stafford Loan (FSL) – For undergraduate students in an eligible program. Support documents are needed along with the FAFSA.

8. Federal Supplemental Educational Opportunity Grant (FSEOG) – For FPELL recipients with exceptional financial need. Support documents are needed along with the FAFSA.

For detailed program descriptions, please refer to the Financial Aid Student Guide, available in the Financial Aid Office.

All applications, except for the BIAG, are available in the Financial Aid Office.

FINANCIAL AID PACKAGING POLICY

Once a student has demonstrated “financial need” the Financial Aid Office must determine the best way to meet the need through either one form of student financial aid or a combination of various forms of student financial aid.

Because funds are limited in some programs, with the exception of Pell Grants, the following criteria are used in meeting the needs of students:

- All students submitting COMPLETE application packets by the May 31st priority deadline will be packaged in the order received, depending upon the student’s eligibility for each program.

* Amounts subject to change.
Packaging may consist of one or more of the following types of aid:

FPELL, FSEOG, EOP&S, FWS, and FSL. Whether the student is living at home or not at home an attempt is made to package 40-50% of the unmet need with grants, provided the student meets the eligibility requirements.

Some students receive a Cal Grant from the State, and this grant is also included in the attempt to meet the 40-50% of students’ need with grant aid.

Maximum award packaging consideration will be made to the student with the lowest effective family contribution.

WHAT HAPPENS IF AID IS DENIED

Not all students who apply for financial assistance will qualify. A student who is denied assistance or is not satisfied with his/her financial aid award, has the right to request, in writing, that a re-evaluation be made of his/her case. Often, new information will qualify the applicant or cause a revision.

Students who are denied aid due to lack of “satisfactory academic progress” must petition to the Appeals Committee by the end of the third week of the semester. The committee will then determine whether further aid will be offered. See “Satisfactory Academic Progress” for further information.

BOARD OF GOVERNORS ENROLLMENT FEE WAIVER – BOGW

The California Community Colleges Board of Governors Enrollment Fee Waiver Program is designed to help students who need assistance paying enrollment fees. California residents who meet one of the following eligibility criteria may be eligible for a BOGW A, B, or C:

- The student or student’s family is receiving AFDC, SSI, or General Assistance (BOGW-A).
- Dependents of deceased or disabled veterans who are eligible for benefits under the California Veterans Dependents Educational Assistance Program and Dependents of deceased or disabled California National Guard members certified by the Adjutant General’s Office can also get a BOGW-A.
- The student’s household meets the following income standards (BOGW-B):

<table>
<thead>
<tr>
<th>Number in Household (Including student)</th>
<th>Total Family Income the Previous Year (Adjusted Gross Income and/or Untaxed Income)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$ 13,965 or less</td>
</tr>
<tr>
<td>2</td>
<td>$ 18,735 or less</td>
</tr>
<tr>
<td>3</td>
<td>$ 23,505 or less</td>
</tr>
<tr>
<td>4</td>
<td>$ 28,725 or less</td>
</tr>
<tr>
<td></td>
<td>Add $4,770 for each additional dependent.</td>
</tr>
</tbody>
</table>

- The student has demonstrated financial need BOGW-C

* Contact the Financial Aid Office for specific eligibility requirements

Once qualified for a BOGW, a student’s enrollment fees are waived for the remainder of the academic year.

SATISFACTORY ACADEMIC PROGRESS

Students who receive financial aid are required to make satisfactory academic progress in their course of study. It is the student’s responsibility to inform the Financial Aid Office of any changes in his/her declared program of study. Financial aid progress standards are in addition to the College’s Academic Standards, which apply to all students. Academic progress for financial aid recipients is assessed according to the Satisfactory Academic Progress Policy Standards outlined below:

Students who complete all credits (based on the credit load at the time a balance check is calculated) with at least a current and cumulative 2.0 GPA are considered to be making satisfactory academic progress in their program of study. See Guide to Financial Aid for more detail.

FINANCIAL AID CONSORTIUM AGREEMENT

As part of the same community college district, both San José City College and Evergreen Valley College have similar COA, Satisfactory Academic Progress (SAP) policies, enrollment status and procedures for awards and disbursements. The institution, which awards the student, is responsible for keeping records, monitoring SAP and distributing student aid funds.

A student enrolled in an eligible program at either SJCC or EVC may take courses at either institution, as long as the courses apply towards his/her program.

The institution in which the student bases his/her course of study (degree or certificate) will calculate and pay the student’s financial award from the Title IV funds.

The institution, which calculates and pays the student, must take into account courses taken by the student at both institutions in determining the student’s enrollment status and cost of education. However, a minimum of 1 unit must be taken each semester at the institution awarding the student.

The Financial Aid Office is located in the Student Center. For detailed information, contact the Financial Aid Office, (408) 288-3741 or email at sjccfa@sjcc.edu.
SPECIAL ACADEMIC PROGRAMS

ACCELERATED DEGREE PROGRAM

The Accelerated Degree Program offers fast-track courses for working adults who want to finish their degrees in a timely manner. Courses are offered evenings in six and eight week blocks. Students concentrate on one course at a time and can finish the program in 2½ years if they are eligible at the English 001A level. Most courses are offered off-campus in business-like training rooms.

For more information, contact the Counseling Office.

CO-NECT PROGRAM

CO-NECT is a joint program between San José City College (SJCC) and the San Jose Unified School District (SJUSD) in which college level general education courses are offered at various high school sites. The courses follow the SJUSD calendar and not the SJCC calendar. Some of the enrollees are high school students. Each section is, however, open to all SJCC students. Further information about the program is available from Claudia Consigny, Dean of Counseling and Matriculation.

For more information, contact the Counseling Office.

HONORS PROGRAM

The San José City College Honors Program is designed to motivate new and continuing students to excel in an intellectually stimulating environment. New students who are placed at the high end of the English Placement Test or were in AP classes in high school are referred to the Honors Program Director for academic planning. Continuing students with a minimum cumulative GPA of 3.25 and eligible for English 001A may participate in the Honors Program. Most of the continuing students are referred by the faculty at San José City College. In each case, the students meet with the Honors Program Director to choose honor options in their course work.

For more information, contact the Counseling Office.

MIDDLE COLLEGE

Middle College is an accelerated program designed to offer a unique option to high school students who are academically capable. It assists students in completing high school while beginning their college careers. Selected junior and senior students take their core subjects, English and Social Studies and two additional courses with high school teachers. Students also must take a minimum of nine college units per semester. Community Service or Service Learning is also an integral part of the program. All classes are held on the San José City College campus.

For more information, contact the Counseling Office.

TEACHER PREPARATION PROGRAM

In response to a shortage of teachers in the state of California and nation-wide, San José City College has placed a stronger institutional emphasis on its Teacher Preparation Program. Specifically, as the recipient of a proposed five year (2000-2005) Teacher and Reading Development Partnership Grant, the College has designed a Transfer Express Program especially to facilitate student transfer to area Teacher Preparation Programs at area institutions such as San Jose State University, California State University Monterey Bay, and the College of Notre Dame. Additionally, special student support services via workshops on teaching career goals, scholarship opportunities, and transfer options are also available.

For more information, contact the Humanities and Social Sciences Division.
WILLOW GLEN COLLEGE PROGRAM
The Willow Glen College Program is a special program between San José City College (SJCC) and Willow Glen High School (WGHS) in which college courses are offered at the high school site. The courses follow the WGHS calendar and not the SJCC calendar. Some of the enrollees are high school students. Each section is, however, open to all SJCC students. Further information about the program is available from Claudia Consigny, Dean of Counseling and Matriculation.

For more information, contact the Counseling Office.

SUPPORT SERVICES

ACADEMIC SYSTEMS LAB
The Academic Systems Lab houses courses in Basic Mathematics, Introductory Algebra and Intermediate Algebra. Each class has an instructor, an instructional assistant, and tutors. The material is delivered via Academic Systems computerized instruction so each student can move as quickly or slowly, as needed, through the course material. Students are required to attend all classes, however, they can also access the software from any computer with internet access for additional work outside of class. Many of the courses are offered in a self-paced format so a student can complete the three-unit Basic Mathematics course or a five-unit Beginning or Intermediate Algebra class in multiple semesters, if needed. Students can also complete more than one course per semester in the self-paced format.

For more information, contact the Math Division.

COLLEGE COMPUTER LAB
The Computer Lab is open to all registered San José City College students and staff. The Computer Lab is equipped with 100 flat screen Dell computers. Two printers are available for student use. Students have access to the Internet, Microsoft Windows 2000, Maple 9, and several other programs.

Location: Learning Resource Center – L101
Hours: Monday – Thursday, 8:30 a.m. – 9 p.m., and Friday, 8:30 a.m. – 2 p.m.

For more information, contact Priscilla C. Munoz, LRC Supervisor x3312

ESL MULTIMEDIA LAB
The ESL Multimedia Lab provides instructional assistance and multimedia materials support for English language development. Students who use this lab are enrolled in variable unit courses at their current level of study: ESL 100L, ESL 310L, ESL 320L, ESL 330L, and ESL 340L. Students can earn .5 to 2 units of credit for each lab level. Assistance with software and computer use is available. Workshops on a variety of language learning points are offered throughout the semester. The lab is located in the Library, Room L120. For further convenience, students may use our online lab at www.eslstation.net to access learning links for each ESL level.

For more information, contact the ESL Department.

HUMANITIES AND SOCIAL SCIENCES LAB
The Humanities and Social Sciences Lab is located in GE 209B. This lab supports current students enrolled in foreign language, Sign Language, Communication Studies, and any of the other courses in the Humanities and Social Sciences Division that require laboratory work. Students have access to computers, video players, audio cassette players, software programs, and other media and print materials.

Instructors and lab assistants are also available at various hours to provide individual help.

For more information, contact the Humanities and Social Sciences Division.

LIBRARY SERVICES
The Library offers a highly useful collection of print, audiovisual and electronic resources housed in a state-of-the-art building. Printed materials include a shared collection of library materials with Evergreen Valley College, current subscriptions to print and electronic journals and a large pamphlet collection. The library also houses a large reserve collection. Other resources include DVD, CD players and VCR stations. Study areas are found throughout the library with access to hardwired and wireless Internet connection. There is an electronic research area, audiovisual equipment and coin- or card-operated copying machines are also available.

Reference librarians are available to provide instruction and to assist students in locating information. Library orientations and workshops are held in the Electronic Resource Lab. The SJCC Student ID card serves as a Library card and is issued in the library.

For students wishing to learn more about the Library and how to use it effectively are encouraged to enroll in Library Studies 015 (3 units) – Electronic Research and the Internet. The Library also offers a course, Library Studies 022 (1 unit) – Internet Research Strategies, which is focused on using the Internet for academic research.

For more information, contact the Library.

READING AND WRITING CENTERS
The Reading and Writing Centers are open on a drop-in basis to all students who need help with their reading and writing assignments in any course. Instructors, instructional assistants and tutors are available to provide individual and group help, and students may use the resources of the center (books, handouts, computer programs, workshops, etc.) as needed. Students may also enroll in various self-paced credit courses in the Centers at any time during the semester to improve their reading and writing skills. The Centers also provide laboratory instruction for students in English, Reading and Writing courses below the English 001A level. The Reading Center is located in L102; the Writing Center is in L103.

For more information, contact the Language Arts Division.

TECHNOLOGY LABS
A variety of technology-rich computer labs support students in technology-intensive programs such as Cisco Academy, Network Administration, Computer Programming, Multimedia/Digital Arts, and Getting Started computer classes. Labs are staffed with instructors and instructional assistants and have open hours throughout the day and evening. A Virtual Reality Lab and a Laser Lab support programs in Semiconductor Manufacturing and Laser Technology.

For more information, contact the Business and Service Careers Division.

For more information about the Multimedia/Digital Arts Lab, contact the Humanities and Social Science Division.

For more information about the Virtual Reality and Laser Labs, contact the Applied Science Division.

TECHNOLOGY SKILLS CENTER
The Learning Resource Center, Technology Skills Center (TSC) L113 is available for faculty and staff to reserve for classroom and instructional use. Twenty-four Dell computer stations are available.

For more information, contact Priscilla C. Munoz, LRC Supervisor, at ext. 3312 or Priscilla.Munoz@sjcc.edu.
CHAPTER 4 — INSTRUCTIONAL RESOURCES AND SPECIAL PROGRAMS

TUTORING CENTER
The Tutoring Center supports SJCC students by providing free one-to-one, drop-in, and group tutoring in most academic subjects offered on campus. Student tutors are faculty recommended, have received a “B” grade or better in the course(s) they tutor, and complete a tutor-training course.

The Tutoring Center also offers the following services: access to textbooks and student solution manuals, overnight math videotape checkout, access to 20 high-tech personal computers, printer and scanner, access to Math software: Maple, Academic Systems On-Line, MathCue, Chemistry software, Career Guidance — Discovery Program, and assistance with WebCT.

Location: Learning Resource Center – L105
Contact: Priscilla C. Munoz, LRC Supervisor, (408) 298-2181 ext. 3312, Priscilla.Munoz@sjcc.edu
Hours: Monday – Thursday, 8:30 a.m. – 9 p.m. and Friday, 8:30 a.m. – 1 p.m.

SPECIALIZED COURSES

DIRECTED STUDY COURSES
Directed study courses allow individual and small groups of students to enhance their individual instructional programs by studying independently under the direction of faculty members in specific or related disciplines. The students and faculty members, in consultation with the Division Dean, work together to develop individualized learning contracts which specify the learning objectives and activities to be completed as well as the number of units to be earned.

For more information, contact the division offices.

WORK EXPERIENCE EDUCATION COURSES
Work Experience Education is the extension of learning opportunities and career awareness for students in the work place. Students are either employed or volunteer to work in occupational fields for which their college programs or majors prepare them. Through this work experience students: a) become oriented to the world of work, b) demonstrate the relevance of theory to practice, c) develop useful references and employment contacts, d) utilize industrial resources, e) improve employment competency, and f) earn academic credit with the possibility of improving their grade point average. Additional information about these courses can be found in the main part of the catalog under Work Experience Education.

For more information, contact the Applied Science, Technology, and Physical Education Division office.

DISTANCE EDUCATION COURSES

A growing number of classes are being offered fully online to students who have access to a computer and the Internet. These courses can be accessed anywhere at anytime. Students in these courses do not meet at regular times on campus; instead, they receive and submit their course work and interact with their instructor and fellow students over the Internet using Web pages, e-mail, discussion lists, chat rooms, specialized computer programs and other technology. Students in these classes have the flexibility of studying from any location and at anytime that fits into their schedules. Students are to contact their instructor about orientation to the course management system. The final examination is to be taken on campus.

HYBRID COURSES
San José City College also offers some courses that are taught in a hybrid manner – part of the time on-campus and part of the time online. The class may meet half the time in a regular classroom, and the rest of the time online, resulting in fewer required trips to campus. Students taking distance education courses are expected to have access to a computer with a connection to the Internet. There are computer labs on campus where the work can be completed, but hybrid and online courses are designed so that a student does not have to come to campus as often as a student taking a traditional on-campus class.

WEB-ENHANCED CLASSES
More and more instructors are using the Internet as a supplement to their traditional on-campus class. Classroom dialog and conversation can be continued outside of the class meeting time using discussion lists, email or chat. The class syllabus, calendar information and assignments can be posted on the Internet so that a student can access them from anywhere, at anytime. Computers are available on-campus to complete those assignments that are to be done using an online course management program.

For more information, contact the Instructional Technology and Learning Resources Division offices.

EDUCATIONAL TECHNOLOGY COURSES
The Educational Technology Program at San José City College is designed for those students who plan on using technology to teach or assist in a traditional classroom or in an online environment. Educational Technology classes will focus on developing the information, pedagogical and technical skills necessary to develop instructional materials that will enhance student learning. The program will include identifying the requirements of developing effective curriculum for online teaching and exploring the technical environment that would best be used in an online or on-campus environment.

For more information, contact the Instructional Technology and Learning Resources Division offices.

STUDY OPTIONS

LEARNING COMMUNITIES
A Learning Community is a group of students who are enrolled in at least two courses together. Instructors cooperate to integrate instruction so that the two subjects are connected in stimulating ways. In a Learning Community, students —

- Fulfill requirements for two or more courses in one organized package
- Build a convenient class schedule
- Gain deeper understanding of the material
- Make friends readily with students in the linked courses
- Hear different points of view from more than one instructor
- Reinforce learning in one class by working on related projects in another
- Enhance their critical thinking skills by synthesizing ideas from two or more disciplines
- Learn from and support their classmates in an atmosphere of shared community

For more information, contact the Counseling Office.
PEER-LED TEAM LEARNING PROJECT

Peer-Led Team Learning is a robust cooperative learning approach that involves students in active participation in the learning process under the facilitation of a peer leader. The project is offered to all students in a wide range of chemistry, biology, and physics courses. Peer-leaders are paid and are provided ongoing training and support, a guidebook, and interactive workshop materials to guide and facilitate learning within a small group of students. The peer leader serves as a role model and provides the students with hands-on models, problem sessions, and other multidimensional methods for learning the class material. Students who participate in this project have the opportunity to become peer-leaders themselves in subsequent semesters and participate in joint programs with San Jose State University and the University of California that offer scholarships, internships and other support activities.

For more information, contact the Math and Science Division in W-101.

PROJECT-BASED LEARNING

Project-Based Learning incorporates real-world projects into the classroom environment. It is an excellent way to learn teamwork, project management, budgeting and other skills that are important for success in the workplace. Currently, Project-Based Learning is part of the curriculum in Multimedia and CIS. In the near future, we plan to extend Project-Based Learning to other areas of the curriculum.

For more information, contact the Humanities and Social Sciences Division.

SERVICE LEARNING PROGRAM

The Service Learning Program provides opportunities for voluntary service in the community. Partnerships with over 60 community service agencies and local schools have been formed through this program. These agencies are seen as extensions of the classroom. Instructors give students the option to complete a class project by exploring course-related issues through participation in reflective tasks (reports, journals, and presentations) in which classroom theory is related to the real world. This activity prepares today’s students for life-long learning in our rapidly changing world. The Service Learning Coordinator has scheduled office hours to advise students in the Service Learning Office, located in the Student Center, Room 216H. In addition, the Job Placement Officer can help students throughout the day in the nearby Job Placement Office. Interested students are encouraged to ask their instructors if community service is a project option for a class.

For more information, contact the Service Learning Office.

ATHLETICS

Intercollegiate competition is offered in a number of sports for men and women. These include men's baseball, football and golf, women's softball and volleyball, and men's and women's basketball, track and field, and cross-country. SJCC is a member of the Coast Conference, one of the most prestigious community college conferences in America, and has achieved a record of athletic excellence. There are full-time coaches in all sports; coaches take an active role in promoting both athletic and scholastic achievement. The Capital Improvement Plan provided a FieldTurf artificial football field and a Super X Mondo all weather track. These are athletic facilities second to none in America. The fitness complex with modern weight and cardiovascular equipment provides classes and supports the athletics program.

For more information, contact the Athletics Department.

CAMPUS MEDIA

- The College newspaper, The Times, is produced and published by students in the Journalism Program and provides a forum for campus-wide dissemination and discussion of information and issues. The Times has repeatedly won General Excellence awards from professional and collegiate journalism organizations. It is available in print and also in an internet version.

For more information, contact the Language Arts Division.

- The College FM radio station, KJCC, is run by students interested in broadcasting. It airs various musical programs and serves to disseminate information on college affairs and issues.

For more information, contact Associated Students.

COLLEGE THEATER

Each year, the College Theater serves as a performance venue for a variety of drama, dance, and musical performances directly connected to the college’s disciplines and programs. It also serves as a platform for a variety of visitors to the college who appear in conjunction with events sponsored by campus groups such as La Raza, the Vietnamese Interdisciplinary Education Association, and activities such as Black History Month and Women’s History Month. Additionally, the College Theater functions as a facility in general support of campus-wide events and community activities.

For more information, contact the Humanities and Social Sciences Division.

COMMUNITY ARTS & LECTURE SERIES

To enhance student life on campus, and to extend the culture of the College to the community at large, each year San José City College sponsors a Community Arts and Lectures Program. Visiting public figures, artists, and performers bring lectures, discussion forums, and music, drama, and various performance arts activities to the campus. Typically during the course of the academic year, seven or eight such presentations/performances are offered. In past years, the College has sponsored appearances by numerous multicultural artists, writers such as Frank McCourt and Lorna Dee Cervantes, and co-sponsored programs with NASA and the National Steinbeck Center.

For more information, contact the Humanities and Social Sciences Division.
CHAPTER 5 — ASSOCIATE OF SCIENCE DEGREES AND CERTIFICATES

CERTIFICATE REQUIREMENTS

San José City College awards four different certificates to qualified students who have met the course requirements in specific occupational areas. Currently we offer:

- Certificate of Course Completion: complete a specific course
- Certificate of Competency: 6 - 17.5 units
- Certificate of Specialization: 18 - 29.5 units
- Certificate of Achievement: 30+ units

Certificates may be issued upon completion of a specific course or courses with a grade of “C” or better. Requirements for each certificate are listed under each major in this section. A grade of “C” or better is required in major courses for the degree.

Grades earned in nondegree applicable courses do not count in their GPA used in relationship to an A.A. or A.S. degree.

Per Title 5 Section 55002 (b)

Students should apply for the certificate during the first 6 weeks of their last semester of their program. The student should make an appointment with a counselor to petition for the certificate. At the completion of the petition the student submits the form to the Office of Admissions and Records.

GRADUATION REQUIREMENTS

ASSOCIATE OF SCIENCE DEGREE

Completion of the Associate of Science (A.S.) general education pattern is different from the Associate of Arts (A.A.). Every student will need to consult with a counselor to determine which pattern to follow.

To be awarded the Associate of Science Degree from San José City College, all students shall complete a minimum of 60 units of instruction with an average grade of at least a “C” (2.0 grade point average) in all units attempted in a curriculum which the college accepts toward a degree, and complete the following minimum requirements:

I. A major consisting of a minimum of 18 semester units in a specialized or related field of study. The major may be in a special field or a general studies area. A grade of "C" or better is required in major courses for the degree.

II. A general education pattern, which shall include:

<table>
<thead>
<tr>
<th>CONTENT AREA</th>
<th>A.S. DEGREE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. English Communication</td>
<td>3 units</td>
</tr>
<tr>
<td>Written Communication</td>
<td>3 units</td>
</tr>
<tr>
<td>Oral Communication</td>
<td>6 units</td>
</tr>
<tr>
<td>B. Physical and Biological Sciences**</td>
<td>3 units</td>
</tr>
<tr>
<td>Select one course for 3 units</td>
<td></td>
</tr>
<tr>
<td>C. Arts and Humanities***</td>
<td>3 units</td>
</tr>
<tr>
<td>Fine Arts</td>
<td>3 units</td>
</tr>
<tr>
<td>Humanities</td>
<td>6 units</td>
</tr>
</tbody>
</table>

IN THIS CHAPTER:
- Certificate Requirements
- Graduation Requirements
- General Education Courses
- A.S. Degree and Certificate Index
CONTENT AREA (continued) A.S. DEGREE

D. Social and Behavioral Science***
   Select two courses for 6 units
   from the Social Science list 6 units

E. Lifelong Understanding and Self Development****
   Select one course for 3 units 3 units

Required Minimum 24 units

** A minimum of 3 units is required in the Sciences area for the A.S. degree. One course with laboratory activity must be included in this area. Students completing majors requiring 10 or more science units will have satisfied this requirement.

*** Area D Social Science list - HIST 017A and HIST 017B OR HIST 001 and POLSC 001

Cultural Pluralism/Ethnic Studies: Students may take a cultural pluralism/ethnic studies class in either Area C or Area D.

**** Lifelong Understanding and Self Development: This requirement may be met by any 3-unit non-physical activity course approved for this area.

III. Within Requirements I and II, courses may satisfy only one graduation requirement except for Cultural Pluralism and courses required in the major, which also fulfill general education requirements.

IV. Competency in reading, written expression, and mathematics to be demonstrated by satisfactory completion in the following:

1. Reading - ENGL 001A, English Composition
2. Written expression ENGL 001A, English Composition
3. Mathematics – MATH 011A, 011R or equivalent Math course, or Algebra competency exam

If a student uses an approved or equivalent course to fulfill the competency requirement in reading, written expression, or mathematics, a grade of "C" or better must be earned in that course.

V. Elective, major, and general education – applicable courses to total at least 60 units.

A grade of "C" or better is required in major courses for the degree.

VI. Residence requirements:

1. Prior to the fulfillment of graduation requirements, no fewer than 12 units must have been earned within the District and no fewer than 6 of these units must have been earned at the College awarding the degree. An exception to this policy will be granted when the colleges jointly offer a program for which only one college has been approved.

2. A minimum of two courses (no fewer than 6 units) must have been completed in the major at the college awarding the degree. A major department may grant an exception to this requirement when able to verify competency equivalent to this requirement.

VII. Physical Activity

A minimum of one (1) unit of physical activity must be taken unless exempt by a doctor’s excuse or prior military credit. The physical activity course must be selected from the approved courses listed in Area E of the District’s General Education/Graduation pattern.

CATALOG TO BE USED BY THE STUDENT FOR GRADUATION

(a) A student may use any catalog for graduation under which he/she was enrolled in the college to meet the general education and graduation requirements (excluding the major requirements as in (b), which follows).

(b) A student may use any catalog for graduation under which he/she was enrolled in the college to meet the major requirements provided that the catalog is not more than seven (7) years old by the time of graduation. A major department may grant an exception to this requirement when able to verify competency equivalent to this requirement.

(c) A student is considered enrolled when the transcript shows one or more classes that the student was enrolled in for a semester, intersession or term. A student is not required to complete a class to be enrolled under the catalog. A catalog year starts with the fall semester of the beginning year of the catalog and extends to the end of the summer semester of the ending year of the catalog.

COURSES COMPLETED AT EVERGREEN VALLEY COLLEGE

(a) A student who has completed all of the graduation requirements at EVC will be considered to have met the graduation requirements at SJCC (exception: see RESIDENCE REQUIREMENTS above for courses, which must be taken at SJCC).

(b) A student who has not completed all of the graduation requirements at EVC must meet the minimum graduation requirements at SJCC.

RECIROCITY AGREEMENT A.A./A.S. DEGREE PATTERNS

SJCC participates in The California Articulation Region 4 Community College's General Education/Graduation Reciprocity Program. Students completing all the General Education/Graduation pattern requirements at a participating college will be given full credit for having completed the SJ/ECCD General Education/Graduation requirements; including reading, writing, math competencies, and cultural pluralism/ethnic studies. For additional information consult with a SJCC counselor.

Participating Colleges:

- De Anza
- Evergreen Valley
- Foothill
- Gavilan
- Mission
- Ohlone
- San José City
- West Valley
CHAPTER 5 — ASSOCIATE OF SCIENCE DEGREES AND CERTIFICATES

GRADUATION APPEALS COMMITTEE

(a) A student may appeal a graduation decision through the Graduation Appeals Committee.

(b) San José City College shall maintain a Graduation Appeals committee to determine if the requirements for graduation have been met. The committee may grant exceptions to the general education and/or graduation requirements provided that the requirements either pose a hardship to the student, such as delaying his/her graduation, or were incorrectly communicated to the student by a college representative. Such exceptions shall not violate state-mandated requirements. The committee will work with the appropriate Division Dean when considering the graduation appeal.

GENERAL EDUCATION COURSES

<table>
<thead>
<tr>
<th>Area A: English Communication – Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written: ENGL 001A with a “C” or better grade 3</td>
</tr>
<tr>
<td>Oral: COMS 020, 020N, 040, 045</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area B: Physical and Biological Science – Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science With Lab: ANAT 001, ASTRO 010, 010L 3</td>
</tr>
<tr>
<td>BIOL 001, 020, 021A, 064; CHEM 001A, 015, 032A, 032B; ENVIR 010; GEOG 010 &amp; 010L, 011 &amp; 011L; PHYS 002A, 003, 004A, 004B</td>
</tr>
<tr>
<td>Cosmetology Major Only: COS 010A, 010B, 105A, 105B</td>
</tr>
<tr>
<td>Dental Assistant Major Only: DENT 151</td>
</tr>
<tr>
<td>Electronics &amp; Laser Majors Only: ELECT 062</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area C: Arts and Humanities – Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities: CHIN 001A; ENGL 001B, 028, 033, 061, 065, 073, 078, 079, 080, 082A, 082B, 083, 084A, 084B, 086A, 086B; FREN 001A, 001B, 002A, 002B, 015, 016, 017, 018; HUMNT 002; JAPAN 001A, 001B, 002A, 002B; PHIL 010, 011, 012, 051, 065, 070; SL 001A, 001B, 002A, 002B; SPAN 001A, 001B, 002A, 002B</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area D: Social and Behavioral Science – Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>One course from each area for 6 units</td>
</tr>
<tr>
<td>Written: HIST 001, and POLSC 001; POLSC 010, 011, 012, 013, 014, 017, 018, 020, 024, 024A, 030, 034, 038, 039, 040, 042, 046, 048, 052, 055, 056, 098; APE 030E, 041E, 042E, 056E</td>
</tr>
<tr>
<td>Oral: ENGL 001B, 020, 020N, 040, 045</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area E: Lifelong Understanding and Self-Development – Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>One course for 3 units</td>
</tr>
<tr>
<td>FCS 019, 070; HED 011; PSYCH 020, 060, 092, 096, 100; THEAT 005</td>
</tr>
</tbody>
</table>

GENERAL EDUCATION PATTERN ..................... 24

Major/Elective Requirement ....................... 18-36

Electives: A.S./A.A. Degree Applicable Courses .................. 0-18

General Education Requirements including... 24

Cultural Pluralism/Ethnic Studies: ENGL 033, 080, 082A, 082B; ETH 026, 027; SL 015; HIST 005, 021, 024; SSCI 020, 030, 031, 032, 040 3

Physical Activity: DANCE 010, 020, 021, 040, 050, 051, 062, 064; PED 001, 008, 009, 010, 011, 012, 013, 014, 017, 018, 020, 024, 024A, 030, 034, 038, 039, 040, 042, 046, 048, 052, 055, 056, 098; APE 030E, 041E, 042E, 056E 1

Math Competency: MATH 011A, 011R, 011S; ELECT 121 with a “C” or better grade OR qualifying test score. 0

TOTAL: .................................................. 60

ASSOCIATE OF SCIENCE DEGREE AND CERTIFICATE INDEX

ACCOUNTING
— A.S. Degree
— Certificate: Specialization

ADMINISTRATION OF JUSTICE
— A.S. Degree

ADVANCED MANUFACTURING TECHNOLOGY
— A.S. Degree
— Certificate: Achievement

AIR CONDITIONING/REFRIGERATION
— A.S. Degree
— Certificate: Specialization

ALCOHOL AND DRUG STUDIES
— A.S. Degree
— Certificate: Competency Specialization

ART
— A.S. Degree

BIOMEDICAL ELECTRONICS TECHNOLOGY
— Certificate: Competency

BUSINESS
— A.S. Degree: Electronic Commerce Entrepreneurship Management Marketing
— Certificate: Competency Electronic Commerce Entrepreneurship Management Marketing Specialization

COMPUTER APPLICATIONS
— A.S. Degree
— Certificate: Competency Specialization Achievement


development requirements provided that the requirements either pose a hardship to the student, such as delaying his/her graduation, or were incorrectly communicated to the student by a college representative. Such exceptions shall not violate state-mandated requirements. The committee will work with the appropriate Division Dean when considering the graduation appeal.

<table>
<thead>
<tr>
<th>Area C: Arts and Humanities –</th>
</tr>
</thead>
<tbody>
<tr>
<td>One course from each area for 6 units</td>
</tr>
<tr>
<td>Art: ART 091, 092; HUMNT 001; MUSIC 083, 089, 091, 095, 099; PHOTO 022; THEAT 002, 020, 022, 040</td>
</tr>
<tr>
<td>Humanities: CHIN 001A; ENGL 001B, 028, 033, 061, 065, 073, 078, 079, 080, 082A, 082B, 083, 084A, 084B, 086A, 086B; FREN 001A, 001B, 002A, 002B, 015, 016, 017, 018; HUMNT 002; JAPAN 001A, 001B, 002A, 002B; PHIL 010, 011, 012, 051, 065, 070; SL 001A, 001B, 002A, 002B; SPAN 001A, 001B, 002A, 002B</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area D: Social and Behavioral Science –</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two courses for 6 units</td>
</tr>
<tr>
<td>Option 1: HIST 001, and POLSC 001; -OR-</td>
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<tr>
<td>Option 2: HIST 017A, and HIST 017B</td>
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</table>

<table>
<thead>
<tr>
<th>Area E: Lifelong Understanding and Self-Development –</th>
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</thead>
<tbody>
<tr>
<td>One course for 3 units</td>
</tr>
<tr>
<td>FCS 019, 070; HED 011; PSYCH 020, 060, 092, 096, 100; THEAT 005</td>
</tr>
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</table>

GENERAL EDUCATION PATTERN ..................... 24

Major/Elective Requirement ....................... 18-36

Electives: A.S./A.A. Degree Applicable Courses .................. 0-18

General Education Requirements including... 24

Cultural Pluralism/Ethnic Studies: ENGL 033, 080, 082A, 082B; ETH 026, 027; SL 015; HIST 005, 021, 024; SSCI 020, 030, 031, 032, 040 3

Physical Activity: DANCE 010, 020, 021, 040, 050, 051, 062, 064; PED 001, 008, 009, 010, 011, 012, 013, 014, 017, 018, 020, 024, 024A, 030, 034, 038, 039, 040, 042, 046, 048, 052, 055, 056, 098; APE 030E, 041E, 042E, 056E 1

Math Competency: MATH 011A, 011R, 011S; ELECT 121 with a “C” or better grade OR qualifying test score. 0

TOTAL: .................................................. 60

ASSOCIATE OF SCIENCE DEGREE AND CERTIFICATE INDEX

ACCOUNTING
— A.S. Degree
— Certificate: Specialization

ADMINISTRATION OF JUSTICE
— A.S. Degree

ADVANCED MANUFACTURING TECHNOLOGY
— A.S. Degree
— Certificate: Achievement

AIR CONDITIONING/REFRIGERATION
— A.S. Degree
— Certificate: Specialization

ALCOHOL AND DRUG STUDIES
— A.S. Degree
— Certificate: Competency Specialization

ART
— A.S. Degree

BIOMEDICAL ELECTRONICS TECHNOLOGY
— Certificate: Competency

BUSINESS
— A.S. Degree: Electronic Commerce Entrepreneurship Management Marketing
— Certificate: Competency Electronic Commerce Entrepreneurship Management Marketing Specialization

COMPUTER APPLICATIONS
— A.S. Degree
— Certificate: Competency Specialization Achievement
COMPUTER INFORMATION SYSTEMS
— A.S. Degree:
  Computer Programming
  Network Administration
  General Networking
  Microsoft Networks – MCSE
  CISCO Networks – CCNP
  UNIX Networks
  Web Application Solutions
  Web Site Administration
— Certificate:
  Competency
  Computer Programming
  Network Administration
  Novell Networks
  CompTia A+
  Web Application Solutions
  Web Site Administration
Specialization
  Computer Programming
  Network Administration
  Microsoft 2003 Networks – MCSE
  Microsoft 2003 Networks – MCSA
  UNIX Networks
  CISCO Networks – CCNA
  General Networking
  Web Application Solutions
  Web Site Administration
Achievement
  Computer Programming
  Network Administration
  CISCO Networks – CCNP
  Web Application Solutions
  Web Site Administration

COMPUTER REPAIR
— Certificate:
  Specialization

COMPUTER TECHNOLOGY
— Certificate:
  Specialization

CONSTRUCTION TECHNOLOGY
— A.S. Degree
— Certificate:
  Competency
  Construction Management
  Residential Maintenance
  Achievement

COSMETOLOGY
— A.S. Degree
— Certificate:
  Competency
  Esthetician
  Achievement

DENTAL ASSISTING
— A.S. Degree
— Certificate:
  Achievement

EARLY CHILDHOOD EDUCATION
— A.S. Degree
— Certificate:
  Competency
  Specialization

ELECTRONICS TECHNOLOGY
— A.S. Degree
— Certificate:
  Competency
  Assembler
  Specialization
  Technician
  Achievement
  Technical Associate
  Microwave Technician

FACILITIES MAINTENANCE
— A.S. Degree
— Certificate:
  Achievement

GENERAL BUSINESS ADMINISTRATION
— Certificate:
  Competency

GENERAL MAJOR
— A.S. Degree

HEALTH SCIENCE
— Certificate:
  Competency
  Clinical Technician
  Polysomnographic Technology

LABOR STUDIES
— A.S. Degree
— Certificate:
  Competency
  Specialization

LASER TECHNOLOGY
— A.S. Degree
— Certificate:
  Achievement
  Technical Associate

MACHINE TECHNOLOGY
— A.S. Degree
— Certificate:
  Specialization
  CNC Machine Operator
  Entry Level Machinist
  Achievement
  Machine Technician

MASK DESIGN TECHNOLOGY
— Certificate:
  Specialization
  Technician

MULTIMEDIA/DIGITAL ARTS
— A.S. Degree
— Certificate:
  Competency
  Digital Arts
  Web Design
  Specialization
  Digital Arts
  Web Design
  Achievement
  Digital Arts
  Web Design

REAL ESTATE
— A.S. Degree
— Certificate:
  Competency
  Sales
  Appraiser
  Specialization
  Broker
This curriculum provides training for paraprofessional accountants, payroll clerks, bookkeepers, and similar workers in banks and business firms. Graduates from this program are qualified to meet the demands of offices requiring special skills in general bookkeeping and machine bookkeeping.

**RELATED OCCUPATIONS**
- Accounts Receivable Specialist
- Accounts Payable Specialist
- Payroll Specialist

For additional information, see your counselor, visit the Career/Transfer Center, or contact the following:

E-mail: Linda.Ferrell@sjcc.edu  
Acctcorner Department: (408) 298-2181 ext. 3231  
San José City College Web site: www.sjcc.edu

Awarded to those who satisfactorily complete the following courses with a grade of "C" or better. An advanced course in the certificate must be taken at San José City College. The student may achieve an employment skill through this one-year program.

A grade of "C" or better in each major course is required. ACCTG 062 and 063 must be taken at San José City College or equivalent courses at other accredited colleges must be approved by the department.

**CERTIFICATE OF SPECIALIZATION**

<table>
<thead>
<tr>
<th>Course</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 020 Financial Accounting (CAN BUS 2)</td>
<td>4</td>
</tr>
<tr>
<td>ACCTG 021 Managerial Accounting (CAN BUS 4)</td>
<td>4</td>
</tr>
<tr>
<td>ACCTG 030 Computerized Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCTG 097 Accounting for Income Taxes</td>
<td>3</td>
</tr>
<tr>
<td>BUS 007A Business Language Skills</td>
<td>3</td>
</tr>
<tr>
<td>CIS 041 Introduction to Computer Information System (CAN BUS 6)</td>
<td>3</td>
</tr>
</tbody>
</table>

**APPROVED ELECTIVES** – choose 4 units from the list below

**TOTAL** 24

**DEGREE REQUIREMENTS**

<table>
<thead>
<tr>
<th>Course</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 020 Financial Accounting (CAN BUS 2)</td>
<td>4</td>
</tr>
<tr>
<td>ACCTG 021 Managerial Accounting (CAN BUS 4)</td>
<td>4</td>
</tr>
<tr>
<td>ACCTG 030 Computerized Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCTG 062 Cost Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ACCTG 063 Intermediate Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ACCTG 097 Principles of Income Tax</td>
<td>3</td>
</tr>
<tr>
<td>BUS 007A Business Language Skills</td>
<td>3</td>
</tr>
<tr>
<td>BUS 071 Legal Environment of Business (CAN BUS 12)</td>
<td>3</td>
</tr>
<tr>
<td>CIS 041 Introduction to Computer Information Systems (CAN BUS 6)</td>
<td>3</td>
</tr>
</tbody>
</table>

**APPROVED ELECTIVES** – choose 4 units from the list below

**TOTAL** 35

**GENERAL EDUCATION**

**TOTAL** 60

**APPROVED ELECTIVES:**

- ACCTG 098 Directed Study 1-3
- ACCTG 136 Occupational Work Experience 1-4
- BUS 007B Business Writing OR
- BUS 008 Business English and Writing 3
- BUS 025 Introduction to Investments 3
- BUS 071 Legal Environment of Business (Required for A.S. Degree) 3
- CA 050D Microsoft Excel Specialist 1
- CA 055D Microsoft Access Expert 1
- ECON 010A Principles of Macroeconomic Theory (CAN ECON 2) 3

**ACCOUNTING**

**ADMINISTRATION OF JUSTICE**

The Administration of Justice program offers both an Associate of Arts Degree and an Associate in Science Degree. The two-year Associate in Science program, which follows, is intended to prepare candidates academically to perform effectively in a host of careers pertaining to Criminal Justice services. Students will be exposed to a series of courses within the major intended to develop social awareness, written communication skills, cultural sensitivity, concepts of law and the physical ability to cope with many of the demanding Administration of Justice careers. Students planning to transfer should follow the Associate of Arts Degree. Classes are offered day and evening at both the Evergreen Valley and San José City College campuses as well as the South Bay Regional Public Safety Training Center located on the Evergreen Valley College Campus.

Programs in Administration of Justice are designed to prepare students for careers in federal, state, and local law enforcement agencies, correctional agencies and institutions and private security agencies. Criminal justice programs also provide additional training for persons already involved in law enforcement administration, correctional administration, forensic science, and security management. Students study the roles and activities of people with regard to maintaining law and order, providing security and protecting life and property, and conducting administration, planning and research. Programs in correctional administration are designed to prepare people for employment as juvenile group counselors, adult correctional officers, or probation aides.

For additional information, see your counselor, visit the Career/Transfer Center, or contact the following:

Phil Crawford: (408) 288-3785  
E-mail: Philip.Crawford@sjcc.edu  
San José City College Web site: www.sjcc.edu

A minimum of three courses in the major must be taken at San José City College. A grade of "C" or better is required in each course in the major for graduation.

**DEGREE REQUIREMENTS**

<table>
<thead>
<tr>
<th>Course</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AJ 010 Introduction to Administration of Justice (CAN AJ 2)</td>
<td>3</td>
</tr>
<tr>
<td>AJ 011 Criminal Law (CAN AJ 4)</td>
<td>3</td>
</tr>
<tr>
<td>AJ 013 Criminal Procedures</td>
<td>3</td>
</tr>
<tr>
<td>AJ 014 Police in Society</td>
<td>3</td>
</tr>
<tr>
<td>AJ 015 Introduction to Investigations</td>
<td>3</td>
</tr>
</tbody>
</table>

**APPROVED ELECTIVES**

**GENERAL ELECTIVES**

**TOTAL** 35

**PHYSICAL ACTIVITY**

**GENERAL EDUCATION**

**TOTAL** 60

**APPROVED ELECTIVES**

Choose 12 units from the following:

1. AJ classes not used in the core sequence above:
   - AJ 103 Patrol Procedures
   - AJ 104 Report Writing
   - AJ 111 Juvenile Law & Procedures
   - AJ 112 Introduction to Evidence
   - AJ 113 Crime and Violence in America OR

2. A combination of Administration of Justice courses, plus other courses such as SOC 010, 011; PSYCH 060, 096, 099; PHOTO 022; SPAN 091A, 091B; Ethnic Studies or Social Science courses OR

3. Completion of the full sequence of the Basic Police Academy consisting of LE 160, 161, 162 OR

4. Completion of the Basic Police Academy (LE 154).
ADVANCED MANUFACTURING TECHNOLOGY

This program has been developed at San José City and Mission College (MC) in a partnership with Intel Corporation and other light technical manufacturing companies. This is an extremely fast growing industry worldwide. It features "hands-on" training, cleanroom environment, integrated academic subjects, realistic assignments, simulated virtual reality facilities, high-tech, and internships.

The Certificate of Achievement is the minimum educational requirement for an entry-level position. Many of the major manufacturers require an A.S. degree for permanent job placement. Typical starting pay with an A.S. degree is $38,000+. The benefits are three or four-day workweeks (12 hour shifts), overtime pay, tuition pay, sabbaticals, medical, dental, life insurance, travel, and bonuses.

Mission College students must enroll in San José City College’s ELECT 082. Although the two colleges’ curriculums are very similar, they are not identical. Therefore, it is highly recommended that students identify their “home” college for the duration of the program.

The two colleges have developed a joint agreement of financial aid, which enables students to count concurrent units at both colleges. Scholarship assistance is available for students who enroll in a minimum of 9 units per semester.

For additional information, see your counselor, visit the Career/Transfer Center, or contact the following:

Applied Science and Technology Division: (408) 288-3781
San José City College Web site: www.sjcc.edu

A minimum of three courses must be taken at San José City College. A grade of "C" or better is required in each course in the major for each certificate and degree.

CERTIFICATE OF ACHIEVEMENT: Units

Technician
ELECT 062 General Electronics I 4
ELECT 063 General Electronics II 4
ELECT 081 Semiconductor Manufacturing 4
ELECT 082 Semiconductor Manufacturing Tool Sets 4
ELECT 112 Troubleshooting 2
ELECT 121 Electronics Math I 3
ELECT 122 Electronics Math II 3
CT 077 Digital Circuits 3
MFG 060 Introduction to Automation Technology 5
MFG 111 Statistical Process Control 2
TOTAL 34

DEGREE REQUIREMENTS

Completion of Certificate of Achievement 34
CHEM 032A* Introduction to GOB Chemistry 4
PHYS 003 General Physics 4
PHYSICAL ACTIVITY 1
GENERAL EDUCATION* 24
TOTAL 63-67

*CHEM 032A meets Lab/Science GE A.S. Degree pattern requirements

AIR CONDITIONING/REFRIGERATION

This program is designed to develop the appreciation, knowledge, and skills essential for employment in the air conditioning and refrigeration industry. Instruction includes both theory and practical work with refrigeration and air conditioning machinery, electrical equipment, and related mathematics.

CAREERS IN:
- Refrigeration Technician
- Air Conditioning Technician
- Sales Engineer
- Estimator
- Troubleshooter
- Counter Sales

RELATED OCCUPATIONS:
- Sheet Metal Technician
- Plumber and Pipe Fitter
- Electrician
- Facilities Maintenance Technician
- Stationary Engineer

For additional information, see your counselor, visit the Career/Transfer Center, or contact the following:

Kieron Connolly: (408) 288-3781 ext. 3667
E-mail: Kieron.Connolly@sjcc.edu
Steve Mansfield: (408) 298-2181 ext. 3671
E-mail: Steve.Mansfield@sjcc.edu
Applied Science and Technology Division: (408) 288-3781
San José City College Web site: www.sjcc.edu

A grade of "C" or better is required in each course in the major for each certificate and degree.

CERTIFICATE OF SPECIALIZATION* Units

AIRC 121 Electrical Principles for Air Conditioning/Refrigeration 4
AIRC 122 Refrigeration Principles 4
AIRC 131 Intermediate Air Conditioning 4.5
CIS 041 Introduction to Computer Information Systems (CAN BUS 6) 3
ELECT 050 Introduction to Electronics 2
TOTAL 17.5

*Daytime Accelerated Program: AIRC 121, 122 and 131 are taken back-to-back in one semester.

CERTIFICATE OF ACHIEVEMENT: Air Conditioning and Refrigeration Technology

AIRC 121 Electrical Principles for Air Conditioning/Refrigeration 4
AIRC 122 Refrigeration Principles 4
AIRC 131 Intermediate Air Conditioning 4.5
AIRC 132 Refrigeration Service 4.5
AIRC 141 Hydronics and Air Distribution 3
AIRC 142 Air Conditioning Control Systems 4
CIS 041 Introduction to Computer Information Systems (CAN BUS 6) 3
FMT 100 Introduction to Facilities Operations 2
OR CNSTR 106 Construction Blueprint Reading, Estimating, Codes and Specifications 3
ELECT 050 Introduction to Electronics 2
TOTAL 31-32
CHAPTER 5 — ASSOCIATE OF SCIENCE DEGREES AND CERTIFICATES

DEGREE REQUIREMENTS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>AIRC 121</td>
<td>4</td>
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<tr>
<td>AIRC 122</td>
<td>4</td>
</tr>
<tr>
<td>AIRC 131</td>
<td>4.5</td>
</tr>
<tr>
<td>AIRC 132</td>
<td>4.5</td>
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<tr>
<td>AIRC 141</td>
<td>3</td>
</tr>
<tr>
<td>AIRC 142</td>
<td>4</td>
</tr>
<tr>
<td>CIS 041</td>
<td>3</td>
</tr>
<tr>
<td>FMT 100</td>
<td>2</td>
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<tr>
<td>CNSTR 106</td>
<td>3</td>
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<tr>
<td>ELECT 050</td>
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<td>APPROVED ELECTIVES</td>
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TOTAL 61

APPROVED ELECTIVES:

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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>AIRC 136</td>
<td>1-4</td>
</tr>
<tr>
<td>CIS 041</td>
<td>3</td>
</tr>
<tr>
<td>CNSTR 101A</td>
<td>3</td>
</tr>
<tr>
<td>CNSTR 102A</td>
<td>3</td>
</tr>
<tr>
<td>CNSTR 102B</td>
<td>3</td>
</tr>
<tr>
<td>CNSTR 106</td>
<td>3</td>
</tr>
<tr>
<td>FMT 104</td>
<td>2</td>
</tr>
<tr>
<td>FMT 105</td>
<td>2.5</td>
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<tr>
<td>FMT 120</td>
<td>3</td>
</tr>
<tr>
<td>FMT 122</td>
<td>4</td>
</tr>
</tbody>
</table>

GENERAL EDUCATION 24

TOTAL 61

ALCOHOL AND DRUG STUDIES

San José City College offers both an Associate of Arts and an Associate of Science Degree. Students planning to transfer should follow the Associate in Arts Degree. San José City College Chemical Dependency Certificate Program is designed to meet the California Association of Alcohol and Drug Counselor (CAADAC) requirement of: 315 hours of approved Alcohol and Drug training education and 255 hours of Supervised Practicum.

Completion of the above requirements prepares students to sit for the written examination given by CAADAC, which is the first step toward certification. Following completion of the written examination, CAADAC Interns are required to document 4,000 to 6,000 hours or 2 years full-time supervised work experience as a drug and alcohol abuse counselor. Completion of 4,000 to 6,000 hours will entitle Interns to apply for the oral examination given by CAADAC. When both the written and oral examinations have been successfully completed, the California Certification Board of Alcohol and Drug Counselors awards the following certification:

- Certified Alcohol Counselor (CAC) - 4,000 hour level
- Certified Alcohol and Drug Counselor (CADC) - 6,000 hour level

To receive more information about CAADAC call (916) 368-9412 or write CAADAC, 3400 Bradshaw Rd., Suite A5, Sacramento, CA 95827

This entry level certificate program is designed to provide beginning Chemical Dependency information to prepare students to apply for positions in Chemical Dependency Treatment and Sober Living environments. The common rate of pay offered for these positions is between $7 and $8.50 per hour. It is our hope that this beginning certificate will meet the trend of increased professionalism in the Chemical Dependency Treatment field in Santa Clara County. These positions include:

- Night Monitor
- Counselor Assistants
- Detoxification Staff
- House Managers
- On-Call Counselors

Students who wish to continue their course of study are recommended to complete the Associate of Science Degree program, which includes both the general education requirements and major courses in Alcohol and Drug studies. The Associate of Science Degree is especially important for those students who desire future employment in a Medical Model treatment facility.

CAREERS IN:

- Counselors in a Social Model county residential program
- Counselors in Pre-treatment, Inpatient, Outpatient, and After Care programs in hospital-based Chemical Dependency Community Prevention and Education
- Employee Assistance Programs
- Chemical Dependency Marketing
- Recovery/Relapse counseling in the private sector upon completion of the CAADAC Certification process
- Counselors in Recovery Home/Sober Living environment

For additional information, see your counselor, visit the Career/Transfer Center, or contact the following:

Mary Crocker Cook:  (408) 488-0333
CAADAC:       (916) 368-9412
San José City College Web site: www.sjcc.edu

A minimum of three courses in the major must be taken at San José City College. A grade of “C” or better is required in each course in the major for the degree and certificate.

CERTIFICATE OF COMPETENCY

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADS 070</td>
<td>3</td>
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<tr>
<td>ADS 072</td>
<td>3</td>
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<tr>
<td>ADS 074</td>
<td>3</td>
</tr>
<tr>
<td>ADS 075</td>
<td>3</td>
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TOTAL 12

CERTIFICATE OF SPECIALIZATION

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADS 071</td>
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<tr>
<td>ADS 073</td>
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<tr>
<td>ADS 076</td>
<td>3</td>
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<td>ADS 077A</td>
<td>3</td>
</tr>
<tr>
<td>ADS 077B</td>
<td>3</td>
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</table>

TOTAL 27

CERTIFICATE OF ACHIEVEMENT

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>PSYCH 010</td>
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<tr>
<td>PSYCH 099</td>
<td>3</td>
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<tr>
<td>SOC 011</td>
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TOTAL 36

APPROVED ELECTIVE:

<table>
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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>ADS 078</td>
<td>3</td>
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</table>

DEGREE REQUIREMENTS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYSICAL ACTIVITY</td>
<td>1</td>
</tr>
<tr>
<td>GENERAL EDUCATION</td>
<td>24</td>
</tr>
</tbody>
</table>

TOTAL 36-64

Note: ADS 070, 071, 073, 074, and 075 are required prior to taking ADS 077A&B Supervised Practicum.
A student will qualify for an Associate of Science or Associate of Arts Degree by completing 60 units of specific curriculum including the options outlined with a "C" grade point average. This program can lead to employment in some specialized fields listed below.

**CAREERS IN:**
- Advertising photography
- Dark room technician
- Fashion design & illustration
- Fine art framing
- Floral arranging & design
- Graphic design
- Interior design

**ART**
- Illustration
- Portrait photography
- Production potter
- Textile design
- Silk screen T-shirts & banners
- Window & retail display

**RELATED OCCUPATIONS:**
- Animation
- Landscaping
- Architecture
- Marketing & advertising
- Art education & teaching
- Medical illustration
- Art direction
- Photojournalism
- Film and video production
- Service bureau technician
- Home/commercial building painting
- Home contracting & remodeling design
- Industrial ceramics technician

For additional information, see your counselor, visit the Career/Transfer Center, or contact the following:

**Eve Page-Mathias:** (408) 288-3785
San José City College Web site: www.sjcc.edu

### DEGREE REQUIREMENTS

<table>
<thead>
<tr>
<th>ART</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>ART 012 Two-Dimensional Design (CAN ART 14)</td>
<td>3</td>
</tr>
<tr>
<td>ART 013 Three-Dimensional Design (CAN ART 16)</td>
<td>3</td>
</tr>
<tr>
<td>ART 014 Color (CAN ART 22)</td>
<td>3</td>
</tr>
<tr>
<td>ART 024 Beginning Drawing (CAN ART 8)</td>
<td>3</td>
</tr>
<tr>
<td>ART 025 Expressive Drawing (3)</td>
<td>3</td>
</tr>
<tr>
<td>OR ART 026 Representational Drawing and Perspective</td>
<td>3</td>
</tr>
<tr>
<td>ART 091 Survey of Art History: Prehistoric through Gothic (CAN ART 2)</td>
<td>3</td>
</tr>
<tr>
<td>ART 092 Survey of Art History: Renaissance to the Present (CAN ART 4)</td>
<td>21</td>
</tr>
</tbody>
</table>

**AREA OF EMPHASIS:** Select one of the following areas for a minimum of 15 units of non-duplicated course work:

**Drawing and Painting**
- EXPRESSIVE DRAWING OR
- REPRESENTATIONAL DRAWING AND PERSPECTIVE

**ART 055A Life Drawing I (CAN ART 24)** | 3     |
**ART 055B Life Drawing II** | 3     |
**ART 060 Beginning Painting I (CAN ART 10)** | 3     |
**ART 061 Beginning Painting II** | 3     |
**Photography**
- BEGINNING PHOTOGRAPHY (CAN ART 18) | 3     |
- INTERMEDIATE PHOTOGRAPHY | 3     |
- BEGINNING COLOR PHOTOGRAPHY | 3     |
- INTERMEDIATE COLOR PHOTOGRAPHY | 3     |
- DIRECTED STUDY | 3     |

### DEGREE REQUIREMENTS

<table>
<thead>
<tr>
<th>ART</th>
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<tbody>
<tr>
<td>ELECT 030 Introduction to Biomedical Field</td>
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<tr>
<td>ELECT 062 General Electronics I</td>
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<tr>
<td>ELECT 121 Electronics Math I</td>
<td>3</td>
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<tr>
<td>HSCI 001 Introduction to Health Sciences</td>
<td>2</td>
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<tr>
<td>CT 077 Digital Circuits</td>
<td>3</td>
</tr>
<tr>
<td>CIS 041 Introduction to Computer Information Systems (CAN BUS 6)</td>
<td>3</td>
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**TOTAL** | **16** |

A grade of "C" or better is required in all courses for this certificate.

### CERTIFICATE OF COMPETENCY

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<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
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<tbody>
<tr>
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<tr>
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<tr>
<td>CIS 041 Introduction to Computer Information Systems (CAN BUS 6)</td>
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</table>

**TOTAL** | **16** |
CHAPTER 5 — ASSOCIATE OF SCIENCE DEGREES AND CERTIFICATES

BUSINESS

The Business Department offers degrees and certificate programs in four major areas: Electronic Commerce, Entrepreneurship, Management, and Marketing. The degree programs require a total of 60 units; of which, 24 units are selected from General Education areas and the remaining 36 units are selected from a business major concentration. Several levels of certificates are available in each of the four areas of concentration. The certificate programs can be completed without the requirements of General Education.

The business programs are designed for students who are planning to begin a business career, preparing to assume positions of responsibility, and planning to operate their own businesses. The following are brief descriptions of each of the four areas of concentrations:

ELECTRONIC COMMERCE

This program is designed for students who are interested in pursuing a business career in the dot.com industry. A strong focus of the program will be placed on the design of an e-Commerce business model from the conceptual stage to the management and marketing functions. While this is not a technical-oriented program, students are exposed to some basic internet technologies.

ENTREPRENEURSHIP

For those who are planning to start their own businesses, the Entrepreneurship program offers a unique opportunity to learn all the 'how-tos' from conceptual stage through implementation and operating stages. Built on the foundation of writing a business plan, to acquisition of funding, to marketing and management, students will be able to learn the A-Z in starting and managing a successful small business.

MANAGEMENT

This program is designed with consideration of the skills in management and supervision in today's ever-changing business environment. Students are introduced to a variety of subjects including fundamentals of management and marketing, communications and human relations, leadership and motivation, and global business and economy.

MARKETING

In a competitive business environment today, technology comes and goes; however, one skill remains constant—the ability to market. This program is designed for those students who are interested in pursuing a career in one of the most exciting careers in existence. Completion of this program will prepare students to seek employment in a variety of industries including hi-tech, retail, advertising, and consumer or industrial products marketing and sales.

For additional information, see your counselor, visit the Career/Transfer Center, or contact the following:

Stephen Tsih: (408) 298-2181 ext. 3232
E-mail: Stephen.Tsih@sjcc.edu
Dennis Wahler: (408) 298-2181 ext. 3243
E-mail: Dennis.Wahler@sjcc.edu
Business and Service Careers Division: (408) 288-3131
San José City College Web site: www.sjcc.edu

<table>
<thead>
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<td>BUS 071 Legal Environment of Business</td>
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<tr>
<td>(CAN BUS 12)</td>
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<tr>
<td>BUS 082 Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 113 Principles of Management</td>
<td>3</td>
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<tr>
<td>CIS 041 Introduction to Computer</td>
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<tr>
<td>MKTG 120 Marketing Principles</td>
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<tr>
<td><strong>TOTAL</strong></td>
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</table>

| **CERTIFICATE OF SPECIALIZATION** | **Completion of Certificate of Competency** | **15** |
| **ELECTIVES:** | **Choose 9 units from the Electives list below** | **9** |
| BUS 068 Small Business Management | 3 |
| BUS 135 Human Relations and Leadership | 3 |
| BUS 160 e-Commerce and Technology | 3 |
| MKTG 110 Introduction to Personal Selling | 3 |
| MKTG 112 Marketing Communications | 3 |
| MKTG 121 Marketing Strategies & Planning | 3 |
| MKTG 128 Electronic Marketing | 3 |

| **CERTIFICATE OF ACHIEVEMENT** | **Completion of Certificate of Specialization** | **24** |
| **ELECTIVES:** | **Choose 6 units from the Electives list below** | **6** |
| BUS 050 Survey of International Business | 3 |
| BUS 082 Introduction to Business | 3 |
| BUS 113 Principles of Management | 3 |
| CIS 041 Introduction to Computer | 3 |
| MKTG 120 Marketing Principles | 3 |
| **TOTAL** | **30** |

| **ELECTIVES:** | **Choose 6 units from the Electives list below** | **6** |
| ACCTG 020 Financial Accounting (CAN BUS 2) | 4 |
| BUS 007A Business Language Skills | 3 |
| BUS 050 Survey of International Business | 3 |

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<th><strong>BUSINESS: ENTREPRENEURSHIP</strong></th>
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<tr>
<td>MKTG 120 Marketing Principles</td>
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</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

| **CERTIFICATE OF SPECIALIZATION** | **Completion of Certificate of Competency** | **15** |
| **ELECTIVES:** | **Choose 9 units from the Electives list below** | **9** |
| BUS 025 Introduction to Investments | 3 |
| BUS 059 Introduction to Importing and Exporting | 3 |
| BUS 068 Small Business Management | 3 |
| BUS 114 Human Resources Management | 3 |
| MKTG 110 Introduction to Personal Selling | 3 |
| MKTG 112 Marketing Communications | 3 |
| MKTG 121 Marketing Strategies and Planning | 3 |
### GENERAL EDUCATION

- **ACCTG 020** Financial Accounting (CAN BUS 2) 4
- **BUS 007A** Business Language Skills 3
- **BUS 050** Survey of International Business 3

### BUSINESS: MANAGEMENT

#### CERTIFICATE OF COMPETENCY

- **BUS 071** Legal Environment of Business (CAN BUS 12) 3
- **BUS 082** Introduction to Business 3
- **BUS 113** Principles of Management 3
- **CIS 041** Introduction to Computer Information Systems (CAN BUS 6) 3
- **MKTG 120** Marketing Principles 3

**TOTAL** 15

#### CERTIFICATE OF SPECIALIZATION

- Completion of Certificate of Competency 15
- **BUS 025** Introduction to Investments 3
- **BUS 059** Introduction to Importing & Exporting 3
- **BUS 068** Small Business Management 3
- **BUS 114** Human Resources Management 3
- **MKTG 110** Introduction to Personal Selling 3
- **MKTG 112** Marketing Communications 3
- **MKTG 121** Marketing Strategies and Planning 3

**TOTAL** 24

### DEGREE REQUIREMENTS

- Completion of Certificate of Specialization 24
- **BUS 135** Human Relations and Leadership 3
- **MKTG 110** Introduction to Personal Selling 3
- **MKTG 112** Marketing Communications 3
- **MKTG 121** Marketing Strategies & Planning 3
- **MKTG 124** International Marketing 3
- **MKTG 126** Retail Management 3
- **MKTG 128** Electronic Marketing 3

**TOTAL** 30

### BUSINESS: MARKETING

#### CERTIFICATE OF COMPETENCY

- **BUS 071** Legal Environment of Business (CAN BUS 12) 3
- **BUS 082** Introduction to Business 3
- **BUS 113** Principles of Management 3
- **CIS 041** Introduction to Computer Information Systems (CAN BUS 6) 3
- **MKTG 120** Marketing Principles 3

**TOTAL** 15

#### CERTIFICATE OF SPECIALIZATION

- Completion of Certificate of Competency 15
- **BUS 025** Introduction to Investments 3
- **BUS 059** Introduction to Importing & Exporting 3
- **BUS 068** Small Business Management 3
- **BUS 114** Human Resources Management 3
- **MKTG 110** Introduction to Personal Selling 3
- **MKTG 112** Marketing Communications 3
- **MKTG 121** Marketing Strategies & Planning 3
- **MKTG 124** International Marketing 3
- **MKTG 126** Retail Management 3
- **MKTG 128** Electronic Marketing 3

**TOTAL** 24

### DEGREE REQUIREMENTS

- Completion of Certificate of Specialization 24
- **BUS 135** Human Relations and Leadership 3
- **MKTG 110** Introduction to Personal Selling 3
- **MKTG 112** Marketing Communications 3
- **MKTG 121** Marketing Strategies & Planning 3
- **MKTG 124** International Marketing 3
- **MKTG 126** Retail Management 3
- **MKTG 128** Electronic Marketing 3

**TOTAL** 61

### CERTIFICATE OF ACHIEVEMENT

- Completion of Certificate of Specialization 24
- **BUS 135** Human Relations and Leadership 3
- **MKTG 110** Introduction to Personal Selling 3
- **MKTG 112** Marketing Communications 3
- **MKTG 124** International Marketing 3
- **MKTG 126** Retail Management 3
- **MKTG 128** Electronic Marketing 3

**TOTAL** 30

### DEGREE REQUIREMENTS

- Completion of Certificate of Achievement 30
- **BUS 135** Human Relations and Leadership 3
- **MKTG 110** Introduction to Personal Selling 3
- **MKTG 112** Marketing Communications 3
- **MKTG 124** International Marketing 3
- **MKTG 126** Retail Management 3
- **MKTG 128** Electronic Marketing 3

**TOTAL** 61

### CERTIFICATE OF ACHIEVEMENT

- Completion of Certificate of Specialization 24
- **BUS 135** Human Relations and Leadership 3
- **MKTG 110** Introduction to Personal Selling 3
- **MKTG 112** Marketing Communications 3
- **MKTG 124** International Marketing 3
- **MKTG 126** Retail Management 3
- **MKTG 128** Electronic Marketing 3

**TOTAL** 30

### DEGREE REQUIREMENTS

- Completion of Certificate of Achievement 30
- **BUS 135** Human Relations and Leadership 3
- **MKTG 110** Introduction to Personal Selling 3
- **MKTG 112** Marketing Communications 3
- **MKTG 124** International Marketing 3
- **MKTG 126** Retail Management 3
- **MKTG 128** Electronic Marketing 3

**TOTAL** 61

### COMPUTER APPLICATIONS

The department of Computer Applications offers a degree and certificates in Computer Applications. The degree program requires a minimum of 60 units, of which at least 36 units must be in the CA major and at least 24 units, must be General Education units. An Associate of Science Degree and three levels of certificates are available: Certificate of Competency, Certificate of Specialization, and Certificate of Achievement. The certificate programs can be completed without the General Education requirements. The emphasis of this degree and certificate program is to prepare students for the Microsoft Office Specialist (MOS) exams, which includes the following courses:

- Microsoft Word
- Microsoft Excel
- Microsoft Access
- Microsoft PowerPoint
- Microsoft Outlook
Our courses and certificates will prepare students to take the Microsoft Office Specialist (MOS) Exams or the International Computer Driver’s License (ICDL) at various testing centers. Microsoft Office Specialist Certification, the premier in Microsoft desktop certification, is a globally recognized standard for demonstrating desktop skills, which helps to meet the demand for qualified and knowledgeable people in the modern workplace. ICDL is one of the world’s leading computer skills certification programs, which informs current and prospective employers that certificate holders possess competency in fundamental Information Technology (IT) skills.

After successful completion of the series of tests for ICDL or MOS, students will receive certification authenticating their skills from the certificating agency. There is a registration fee that must be paid before students can take the desired tests.

Upon receiving an Associate in Science Degree, graduates should be able to demonstrate use of following skills: touch keyboarding, document composition/word processing, mail merge, using e-mail, scheduling appointments, using Internet to locate information, file and folder management, oral and written communication skills, preparing presentations, resume writing, creating a portfolio of business documents, and organization skills.

The Computer Applications Program provides in-depth training in careers such as:
- Administrative Assistant/Support
- Office Manager
- Word Processing Specialist
- Database Designer
- Receptionist

For additional information, see your counselor, visit the Career/Transfer Center, or contact the following:
Sharon Youngblood: (408) 298-2181 ext. 3241
E-mail: Youngblood.Sharon@sjcc.edu
Anuradha Soman: (408) 298-2181 ext. 3238
E-mail: Anuradha.Soman@sjcc.edu

Business & Service Careers Division: (408) 288-3131
San José City College Web site: www.sjcc.edu

Awarded to students who satisfactorily complete the following courses with a “C” or better grade and at least four courses at San José City College.

**CERTIFICATE OF COMPETENCY**

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<td>CA 010A</td>
<td>Computer Keyboarding</td>
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<tr>
<td>CA 011</td>
<td>Speed and Accuracy</td>
<td>1</td>
</tr>
<tr>
<td>CA 015A</td>
<td>Document Processing</td>
<td>2</td>
</tr>
<tr>
<td>CA 020A</td>
<td>Microsoft Windows 2000</td>
<td>1</td>
</tr>
<tr>
<td>CA 030A</td>
<td>Internet for Beginners OR</td>
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<tr>
<td>CIS 131</td>
<td>Introduction to Internet</td>
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<tr>
<td>CA 040D</td>
<td>Microsoft Word Specialist</td>
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<td>CA 045D</td>
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<td>Microsoft Excel Specialist</td>
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<tr>
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**CERTIFICATE OF SPECIALIZATION**

Completion of Certificate of Competency 16

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<td>BUS 007A</td>
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<td>BUS 135</td>
<td>Human Relations and Leadership</td>
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<td>CA 060D</td>
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<td>Microsoft PowerPoint Specialist</td>
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<td>CA 080D</td>
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Total 27

**CERTIFICATE OF ACHIEVEMENT**

Completion of Certificate of Specialization 27

Choose a minimum of 8 units from the Electives course list below

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<td>Financial Accounting (CAN BUS 2)</td>
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<tr>
<td>ACCTG 030</td>
<td>Computerized Accounting</td>
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<td>ACCTG 101</td>
<td>Bookkeeping for Small Business</td>
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<tr>
<td>AR 071</td>
<td>Introduction to Multimedia</td>
<td>3</td>
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<tr>
<td>BUS 001</td>
<td>Business Math</td>
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<tr>
<td>BUS 007B</td>
<td>Business Writing OR</td>
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<td>BUS 008</td>
<td>Business English and Writing</td>
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<tr>
<td>BUS 017</td>
<td>Business/Medical Records</td>
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<td>BUS 113</td>
<td>Principles of Management</td>
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<tr>
<td>CA 102D</td>
<td>Advanced Microsoft Office</td>
<td>3</td>
</tr>
<tr>
<td>CIS 042</td>
<td>Program Design and Development</td>
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</tr>
<tr>
<td>CIS 062A</td>
<td>Introduction to PC Hardware and Diagnostics</td>
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<td>CIS 132</td>
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**ELECTIVES:**

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**PHYSICAL ACTIVITY**

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**GENERAL EDUCATION**

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<tr>
<td>AGSC 101</td>
<td>Agriculture and Society</td>
<td>3</td>
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<tr>
<td>BUS 007A</td>
<td>Business Language Skills</td>
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<td>BUS 008</td>
<td>Business English and Writing</td>
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<td>BUS 017</td>
<td>Business/Medical Records</td>
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<tr>
<td>BUS 113</td>
<td>Principles of Management</td>
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<tr>
<td>CA 102D</td>
<td>Advanced Microsoft Office</td>
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<td>CIS 042</td>
<td>Program Design and Development</td>
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<td>CIS 062A</td>
<td>Introduction to PC Hardware</td>
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<tr>
<td>CIS 132</td>
<td>Web sites with HTML</td>
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</table>

**DEGREE REQUIREMENTS**

Completion of Certificate of Achievement 35

**COMPUTER INFORMATION SYSTEMS**

The department of Computer Information Systems (CIS) offers degrees and certificates in four major areas:

- *Computer Programming*
- *Network Administration*
- *Web Application Solutions*
- *Web Site Administration*

The degree programs require a minimum of 60 units, of which at least 35 units must be in a selected CIS major, a physical education course of 1 unit, and at least 24 units must be General Education units. Several levels of certificates are available in each of the four areas. The certificate programs can be completed without the General Education requirements. A grade of “C” or better is required in each course.

The **CIS Programming** program is designed to provide students with skills in computer programming to enable graduates to gain employment as an entry-level programmer. Courses will emphasize skills on how to organize a computer program, and how to program in several different languages such as Java and C++. An Associate in Science Degree is available and three levels of certificates are offered.

The **Network Administration** program is designed to provide students with the necessary skills to gain employment as a network administrator. Most business computers are being connected in networks. The industry needs skilled people to configure, troubleshoot, and maintain these networks. The Network Administration Program is designed to train students to fill these needs. Eleven certificates and six Associates of Science Degree specializing in General Networking or MCSE Windows 2003 or CISCO-CCNP, Network Security, Wireless LANs and UNIX are available.

The **Web Application Solutions** program provides students with the skills necessary to design front-end applications for a Web site. It assumes basic programming skills so that students can design applications that search a Web site, obtain interactive information from visitors to the site, implement push and pull technologies, client server interactions, and provide the benefits of having a dynamic, well structured Web site.
The Web Site Administration program offers classes designed to give students the necessary skills in administrating a Web site. Upon successful completion of the Web Site Administration program, students will be able to configure and customize different Web servers on various platforms, troubleshoot Web applications and Web server software, and use and evaluate various types of Web security systems, proxy servers, and firewalls. This degree includes classes that cover both the programming and networking skills necessary to implement interactive, dynamic technologies supported on many corporate Web sites.

Notice: Most courses applying to a degree or certificate have basic language/math requirements and/or subject prerequisites. See a counselor, class schedule, or the college catalog for prerequisites.

For additional information, see your counselor, visit the Career/Transfer Center, or contact the following:

Dan McElroy: (408) 298-2181 ext. 3235
E-mail: Dan.McElroy@sjcc.edu

Ann Soman: (408) 298-2181 ext. 3238
E-mail: Anuradha.Soman@sjcc.edu

Business and Service Careers Division: (408) 288-3131
San José City College Web site:  www.sjcc.edu

** COMPUTER PROGRAMMING **

<table>
<thead>
<tr>
<th>CERTIFICATE OF COMPETENCY</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>CIS 041 Introduction to Computer Information Systems (CAN BUS 6)</td>
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<tr>
<td>CIS 042 Program Design and Development</td>
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<td>MATH 082 Computer Programming with 4 Mathematical and Scientific Applications</td>
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<td>OR</td>
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<td>12-13</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CERTIFICATE OF SPECIALIZATION: Novell Networks Completion of Core Requirements</th>
<th>8</th>
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<tbody>
<tr>
<td>CIS 069 Novell Systems Administration I</td>
<td>3</td>
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<table>
<thead>
<tr>
<th>CERTIFICATE OF COMPETENCY: CompTia A+ Certification Completion of Core Requirements</th>
<th>8</th>
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</thead>
<tbody>
<tr>
<td>CIS 062B PC Core Hardware Technology</td>
<td>2</td>
</tr>
<tr>
<td>CIS 062C PC Operating Systems Technology</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
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</table>

<table>
<thead>
<tr>
<th>CERTIFICATE OF SPECIALIZATION: General Networking Completion of Core Requirements</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 014 Networking TCP/IP on NT 4.0, #688</td>
<td>3</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>CIS 014A Internet Principles and Protocols</td>
<td>3</td>
</tr>
<tr>
<td>CIS 0151 UNIX Shell Programming</td>
<td>3</td>
</tr>
<tr>
<td>CIS 0151D UNIX Network Administration</td>
<td>3</td>
</tr>
<tr>
<td>CIS 0157 Introduction to UNIX</td>
<td>3</td>
</tr>
<tr>
<td>CIS 0158 UNIX System Administration</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>23</td>
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</table>

<table>
<thead>
<tr>
<th>CERTIFICATE OF SPECIALIZATION: Microsoft Networks – MCSE 2003 Completion of Core Requirements</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 017A Windows XP Professional</td>
<td>3</td>
</tr>
<tr>
<td>CIS 017B Windows 2000 Server</td>
<td>3</td>
</tr>
<tr>
<td>CIS 017C Windows Server 2003 Active Directory</td>
<td>3</td>
</tr>
<tr>
<td>CIS 017D Windows Server 2003 Network Infrastructure</td>
<td>3</td>
</tr>
<tr>
<td>Select one from the following:</td>
<td>2</td>
</tr>
<tr>
<td>CIS 017E Exchange Server 2003</td>
<td>3</td>
</tr>
<tr>
<td>CIS 068 Administering MS SQL Server</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>23</td>
</tr>
<tr>
<td>CIS 017F** Windows 2003 Clustering Implementation</td>
<td>3</td>
</tr>
<tr>
<td>** NOTE: CIS 017F is not part of the certificate but is highly recommended.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CERTIFICATE OF SPECIALIZATION: Microsoft Networks – MCSA Completion of Core Requirements</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 017A Windows XP Professional</td>
<td>3</td>
</tr>
<tr>
<td>CIS 017B Windows 2000 Server</td>
<td>3</td>
</tr>
<tr>
<td>CIS 017D Windows Server 2003 Network Infrastructure</td>
<td>3</td>
</tr>
<tr>
<td>Select one from the following:</td>
<td>2</td>
</tr>
<tr>
<td>CIS 017E Exchange Server 2003</td>
<td>3</td>
</tr>
<tr>
<td>CIS 068 Administering MS SQL Server</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>20</td>
</tr>
</tbody>
</table>

* NOTE: CIS 017D covers Network Infrastructure implementation (Exam 70-291) and planning (70-293). Only Exam 70-291 required for MCSA-2003.
### CERTIFICATE OF SPECIALIZATION:  
**CISCO Networks – CCNA**  
Completion of Core Requirements  
<table>
<thead>
<tr>
<th>Course</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 018A CISCO Network Essentials</td>
<td>(3) (n/a if taken as Core)</td>
</tr>
<tr>
<td>CIS 018B CISCO Router and IOS Software</td>
<td>3</td>
</tr>
<tr>
<td>CIS 018C CISCO Local Area Network Design</td>
<td>3</td>
</tr>
<tr>
<td>CIS 018D CISCO Wide Area Network Design</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>17-20</strong></td>
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</table>

### CERTIFICATE OF SPECIALIZATION:  
**CISCO Networks – CCNP**  
Completion of Core Requirements  
<table>
<thead>
<tr>
<th>Course</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 018E CCNP Advanced Routing</td>
<td>3</td>
</tr>
<tr>
<td>CIS 018F CCNP Remote Access</td>
<td>3</td>
</tr>
<tr>
<td>CIS 018G CCNP Multilayer Switching</td>
<td>3</td>
</tr>
<tr>
<td>CIS 018H CCNP Network Troubleshooting</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>29-32</strong></td>
</tr>
</tbody>
</table>

### DEGREE REQUIREMENTS  
**DEGREE: CIS General Networking**  
Completion of Certificate of Specialization, General Networking  
Choose non-duplicated units from the list of CIS Approved Electives  
<table>
<thead>
<tr>
<th>Course</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYSICAL ACTIVITY</td>
<td>1</td>
</tr>
<tr>
<td>GENERAL EDUCATION</td>
<td>24</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>60</strong></td>
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</table>

**DEGREE: CIS Microsoft Networks – MCSE – Windows 2003**  
Completion of Certificate of Specialization, MCSE Windows 2003  
Choose non-duplicated units from the list of CIS Approved Electives  
<table>
<thead>
<tr>
<th>Course</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYSICAL ACTIVITY</td>
<td>1</td>
</tr>
<tr>
<td>GENERAL EDUCATION</td>
<td>24</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>60</strong></td>
</tr>
</tbody>
</table>

**DEGREE: CIS CISCO Networks – CCNP – CCNP**  
Completion of Certificate of Specialization, CCNP – CCNP  
Choose non-duplicated units from the list of CIS Approved Electives  
<table>
<thead>
<tr>
<th>Course</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYSICAL ACTIVITY</td>
<td>1</td>
</tr>
<tr>
<td>GENERAL EDUCATION</td>
<td>24</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>60</strong></td>
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</tbody>
</table>

**DEGREE: CIS UNIX Networks**  
Completion of Certificate of Specialization, UNIX Networks  
Choose non-duplicated units from the list of CIS Approved Electives  
<table>
<thead>
<tr>
<th>Course</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYSICAL ACTIVITY</td>
<td>1</td>
</tr>
<tr>
<td>GENERAL EDUCATION</td>
<td>24</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>60</strong></td>
</tr>
</tbody>
</table>

### WEB APPLICATION SOLUTIONS  
**CERTIFICATE OF COMPETENCY:**  
<table>
<thead>
<tr>
<th>Course</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 023 JAVAScript Programming for the Web</td>
<td>2</td>
</tr>
<tr>
<td>CIS 025 VBX and ActiveX Controls</td>
<td>3</td>
</tr>
<tr>
<td>CIS 041 Introduction to Computer</td>
<td>3</td>
</tr>
<tr>
<td>CIS 042 Program Design and Development</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>11</strong></td>
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</tbody>
</table>

**CERTIFICATE OF SPECIALIZATION:**  
Completion of Certificate of Competency  
<table>
<thead>
<tr>
<th>Course</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 024 CGI and Perl Programming for the Web</td>
<td>3</td>
</tr>
<tr>
<td>CIS 063 Network Telecommunications</td>
<td>3</td>
</tr>
<tr>
<td>CIS 084 JAVA Programming</td>
<td>3</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>20</strong></td>
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</table>

### WEB SITE ADMINISTRATION  
**CERTIFICATE OF COMPETENCY:**  
<table>
<thead>
<tr>
<th>Course</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 041 Introduction to Computer</td>
<td>3</td>
</tr>
<tr>
<td>CIS 042 Program Design and Development</td>
<td>3</td>
</tr>
<tr>
<td>CIS 060 Systems Analysis and Design</td>
<td>3</td>
</tr>
<tr>
<td>CIS 063 Network Telecommunications</td>
<td>3</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

**CERTIFICATE OF SPECIALIZATION:**  
Completion of Certificate of Competency  
Choose non-duplicated units from the following list:  
<table>
<thead>
<tr>
<th>Course</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 024 CGI and Perl Programming for the Web</td>
<td>3</td>
</tr>
<tr>
<td>CIS 028 Web Site Administration #I</td>
<td>3</td>
</tr>
<tr>
<td>CIS 157 Introduction to UNIX</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>21</strong></td>
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</tbody>
</table>

**DEGREE REQUIREMENTS**  
Completion of Certificate of Achievement  
Choose 6 units of non-duplicated units from the list of CIS Approved Electives  
<table>
<thead>
<tr>
<th>Course</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
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<td>1</td>
</tr>
<tr>
<td>GENERAL EDUCATION</td>
<td>24</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>60</strong></td>
</tr>
</tbody>
</table>

### CIS APPROVED ELECTIVES:**  
Choose non-duplicated courses from the following list:  
<table>
<thead>
<tr>
<th>Course</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 014 Networking TCP/IP on NT 4.0 #688</td>
<td>3</td>
</tr>
<tr>
<td>CIS 014A Internet Principles and Protocols</td>
<td>3</td>
</tr>
<tr>
<td>CIS 017A Windows XP Professional</td>
<td>3</td>
</tr>
<tr>
<td>CIS 017B Windows 2003 Server</td>
<td>3</td>
</tr>
<tr>
<td>CIS 017C Windows Server 2003 Active Directory</td>
<td>3</td>
</tr>
<tr>
<td>CIS 017D Windows Server 2003 Network Infrastructure</td>
<td>3</td>
</tr>
<tr>
<td>CIS 017E Exchange Server 2003</td>
<td>3</td>
</tr>
<tr>
<td>CIS 017F Windows 2003 Clustering Implementation</td>
<td>3</td>
</tr>
<tr>
<td>CIS 018A CISCO Network Essentials</td>
<td>3</td>
</tr>
<tr>
<td>CIS 018B CISCO Router and IOS Software</td>
<td>3</td>
</tr>
<tr>
<td>CIS 018C CISCO Local Area Network Design</td>
<td>3</td>
</tr>
<tr>
<td>CIS 018D CISCO Wide Area Network Design</td>
<td>3</td>
</tr>
<tr>
<td>CIS 018E CCNP Advanced Routing</td>
<td>3</td>
</tr>
<tr>
<td>CIS 018F CCNP Remote Access</td>
<td>3</td>
</tr>
<tr>
<td>CIS 018G CCNP Multilayer Switching</td>
<td>3</td>
</tr>
<tr>
<td>CIS 018H CCNP Network Troubleshooting</td>
<td>3</td>
</tr>
<tr>
<td>CIS 019A CISCO Network Security Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CIS 019B CISCO Wireless Local Area Network Fundamentals</td>
<td>3</td>
</tr>
</tbody>
</table>
CIS Approved Electives (continued)

CIS 020 XML Fundamentals
CIS 021 JAVA Servlets
CIS 022 Database Technology
CIS 023 JAVAScript Programming for the Web
CIS 024 CGI and Perl Programming for the Web
CIS 024A Perl Programming
CIS 025 VBX and Active X Controls
CIS 026 Designing Web-Based Courses and Training Materials
CIS 027 Web Application Solutions
CIS 028 Web Site Administration I
CIS 029 Web Site Administration II
CIS 030 Introduction to .NET Architecture and Programming
CIS 031A C# Programming I
CIS 031B C# Programming II
CIS 032 VB .NET Programming
CIS 033 Application Using ASP .NET
CIS 034 Web Development with .NET
CIS 035 .NET Infrastructure Configuration and Management
CIS 041 Introduction to CIS (CAN BUS 6)
CIS 042 Program Design and Development
CIS 051 Assembly Language Programming for Micros
CIS 054 "C" Programming (CAN CSCI 16)
CIS 055 Data Structures
CIS 059 Object Oriented Programming - Using C++
CIS 059C Visual C++ using Microsoft Foundation Classes
CIS 060 System Analysis and Design
CIS 062A Introduction to PC Hardware and Diagnostics
CIS 062B PC Core Hardware Technology
CIS 062C PC Operating Systems Technology
CIS 063 Network Telecommunications
CIS 068 Administering MS SQL Server
CIS 069 Novell System Administration I
CIS 073 Visual Basic Programming
CIS 083 J2EE Fundamentals
CIS 083A Deploying Scripts for EJB Component Development
CIS 083B Advanced EJB Component Development
CIS 083C Advanced Web Component Development with Struts
CIS 084 JAVA Programming
CIS 085 Advanced JAVA Programming
CIS 089 Web Services Architecture
CIS 089A Migration and Integration of Web with Business Services
CIS 090 Web Services Registry Using UDDI
CIS 098 Directed Study
CIS 119A Network Security and Intrusion Detection
CIS 119B Internet Security Protocols
CIS 121 Web Application Security
CIS 132 Web Pages with HTML
CIS 136 CIS Work Experience
CIS 138 CIS Work Experience - Alternate Plan
CIS 151B UNIX Shell Programming
CIS 151D Linux Network Administration
CIS 157 Introduction to UNIX
CIS 158 UNIX System Administration

Computer Repair

Graduates of this program are qualified for employment in the computer industry. Positions in this area include networking, Internet hosting, personal computer repair, computer technical support, computer hardware support.

Experience earned in this program through hands-on experience enables students to acquire the skills necessary to pursue a career related to the computer industry.

CAREERS IN:
- Computer Repair
- Computer Assembler
- Computer Quality Assurance
- Computer Customer Support
- Network Maintenance
- Computer Maintenance
- Field Service Technician

RELATED OCCUPATIONS:
- Internet Services Support
- Network Administrator
- Technical Support

For additional information, see your counselor, visit the Career/Transfer Center, or contact the following:
Applied Science and Technology Division: (408) 288-3781
San José City College Web site: www.sjcc.edu

A minimum of three courses in the major must be taken at San José City College. A grade of "C" or better is required in each course in the certificate. Recommended introduction course: Electronics 320, Introduction to Electronics Math.

Certificate of Competency

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 041</td>
<td>Introduction to Computer Information Systems (CAN BUS 6)</td>
<td>2-3</td>
</tr>
<tr>
<td>OR</td>
<td>CT 120 Using Computers for Applied Sciences</td>
<td>2</td>
</tr>
<tr>
<td>ELECT 121</td>
<td>Electronics Math I</td>
<td>3</td>
</tr>
<tr>
<td>ELECT 131</td>
<td>Personal Computer Hardware:</td>
<td>3</td>
</tr>
<tr>
<td>ELECT 133</td>
<td>Introduction to Computer Repair</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>11-12</td>
</tr>
</tbody>
</table>

Computer Technology

Recipients of this certificate are qualified for employment in the computer and electronics industry. Positions in more than 100 firms in the area, which are directly, or indirectly computer related include: research and development, maintenance, production, quality control, testing, and field service.

One of the highlights of the computer technology program is the hands-on experience the student gets in class. Experiments and projects are designed to parallel industry standards.

RELATED CAREERS AND OCCUPATIONS:
- Computer Technician
- Electronics Technician
- Local Area Network Installation and Maintenance
- Manufacturing
- Quality Control
- Production Technician
- Product Test Technician
- Research and Development Technician
- Technical Products Sales
- Technical Writing
- Technical Support Group
- Test Technician
For additional information, see your counselor, visit the Career/Transfer Center, or contact the following:

Applied Science and Technology Division: (408) 288-3781
San José City College Web site: www.sjcc.edu

Prepares the student for an entry-level position as a computer technician. A grade of "C" or better is required in each course.

CERTIFICATE OF SPECIALIZATION

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT 077 Digital Circuits</td>
<td>3</td>
</tr>
<tr>
<td>CT 079 Microprocessor Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>ELECT 062 General Electronics I</td>
<td>4</td>
</tr>
<tr>
<td>ELECT 063 General Electronics II</td>
<td>4</td>
</tr>
<tr>
<td>ELECT 121 Electronics Math I</td>
<td>3</td>
</tr>
<tr>
<td>ELECT 122 Electronics Math II</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

CONSTRUCTION TECHNOLOGY

Successful completion of this program prepares the student for entry into the construction trades, which require a technical skill and understanding of construction processes.

CAREERS IN CONSTRUCTION TECHNOLOGY:
- Air Conditioning and Refrigeration
- Building Inspector
- Cabinet Making
- Carpenter
- Ceramic Tile Installer
- Concrete
- Construction
- Construction Management
- Contractor
- Drywall Installer, Taper and Texture
- Electrical
- Estimator
- Furniture Making
- Home Improvement Material Retail Sales
- Insulation Installer
- Millwrights
- Painting
- Plasterers
- Plumbing
- Real Estate Maintenance
- Residential Maintenance
- Roofing
- Stage Hand

HIGHLIGHTS:
- Program designed for immediate employment
- Transferability of courses to 4 year degree
- Courses designed for upgrading of job skills
- Potential opportunities for career self-employment

For additional information, see your counselor, visit the Career/Transfer Center, or contact the following:

Applied Science and Technology Division: (408) 288-3781
San José City College Web site: www.sjcc.edu

A grade of "C" or better is required in each course. Construction Technology 106 and 109A must be taken at San José City College. Construction Technology 106 and 107 may be taken concurrently and are usually offered during the fall semester on Saturdays.

CERTIFICATE OF COMPETENCY:

<table>
<thead>
<tr>
<th>MANAGEMENT</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNSTR 101B Residential Construction Framing</td>
<td>3</td>
</tr>
<tr>
<td>CNSTR 106 Construction Blueprint Reading, Estimating, Codes and Specifications</td>
<td>3</td>
</tr>
<tr>
<td>CNSTR 107 Seminar in Principles of Contracting</td>
<td>3</td>
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<tr>
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CERTIFICATE OF COMPETENCY:

<table>
<thead>
<tr>
<th>RESIDENTIAL MAINTENANCE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNSTR 101A Construction Tools, Materials, and Processes</td>
<td>4</td>
</tr>
<tr>
<td>CNSTR 102A Residential Construction - Plumbing</td>
<td>3</td>
</tr>
<tr>
<td>CNSTR 102B Residential/Commercial Wiring</td>
<td>4</td>
</tr>
<tr>
<td>CNSTR 104 Interior/Exterior Finish</td>
<td>4</td>
</tr>
<tr>
<td>CNSTR 106 Construction Blueprint Reading, Estimating, Codes and Specifications</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>18</strong></td>
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CERTIFICATE OF ACHIEVEMENT

| CIS 041 Introduction to Computer Information Systems (CAN BUS 6) | 3     |
| CNSTR 101A Construction Tools, Materials, and Processes | 4     |
| CNSTR 102A Residential Construction - Plumbing | 3     |
| CNSTR 102B Residential/Commercial Wiring | 4     |
| CNSTR 104 Interior/Exterior Finish | 4     |
| CNSTR 106 Construction Blueprint Reading, Estimating, Codes and Specifications | 3     |
| CNSTR 110 Architectural Drawing and Home Planning | 3     |

APPROVED ELECTIVES – Complete 18 units from the following list:

| CNSTR 101B Residential Construction Framing | 3     |
| CNSTR 103 Roof Framing Systems | 3     |
| CNSTR 105 Concrete Construction | 3     |
| CNSTR 107 Seminar in Principles of Contracting | 3     |
| CNSTR 109A Basic Cabinet/Furniture Making | 3     |
| CNSTR 109B Advanced Cabinet/Furniture Making | 3     |
| CNSTR 111 Basic Woodworking-Clockmaking | 1.5   |
| CNSTR 112 Supervision of Construction | 1     |
| CNSTR 113 Insurance for Construction | 1     |
| CNSTR 114 Finance for Construction | 1     |
| CNSTR 115 Blueprint Reading | 1     |
| CNSTR 116 Estimating | 1     |
| CNSTR 117 Fed-OSHA 10 Hour Safety | 1     |
| CNSTR 118 Project Management for Construction | 1 |
| CNSTR 119 Construction Contracting with the Federal Government | 1 |
| REST 127 Real Estate Property Management | 3     |
| **TOTAL** | **42** |

MAJOR REQUIREMENTS

COMPLETION OF CERTIFICATE OF ACHIEVEMENT

<table>
<thead>
<tr>
<th>PHYSICAL ACTIVITY</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENERAL EDUCATION</td>
<td>24</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>67</strong></td>
</tr>
</tbody>
</table>

COSMETOLOGY

The Cosmetology Program is designed to provide those persons interested in becoming a licensed cosmetologist with instruction in technical and theoretical knowledge relating to the basic skills in all phases of cosmetology including current salon techniques and trends. Emphasis is placed on application of skills in hair coloring, permanent waving, chemical relaxing, hair styling, hair cutting, manicuring, skin care, facials and makeup. Instruction in professionalism, salon management, chemistry, anatomy, physiology, sanitation, Cosmetology Act, rules and regulations are included.
The Cosmetology Program is composed of 1600 hours of instruction, to satisfy the requirements of the California State Board of Cosmetology. Once a student is admitted to the Cosmetology Program the student is expected to enroll on a full-time basis (40 hours a week). The program offers a Certificate of Achievement as well as an Associate of Science Degree. Upon completion of the certificate program, students are eligible to take the State Board Examination for licensing. The program is intended to prepare students for Cosmetology entry positions i.e., hairstylist, facialist, manicurist.

The Esthetician Program is composed of 600 hours of instruction to satisfy the requirements of the California State Board of Cosmetology. The program is 20 hours a week, with classes being held in the evenings. The program offers a Certificate of Competency in Esthetics. Upon completion of the program students are eligible to take the State Board Esthetician examination. The program is intended to prepare students for entry level positions i.e., esthetician, makeup artist, reconstructive makeup artist, cosmetic sales.

**RELATED OCCUPATIONS**
- Esthetician
- Makeup Artist
- Salon Owner/Manager
- Platform Technician
- Barber Stylist
- Manufacturer Representative

Candidates for the Cosmetology Program must file a supplementary application. Applications are available in the Cosmetology Department V-11. Orientation meeting attendance is required prior to enrollment.

**For additional information, see your counselor, visit the Career/Transfer Center, or contact the following:**
- Cosmetology Department: (408) 288-3710
- Cosmetology Coordinator: (408) 298-2181 ext. 3904
- Business and Service Careers Division: (408) 288-3313
- Esthetics Department: (408) 288-3766
- Esthetics Coordinator: (408) 298-2181 ext. 3973
- San José City College Web site: www.sjcc.edu

**CERTIFICATE OF COMPETENCY:**

**ESTHETICIAN**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COS 130A</td>
<td>Esthetician I</td>
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<tr>
<td>COS 130B</td>
<td>Esthetician II</td>
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**CERTIFICATE OF ACHIEVEMENT**

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<th>Units</th>
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<tbody>
<tr>
<td>COS 010A</td>
<td>Cosmetology Freshman Theory*</td>
<td>5</td>
</tr>
<tr>
<td>COS 010B</td>
<td>Cosmetology Senior Theory*</td>
<td>5</td>
</tr>
<tr>
<td>COS 105A</td>
<td>Cosmetology Freshman Lab*</td>
<td>16</td>
</tr>
<tr>
<td>COS 105B</td>
<td>Cosmetology Senior Lab*</td>
<td>16</td>
</tr>
<tr>
<td>COS 105</td>
<td>Cosmetology Professional Skills</td>
<td>11.5</td>
</tr>
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**DEGREE REQUIREMENTS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COS 010A</td>
<td>Cosmetology Freshman Theory*</td>
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<td>COS 105A</td>
<td>Cosmetology Freshman Lab*</td>
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<td>COS 010B</td>
<td>Cosmetology Senior Theory*</td>
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<td>COS 105B</td>
<td>Cosmetology Senior Lab*</td>
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<td>COS 105</td>
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<td>PHYSICAL ACTIVITY</td>
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<td><strong>TOTAL</strong></td>
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<td><strong>78.5</strong></td>
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</tbody>
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*Course meets the lab science graduation requirement for Cosmetology majors only.

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**DENTAL ASSISTING**

Registered Dental Assisting Programs are designed to instruct women and men with the knowledge and skills necessary to perform as dental health care paraprofessionals. Students are taught to assist in all phases of general dentistry and dental specialties including prosthodontics, oral surgery, periodontics, endodontics, orthodontics, and pediatric dentistry. Through the Registered Dental Assisting Program students will be taught to perform in expanded functions, trained and licensed in taking dental x-rays, and certified in coronal polishing. The preventive, restorative, business, teaching, and employment aspects of dental assisting are included.

Upon completion of the Program students will be eligible to take the California State Board Examination for licensure as a Registered Dental Assistant (R.D.A.) and the Dental Assisting National Board Certification (C.D.A.).

Students are admitted to the program in the fall and spring semester. Advisory Level 2 Basic Language Skills are critical for entry into DENT 151, 152, and 153, as well as all other Dental Assisting courses. It is recommended that students planning to enter the program take the placement test as early as possible to determine their level. Those needing to improve their language skills may do so in courses offered by the college prior to admissions to the program.

Costs of uniforms, books, safety items, and miscellaneous supplies are estimated at $800-$1,000 for the 11 months of the program. Costs are spread out over the 11 months. Approximately $400 is needed to start the first two weeks of the program.

Students develop laboratory skills in role playing situations with mannequins on campus and are assigned to dental offices in the community to develop clinical experience and receive training in a professional working environment.

Students are responsible for their own transportation to clinical facilities. Students should have current certification in C.P.R. and need current vaccinations before entering the second semester.

**CAREERS IN:**
- Registered Dental Assistant in Extended Functions (R.D.A.E.F.)
- Registered Dental Hygienist
- Dentist
- Dental Assisting Instructor
- Dental Laboratory Technician
- Dental Office Manager
- Dental X-Ray Technician

**For additional information, see your counselor, visit the Career/Transfer Center, or contact the following:**
- Dental Assisting Department: (408) 288-3712
- Laura Sanchez: Laura.Sanchez@sjcc.edu
- Business & Service Careers Division: (408) 288-3714
- San José City College Web site: www.sjcc.edu

A student in the Dental Assisting Program must enroll full time in the major classes. A student who meets the certificate requirements is eligible for the R.D.A. and C.D.A. examinations. Prior to, or after finishing the major classes, the student may complete the General Education Requirements for the A.S. Degree. An advanced course in the major must be taken at San José City College. A grade of “C” or better is required in each major course.
**CERTIFICATE OF ACHIEVEMENT**

<table>
<thead>
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<td>DENT 151 Beginning Dental Assisting 1*</td>
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<tr>
<td>DENT 152 Beginning Dental Assisting 2</td>
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<tr>
<td>DENT 153 Beginning Dental Assisting 3</td>
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<tr>
<td>DENT 154 Fundamental Dental Assisting 1</td>
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</tr>
<tr>
<td>DENT 155 Fundamental Dental Assisting 2</td>
<td>3</td>
</tr>
<tr>
<td>DENT 156 Fundamental Dental Assisting 3</td>
<td>1.5</td>
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<tr>
<td>DENT 161 Intermediate Dental Assisting 1</td>
<td>3</td>
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<td>DENT 162 Intermediate Dental Assisting 2</td>
<td>3</td>
</tr>
<tr>
<td>DENT 163 Expanded Dental Assisting 1</td>
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<tr>
<td>DENT 164 Expanded Dental Assisting 2</td>
<td>1.5</td>
</tr>
<tr>
<td>DENT 171 Clinical Dental Assisting 1</td>
<td>2.5</td>
</tr>
<tr>
<td>DENT 172 Clinical Dental Assisting 2</td>
<td>2.5</td>
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<td>DENT 173 Clinical Dental Assisting 3</td>
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**TOTAL** 31.5

**DEGREE REQUIREMENTS**

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<tr>
<td>Completion of Certificate of Achievement</td>
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**ELECTIVES**

<table>
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<tr>
<th>UNITS</th>
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**PHYSICAL ACTIVITY**

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<tr>
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**GENERAL EDUCATION**

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<tbody>
<tr>
<td>24</td>
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</tbody>
</table>

**TOTAL** 60

*Course meets the lab science graduation requirement for Dental Assisting Major only.

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**EARLY CHILDHOOD EDUCATION**

Graduates of the Associate in Science Degree Program qualify through academic preparation and field experience for work in child centers, pre-schools, day care facilities, infant/toddler centers and other programs handling young children. They are able to use instructional techniques, which promote intellectual, social, emotional, physical, and creative growth in children.

For additional information, see your counselor, visit the Career/Transfer Center, or contact the following:

Early Childhood Education: (408) 288-3705
San José City College Web site: www.sjcc.edu

A grade of "C" or better is required in all Early Childhood Education courses.

**CERTIFICATE OF COMPETENCY**

Students who want to specialize in a specific area in the Early Childhood Education Program can do so in the following; Early Childhood, Infant/Toddler, or School Age.

**CORE COURSES:**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>ECE 101 Practicum in Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>ECE 102 Introduction to Early Childhood Programs</td>
<td>3</td>
</tr>
<tr>
<td>ECE 107 Child, Family, and Community</td>
<td>3</td>
</tr>
<tr>
<td>ECE 070 Child Development (CAN FCS 14)</td>
<td>3</td>
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</table>

Select 3 units from the list below

**EARLY CHILDHOOD**

<table>
<thead>
<tr>
<th>COURSE</th>
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<tbody>
<tr>
<td>ECE 105 Language Experiences for Children</td>
<td>3</td>
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**OR**

**INFANT TODDLER**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>ECE 191 Infant Toddler Development</td>
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**OR**

**SCHOOL AGE**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>ECE 195 Development of School Age Children</td>
<td>3</td>
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**TOTAL** 15

**CERTIFICATE OF SPECIALIZATION**

ECE 103 must be taken at San José City College.

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>ECE 101 Practicum in Curriculum</td>
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</tr>
<tr>
<td>ECE 102 Introduction to Early Childhood Programs</td>
<td>3</td>
</tr>
<tr>
<td>ECE 103 Child Studies Student Teaching</td>
<td>6</td>
</tr>
<tr>
<td>ECE 104 Art, Crafts, Creative Activities (Fall only)</td>
<td>2</td>
</tr>
<tr>
<td>ECE 105 Language Experience for Children</td>
<td>3</td>
</tr>
<tr>
<td>ECE 107 Child, Family, and Community</td>
<td>3</td>
</tr>
<tr>
<td>ECE 108 Health and Safety in Child Care</td>
<td>2</td>
</tr>
<tr>
<td>ECE 109 Rhythm, Music, Movement Activities for Children</td>
<td>2</td>
</tr>
<tr>
<td>ECE 070 Child Development (CAN FCS 14)</td>
<td>3</td>
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</tbody>
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**TOTAL** 27

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**DEGREE REQUIREMENTS**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
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<tr>
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<tr>
<td>PSYCH 092 Development Psychology (CAN PSY 10)</td>
<td>3</td>
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Choose 6 units of elective courses

**GENERAL EDUCATION**

<table>
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<tr>
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**TOTAL** 61

**ELECTIVES:** Suggested but not required electives:

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<tr>
<th>COURSE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>ECE 016 Storytelling for Children</td>
<td>2</td>
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<tr>
<td>ECE 098 Directed Studies</td>
<td>1-9</td>
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<tr>
<td>ECE 106 Administration and Supervision of Early Childhood Programs</td>
<td>3</td>
</tr>
<tr>
<td>ECE 110 Management and Supervision of Programs for School Age Children</td>
<td>3</td>
</tr>
<tr>
<td>ECE 120 Family Day Care as a Business</td>
<td>1</td>
</tr>
<tr>
<td>ECE 121 Family Day Care Activities</td>
<td>1</td>
</tr>
<tr>
<td>ECE 136 Early Childhood Education Work Experience</td>
<td>1-4</td>
</tr>
<tr>
<td>ECE 142 Supervision of Adults – The Mentor Teacher</td>
<td>2</td>
</tr>
<tr>
<td>ECE 145 Integrating Children with Special Needs</td>
<td>1</td>
</tr>
<tr>
<td>ECE 146 Child Guidance and Discipline</td>
<td>2</td>
</tr>
<tr>
<td>ECE 147 Multicultural/Anti-bias Curriculum for Children</td>
<td>1</td>
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<tr>
<td>ECE 191 Infant Toddler Development</td>
<td>3</td>
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<tr>
<td>ECE 195 School Age Care</td>
<td>3</td>
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<tr>
<td>FCS 019 Nutrition (CAN FCS 12)</td>
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**ELECTRONICS TECHNOLOGY**

Graduates of this program are qualified for employment in the electronics industry. Positions in the more than 5000 firms in the area include electronics servicing, electronics manufacturing and maintenance, electronics research and development, and related fields.

One of the highlights of the electronics technology program is the hands-on experience the student gets in each class. Experiments and projects are designed to parallel industry standards.

**CAREERS IN:**

- Assembler
- Electronics Technician
- Product Test Technician
- Communication Equipment Technician
- Research/Development Technician
- Maintenance Technician
- Field Service Technician
- Customer Service Engineer
- Microwave Technician
- Microwave Test Technician
- Microwave Quality Assurance Technician
- Development Technician
- Field Service Technician
- Maintenance Technician
- Research/Development Technician
- Manufacturing Technician

**RELATED OCCUPATIONS:**

**Electronics Technology**

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<thead>
<tr>
<th>Occupation</th>
<th>Specifics</th>
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<tbody>
<tr>
<td>Marketing of Technical Products</td>
<td>Technical Writing, Manufacturing</td>
</tr>
<tr>
<td>Technical Support Group</td>
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<tr>
<td>Production Assurance</td>
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</table>

**Microwave**

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Specifics</th>
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<tbody>
<tr>
<td>Marketing of Technical Products</td>
<td>Technical Writing, Manufacturing</td>
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<td>Technical Support Group</td>
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<tr>
<td>Production Assurance</td>
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CHAPTER 5 — ASSOCIATE OF SCIENCE DEGREES AND CERTIFICATES

For additional information, see your counselor, visit the Career/Transfer Center, or contact the following:
Applied Science and Technology Division: (408) 288-3781
San José City College Web site: www.sjcc.edu

A grade of "C" or better is required in each course in the certificate. Recommended Introduction Courses: Elect 050, Introduction to Electronics and Elect 320, Introduction to Electronics Math.

CERTIFICATE OF COMPETENCY:

<table>
<thead>
<tr>
<th>Course</th>
<th>UNITS</th>
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<tbody>
<tr>
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<tr>
<td>ELECT 062</td>
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<td>ELECT 113</td>
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<td>ELECT 115</td>
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CERTIFICATE OF SPECIALIZATION:

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<tr>
<td>ELECT 050 Introduction</td>
<td>(2)</td>
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<td>ELECT 062 General</td>
<td>(4)</td>
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<tr>
<td>ELECT 113 Fabrication</td>
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<tr>
<td>ELECT 115 Surface</td>
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<td>TOTAL</td>
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MAJOR REQUIREMENTS:

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<td>ELECT 062 General</td>
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<tr>
<td>ELECT 065 Analog</td>
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<td>ELECT 066 RF</td>
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<tr>
<td>ELECT 112 Troubleshooting</td>
<td>2</td>
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<tr>
<td>ELECT 114 Fabrication</td>
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<tr>
<td>ELECT 163 Microwave</td>
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GENERAL REQUIREMENTS:

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<tbody>
<tr>
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<td>(2)</td>
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<tr>
<td>ELECT 062 General</td>
<td>(4)</td>
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<tr>
<td>ELECT 113 Fabrication</td>
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<tr>
<td>ELECT 115 Surface</td>
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DEGREE REQUIREMENTS:

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<th>UNITS</th>
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<tbody>
<tr>
<td>ELECT 050 Introduction</td>
<td>(2)</td>
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<tr>
<td>ELECT 062 General</td>
<td>(4)</td>
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<tr>
<td>ELECT 113 Fabrication</td>
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<tr>
<td>ELECT 115 Surface</td>
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Facilities Maintenance Technology

The Facilities Maintenance Technology Program at San José City College will provide students with the skills to begin or advance in a career in facilities maintenance. It was designed by the advisory committee to meet industry requirements. Students will learn the skills and concepts necessary to install, operate, maintain and repair control, piping, and mechanical systems in large commercial, medical, institutional, and industrial buildings. Students will also learn troubleshooting skills, problem solving methods and electrical concepts. Continuous improvement techniques and effective written, verbal, and electronic communication skills will be stressed across the curriculum. Classes are designed in lecture and lecture/lab format to give students a solid foundation in general maintenance skills including HVAC/R. Print reading and troubleshooting skills will be emphasized.

For additional information, see your counselor, visit the Career/Transfer Center, or contact the following:
Applied Science and Technology Division: (408) 288-3781
San José City College Web site: www.sjcc.edu

CERTIFICATE OF ACHIEVEMENT:

<table>
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<th>Course</th>
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<tbody>
<tr>
<td>AIRC 121 Electrical</td>
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<tr>
<td>AIRC 122 Refrigeration</td>
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<td>AIRC 136 Air Conditioning</td>
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<tr>
<td>AIRC 142 Air Conditioning</td>
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<tr>
<td>CIS 041 Introduction</td>
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<tr>
<td>CNSTR 106 Construction</td>
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<td>FMT 100 Introduction</td>
<td>2</td>
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<tr>
<td>FMT 104 Electrical</td>
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<tr>
<td>FMT 105 Introduction</td>
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<tr>
<td>FMT 120 Low and High</td>
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<td>FMT 122 Introduction</td>
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DEGREE REQUIREMENTS:

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<td>AIRC 121 Electrical</td>
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<td>AIRC 122 Refrigeration</td>
<td>4</td>
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<tr>
<td>AIRC 136 Air Conditioning</td>
<td>3</td>
</tr>
<tr>
<td>AIRC 142 Air Conditioning</td>
<td>4</td>
</tr>
<tr>
<td>CIS 041 Introduction</td>
<td>3</td>
</tr>
<tr>
<td>CNSTR 106 Construction</td>
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<td>FMT 100 Introduction</td>
<td>2</td>
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<tr>
<td>FMT 104 Electrical</td>
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<td>FMT 105 Introduction</td>
<td>2.5</td>
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<tr>
<td>FMT 120 Low and High</td>
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<tr>
<td>TOTAL</td>
<td>62.5</td>
</tr>
</tbody>
</table>

General Business Administration Certificate

This business certificate will provide the students with a broad background understanding of business and its functions and prepare them to assimilate in the complex global business environment today. The courses are designed to provide students with a set of basic marketable skills through the first two required courses and some level of specialty in the selective course. Some of the objectives are:

- Distinguish and develop a decision-making model
- Demonstrate problem solving techniques
- Appraise and differentiate leadership styles
- Practice team-building skills and develop a collaborative mentality
- Review and examine marketing concepts
- Develop and appraise marketing strategies
CHAPTER 5 — ASSOCIATE OF SCIENCE DEGREES AND CERTIFICATES

- Assess the global economy
- Develop and innovate business models
- Coordinate effective and efficient management of technology
- Manage and respond to change
- Recognize and evaluate international trade issues
- Identify and adapt to cultural difference

For additional information, see your counselor, visit the Career/Transfer Center, or contact the following:

Stephen Tsih: (408) 298-2181 ext. 3232
E-mail: Stephen.Tsih@sjcc.edu
Business and Service Careers Division: (408) 288-3131
San José City College Web site: www.sjcc.edu

CERTIFICATE OF COMPETENCY

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 113 Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 120 Marketing Principles</td>
<td>3</td>
</tr>
<tr>
<td><strong>Choose one of the following:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>BUS 050 Survey of International Business</strong></td>
<td>2</td>
</tr>
<tr>
<td><strong>BUS 160 E-Commerce and Technology</strong></td>
<td></td>
</tr>
<tr>
<td><strong>MKTG 121 Marketing Strategies and Planning</strong></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>

G E N E R A L M A J O R

A General Major leading to the Associate in Science Degree has been established for students wishing to have a broad educational objective. The major consists of a minimum of 60 A.S. degree applicable units with a 2.0 grade point average. This major is intended for individuals wishing to complete a two year A.S. degree only. Students planning to transfer to a four-year university should follow the Associate in Arts General Major.

For additional information, see your counselor, visit the Career/Transfer Center, or contact the following:

Counseling Department: (408) 288-3750
San José City College Web site: www.sjcc.edu

DEGREE REQUIREMENTS

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Awareness course</td>
<td>CIS 041; CT 077; MATH 063, 082</td>
</tr>
<tr>
<td>Behavioral Science</td>
<td>PSYCH 010, 060, 096, 100; ANTH 062, 063; SOC 010, 011</td>
</tr>
<tr>
<td>Area of Concentration (Must include 2 CSU transferable courses in the area for a minimum of 6 units)</td>
<td>15</td>
</tr>
<tr>
<td>Electives (Must be associate degree applicable courses)</td>
<td>14</td>
</tr>
<tr>
<td>Physical Activity</td>
<td>1</td>
</tr>
<tr>
<td>General Education</td>
<td>24</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>60</strong></td>
</tr>
</tbody>
</table>

No course shall be used to meet more than one of the graduation requirements for general education, major, or electives. A grade of "C" or better is required in each major course.

AREAS OF CONCENTRATION

To satisfy the requirement in the chosen area of concentration, a student must complete a minimum of 15 units in unduplicated courses offered in any of the following instructional fields with at least two CSU transferable courses totaling at least 6 units as indicated by the underlined course numbers.

- Art
- Communication Studies/Dance/Theatre
- Early Childhood Education/Family and Consumer Studies
- English/Humanities
- Ethnic Studies/Social Science
- Foreign Language
- Music
- Photography
- Science: Life
- Business
- Mathematics
- Philosophy
- Psychology
- Science: Physical

AREAS OF CONCENTRATION (General Major):

| ART | 012, 013, 014, 024, 025, 026, 028, 046A, 046B, 047, 047B, 055A, 055B, 060, 061, 071, 072, 073, 074, 076, 077, 078, 079, 081, 083, 084A, 084B, 085, 086, 091, 092 |
| PHILOSOPHY | PHIL: 010, 011, 012, 051, 060, 065, 070 |
| PSYCHOLOGY | PSYCH: 010, 012, 060, 092, 096, 098, 099, 100 |

SCIENCE - LIFE: ANAT: 001; BIOL: 001, 002, 003, 020, 021A, 061, 063, 064, 098; BOT: 062; ENVIR: 010; MICRO: 070; PHYSO: 060

HEALTH SCIENCE

EMERGENCY MEDICAL TECHNICIAN: STATE CERTIFICATION GUIDELINES

Emergency Medical Technicians (EMT-1) are often the first personnel to arrive on the emergency scene. EMT's may be the ambulance attendant, a park ranger, nurse, lifeguard, firefighter, ski patrol or search and rescue member. Police officers, security personnel, and occupational safety (industry) team members are also educated as EMT's. Employment opportunities vary according to the job title. Salary ranges from $35,000-$50,000 a year, depending on shift configuration and overtime. National labor statistics show dual trained personnel, such as EMT/Fire Service average $37,500 a year nationally.

The EMT course is based on the United States Department of Transportation’s EMT-Basic National Standard Curriculum. Curriculum includes theory lectures on anatomy and physiology, medical terminology, patient assessment, medical and trauma scene management. During EMT skills labs the students perform assessments using “real life” scenarios. Working with partners, the EMT’s walk into an unknown scene, communicate with firefighters and police responders, elicit a history from the family members and bystanders, and manage the total care and transport of the patient. EMT-1s often partner with field Paramedics to perform advanced optional skills.

Once students have attained a basic skills level in the classroom, a ambulance rotation will be scheduled through the college. Students will complete this mandatory 10-hour ambulance ride-along in addition to the classroom hours. Immunization requirements for this rotation will be explained the first day of class. The student must possess an American Heart Association Healthcare provider CPR card by the first class meeting. The card must be current through the end of the enrolled semester. The course includes 10 National Registry skills tests.

When all course requirements are met, an “EMT-1 Certificate of Completion” will be issued. A grade of “C” or better is required. Following course completion the student must schedule to sit for a National Registry Written Exam. Results of the exam will be mailed to the student in 4-6 weeks. Once this exam has been passed the student will present their credentials to a California county Emergency Medical Services Office. Drug testing and justice department background checks are completed before state certification and employment. The state certification must be renewed every two years. San Jose City College offers this 24 hour refresher each year in June.

The entire educational process, national testing, and state certification can be completed in under two semesters if students meet all criteria.

For additional information, see your counselor, visit the Career/Transfer Center, or contact the following:
Jennifer Witte: (408) 298-2181 ext. 3134
E-mail: Jennifer.Witte@sjcc.edu
Business and Service Careers Division: (408) 288-3131
San José City College Web site: www.sjcc.edu

<table>
<thead>
<tr>
<th>REQUIRED COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSCI 010</td>
<td>5.5</td>
</tr>
</tbody>
</table>

CERTIFICATE OF COMPETENCY: INTRODUCTION TO HEALTH SCIENCE, CLINICAL TECHNICIAN I, CLINICAL TECHNICIAN II, POLYSOMNOGRAPHIC TECHNOLOGY I

Clinical Technicians function in various work environments as multi-task technicians. Job titles include Emergency Department Technician, Patient Transport Aids, EKG Technician, Surgical Technician I, Orthopedic Aide, Phlebotomist Lab Assistant, Anesthesia Aide, Health Corps Aide, and Clinical Assistant I. Salary ranges from $15 - $18 per hour for part-time, and $25,000 - $35,000 for full-time employment.

Introduction to Health Science covers medical terminology, anatomy, and physiology. Body systems are investigated through the study of pathology, laboratory tests, diagnostic and treatment procedures.

Clinical Technician I includes phlebotomy, specimen collection, lab testing, preparation of instrument packs, sterilization, minor surgery assisting, clinical assisting during obstetric and pediatric examinations, CPR, career ladder, and resume writing. Opportunities for a 4-week clinical work experience will be offered.

Clinical Technician II includes scheduling appointments, nutritional education planning, pharmacology and injections, electrocardiograms, clinical assisting during orthopedic procedures, CPR and career ladder. Opportunities for a 4-week clinical work experience will be offered. Clinical Technician I and II can be taken in any sequence.

Fundamentals of Polysomnographic Technology I will introduce the student to the field of Sleep Medicine. The Association of Polysomnographic Technologists has authored the Technology I curriculum including normal sleep architecture, physiology of hypoxic and hypercapnic mechanisms, instrumentation, and an introduction to scoring. Clinical rotations and study guides for national certification will be provided. Employment involves 10-12 hour night shifts, salary ranges $18 to $25 per hour.

Introduction to Health Science is a mandatory pre-requirement for the two certificates. A grade of "C" or better is required in each course. A Certificate of Course Completion will be issued upon successful completion of each class/certificate.

<table>
<thead>
<tr>
<th>CLINICAL TECHNICIAN:</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSCI 001 Introduction to Health Science</td>
<td>2</td>
</tr>
<tr>
<td>HSCI 020 Clinical Technician I</td>
<td>3</td>
</tr>
<tr>
<td>HSCI 021 Clinical Technician II</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>8</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>POLYSOMNOGRAPHIC TECHNOLOGY I:</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSCI 001 Introduction to Health Science</td>
<td>2</td>
</tr>
<tr>
<td>HSCI 025 Fundamentals of Polysomnographic Technology I</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>5</td>
</tr>
</tbody>
</table>

LABOR STUDIES

This program is designed to provide students with the skills and knowledge required to assume leadership in organized labor and in community organizations.

CAREERS IN:
- Labor Union Leadership
- Community Organizing
- Governmental Agencies Regulating Employment Relations
- Human Resource Management
- Labor Management Mediation
- Labor Arbitration
- Union Organizing
CHAPTER 5 — ASSOCIATE OF SCIENCE DEGREES AND CERTIFICATES

RELATED CAREERS:
- Commercial Arbitration
- Conflict Resolution
- Employee Relations

For additional information, see your counselor, visit the Career/Transfer Center, or contact the following:
Labor Studies: (408) 288-3705
San José City College Web site: www.sjcc.edu

The Certificate of Competency classes are offered over a single academic year. Within this year students could complete their Certificate of Competency by attending school one night a week with scheduled meetings with their instructor in the Directed Study and Work Experience classes. A minimum of nine units for the Certificate of Competency must be taken at San José City College. A grade of “C” or better is required in each course for the major.

CERTIFICATE OF COMPETENCY

<table>
<thead>
<tr>
<th>Course</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>LABOR 020 Workers’ Rights</td>
<td>1</td>
</tr>
<tr>
<td>LABOR 022 Labor Negotiations and Dispute Resolutions</td>
<td>1</td>
</tr>
<tr>
<td>LABOR 023 Labor in American Society</td>
<td>1</td>
</tr>
<tr>
<td>LABOR 024 Leadership and Communication</td>
<td>1</td>
</tr>
<tr>
<td>LABOR 025 Labor Organizing and Political Action</td>
<td>1</td>
</tr>
<tr>
<td>LABOR 031 Survey of Contemporary Labor/Social Issues for Activist</td>
<td>1</td>
</tr>
<tr>
<td>LABOR 098 Directed Study</td>
<td>2</td>
</tr>
<tr>
<td>LABOR 136 Work Experience</td>
<td>4</td>
</tr>
<tr>
<td>TOTAL</td>
<td>12</td>
</tr>
</tbody>
</table>

CERTIFICATE OF SPECIALIZATION

Completion Certificate of Competency

<table>
<thead>
<tr>
<th>Course</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select four courses from the following:</td>
<td>12</td>
</tr>
<tr>
<td>COMS 040 Introduction to Argumentation (CAN SPCH 6)</td>
<td>3</td>
</tr>
<tr>
<td>ECON 010A Principles of Macroeconomic Theory (CAN ECON 2)</td>
<td>3</td>
</tr>
<tr>
<td>LABOR 015 Local Union and Community Leadership</td>
<td>3</td>
</tr>
<tr>
<td>SOC 011 Social Problems (CAN SOC 4)</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>24</td>
</tr>
</tbody>
</table>

DEGREE REQUIREMENTS

Completion Certificate of Specialization

<table>
<thead>
<tr>
<th>Course</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one course from the following:</td>
<td>3</td>
</tr>
<tr>
<td>CIS 041 Introduction to Computer</td>
<td>3</td>
</tr>
<tr>
<td>MATH 063 Elementary Statistics (CAN STAT 2)</td>
<td>3</td>
</tr>
<tr>
<td>Select one course from the following:</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 062 Introduction to Physical Anthropology (CAN ANTH 2)</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 063 Introduction to Social &amp; Cultural Anthropology (CAN ANTH 4)</td>
<td>3</td>
</tr>
<tr>
<td>HED 011 Dynamic Health Concepts</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 010 General Psychology (CAN PSY 2)</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 060 Personal Growth and Adjustment</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 096 Marriage and Family</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 100 Human Sexuality</td>
<td>3</td>
</tr>
<tr>
<td>SOC 010 Introduction to Sociology (CAN SOC 2)</td>
<td>3</td>
</tr>
<tr>
<td>SOC 011 Social Problems (CAN SOC 4)</td>
<td>3</td>
</tr>
<tr>
<td>ELECTIVES - must select 6 units of Associate of Science Degree applicable courses</td>
<td>6</td>
</tr>
<tr>
<td>PHYSICAL ACTIVITY</td>
<td>1</td>
</tr>
<tr>
<td>GENERAL EDUCATION</td>
<td>24</td>
</tr>
<tr>
<td>TOTAL</td>
<td>61</td>
</tr>
</tbody>
</table>

LASER TECHNOLOGY

TYPES OF JOBS AVAILABLE
- **Manufacturing**
  Laser technicians can find employment at laser companies, where they assemble and test sophisticated lasers and other kinds of electro-optical equipment.
- **Research and development**
  Highly skilled laser technicians assist scientists or engineers perform experiments in an R&D laboratory.
- **Sales**
  Many laser technicians possess the personal and communication skills that enable them to become part of a laser manufacturer’s sales force.
- **Maintenance**
  Other laser technicians work in environments ranging from hospitals to factories, where they operate lasers and repair them when they break down.
- **Field service**
  Many laser manufacturers employ laser technicians to visit customers to perform maintenance on their lasers.
- **Safety officer**
  A laser safety officer is responsible for making sure that lasers are used safely everywhere within a company.

SKILLS REQUIRED
- **Manual dexterity**
  Laser technicians manipulate delicate and expensive parts, align sensitive optical systems, and clean fragile components.
- **Laser and optics principles**
  Laser technicians must understand the basic physics and engineering principles of lasers and optics.
- **Electronics**
  Laser technicians need to be familiar with the basic principles of electronic circuits and with the precautions of electrostatic discharge.
- **Troubleshooting**
  Laser technicians must be able to analyze complex problems and patiently work their way to a logical solution.
- **Electrical and laser safety**
  Laser technicians must be able to work safely around high-power lasers and around dangerous electrical voltages.
- **Basic math skills**
  Laser technicians need to be comfortable with algebraic equations and some trigonometry.
- **Writing and communication**
  Laser technicians must be able to read and follow written instructions, and to communicate effectively in written documents.

JOBS, ADVANCEMENT, WAGES
- **Entry level**
  As an entry-level laser technician, you will generally have an AS degree or equivalent vocational training and experience. Entry-level laser technicians assemble simple mechanical and optical components, often in a clean-room environment. They use sensitive instruments to measure the performance of a laser or sub-assembly, and sometimes make adjustments to improve the performance. They read blueprints, and may also prepare technical reports summarizing findings and recommending manufacturing process or design change. Entry-level laser technicians often earn between $35,000 and $42,000 per year, and receive full benefits from their employer.
**Mid-level**

After two to five years on the job, you should advance to a mid-level laser technician. At this level, you will perform more demanding tasks, like complex tests that require detailed knowledge and understanding of how the systems work. You will work much more independently, often with only limited instruction from your supervisor. You may devise your own test methods when standard tests don't produce the desired results. You will also prepare longer and more complex technical reports and written recommendations for process changes. As a mid-level laser technician, you will probably earn between $40,000 and $55,000, and enjoy full benefits.

**Senior level**

After eight to 12 years working as a laser technician, you should rise to the senior, or master-technician level. Here you will use complicated drawings and specifications, advanced mathematics, and a wide variety of precision measuring instruments to complete your assignments with minimal supervision. You may be working with the engineering staff to develop new products, or you may be developing computer programs to test equipment. You may supervise one or several other technicians, and you're likely to have responsibility for planning and completing complex projects. As a master technician, you can earn $50,000 to $70,000 or more, and enjoy full benefits.

San José City College participates in the Photonics Consortium of California, and holds an NSF grant to promote Photonics education.

For additional information, see your counselor, visit the Career/Transfer Center, or contact the following:
Sydney Sukuta, Ph.D.: (408) 298-2181 ext. 3805
E-mail: Sydney.Sukuta@sjcc.edu
Applied Science and Technology Division: (408) 288-3781
San José City College Web site: www.sjcc.edu

A minimum of four courses in the major must be taken at San José City College. A grade of "C" or better is required in each course. The following requirements must be fulfilled with grades of "C" or better in each course.

**CERTIFICATE OF ACHIEVEMENT:**

**TECHNICAL ASSOCIATE**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELECT 062* General Electronics I</td>
<td>0-4</td>
</tr>
<tr>
<td>ELECT 063 General Electronics II</td>
<td>4</td>
</tr>
<tr>
<td>LASER 100 Introduction to Photonics</td>
<td>4</td>
</tr>
<tr>
<td>LASER 101 Laser Optics</td>
<td>4</td>
</tr>
<tr>
<td>LASER 102 Laser Technology</td>
<td>4</td>
</tr>
<tr>
<td>LASER 103 Advanced Laser Technology</td>
<td>4</td>
</tr>
<tr>
<td>MFG 103 Measurement and Test</td>
<td>3</td>
</tr>
<tr>
<td>MFG 111 Statistical Process Control</td>
<td>2</td>
</tr>
<tr>
<td>MFG 112 Technical Problem Solving</td>
<td>2</td>
</tr>
<tr>
<td>PHYS 003 General Physics</td>
<td>4</td>
</tr>
</tbody>
</table>

**Option #1**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELECT 121 Electronics Math I</td>
<td>(3)</td>
</tr>
</tbody>
</table>

**Option #2**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 025 Precalculus Algebra &amp; Trigonometry</td>
<td>(5)</td>
</tr>
</tbody>
</table>

**TOTAL**

**36-41**

---

**MAJOR REQUIREMENTS**

Completion Certificate of Achievement  **36-41**

PHYSICAL ACTIVITY*  **1**

GENERAL EDUCATION*  **24**

**TOTAL**

**61-66**

*Electronic 62 fulfills the General Education lab science content credit requirement. Students will still need to fulfill the unit requirement.

---

**MACHINE TECHNOLOGY**

Successful completion of this program prepares the graduate for entry into the machinist trade and positions in industry requiring technical skill and understanding of precision metal working. If a student's English and Math Placement scores do not qualify the student for English 092 and Math 011A, it is strongly recommended that Reading 301 and English 335 or ESL 312, 313 and Math 310 be taken prior to enrolling in the Machine Technology courses.

Most courses applying to a degree or certificate have basic language/math requirements and/or course prerequisites. See a counselor, the class schedule, or the college catalog for prerequisites.

**CAREERS IN:**

Mechanic Shop Deburr/Detail Person
Manual Machinist
CNC Operator
CNC Setup Operator/Programmer
CNC Programmer
Tool and Die Machinist
QA/QC Inspector
Expeditor

For additional information, see your counselor, visit the Career/Transfer Center, or contact the following:

Applied Science and Technology Division: (408) 288-3781
San José City College Web site: www.sjcc.edu

A grade of "C" or better is required in each course. The following classes in the major must be taken at San José City College: MACH 151B, 151C, and 110.

**CERTIFICATE OF SPECIALIZATION:**

**CNC Machine Operator**

*Day Accelerated Program*

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MACH 120 Principles of Machine Tool Practices 1</td>
<td>4.5</td>
</tr>
<tr>
<td>MACH 123 Principles of Machine Tool Practices 2</td>
<td>4.5</td>
</tr>
<tr>
<td>MACH 126 Principles of Machine Tool Practices 3</td>
<td>4.5</td>
</tr>
<tr>
<td>MACH 129 CNC Operator Fundamentals</td>
<td>4.5</td>
</tr>
</tbody>
</table>

**TOTAL**

**18**

**OR**

**CERTIFICATE OF SPECIALIZATION:**

**Entry Level Machinist**

*Evening Program*

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MACH 100 Shop Math and Blueprint Reading</td>
<td>4</td>
</tr>
<tr>
<td>MACH 101 Introduction to Machine Tech.</td>
<td>3</td>
</tr>
<tr>
<td>MACH 151A Advanced Lathe Practices</td>
<td>4</td>
</tr>
<tr>
<td>MACH 151B Advanced Milling Machine Practices</td>
<td>4</td>
</tr>
</tbody>
</table>

**APPROVED ELECTIVES— choose 3 units from the list on the next page**

**TOTAL**

**18**

---

**CERTIFICATE OF ACHIEVEMENT:**

**Machine Technician**

Completion Certificate of Specialization - CNC Operator

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MACH 110 Precision Measurement</td>
<td>3</td>
</tr>
<tr>
<td>MACH 151C Applied Problems in Shop Practices</td>
<td>4</td>
</tr>
<tr>
<td>MACH 153A Operator/Programmer 1</td>
<td>5</td>
</tr>
<tr>
<td>MACH 153B Operator/Programmer II</td>
<td>5</td>
</tr>
</tbody>
</table>

**APPROVED ELECTIVES— choose 1 unit from the list on the next page**

**TOTAL**

**36**
**APPROVED MAJOR ELECTIVES:**

Choose from the following:

- **CIS 041** Introduction to Computer Information Systems (CAN BUS 6) 3
- **OR**
  - **CT 120** Using Computers for Applied Science 2
  - **MACH 098** Directed Studies 1-8
  - **MACH 136** Occupational Work Experience 3-4
    - Parallel Plan
  - **MACH 155** Introduction to CNC 4th Axis 3

**DEGREE REQUIREMENTS**

A grade of "C" or better is required in each course. The following classes in the courses must be taken at San José City College:

**DAY PROGRAM**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MACH 110</td>
<td>Precision Measurement</td>
</tr>
<tr>
<td>MACH 120</td>
<td>Principles of Machine Tool Practices 1</td>
</tr>
<tr>
<td>MACH 123</td>
<td>Principles of Machine Tool Practices 2</td>
</tr>
<tr>
<td>MACH 126</td>
<td>Principles of Machine Tool Practices 3</td>
</tr>
<tr>
<td>MACH 129</td>
<td>CNC Operator Fundamentals</td>
</tr>
<tr>
<td>MACH 151C</td>
<td>Applied Problems in Shop Practices</td>
</tr>
<tr>
<td>MACH 153A</td>
<td>Operator/Programmer I</td>
</tr>
<tr>
<td>MACH 153B</td>
<td>Operator/Programmer II</td>
</tr>
</tbody>
</table>

**APPROVED ELECTIVES** — choose 1 unit from the list below

**MAJOR REQUIREMENTS** 36

**OR**

**EVENING PROGRAM**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MACH 100</td>
<td>Shop Math and Blueprint Reading</td>
</tr>
<tr>
<td>MACH 101</td>
<td>Introduction to Machine Tech.</td>
</tr>
<tr>
<td>MACH 110</td>
<td>Precision Measurement</td>
</tr>
<tr>
<td>MACH 151A</td>
<td>Advanced Lathe Practices</td>
</tr>
<tr>
<td>MACH 151B</td>
<td>Advanced Milling Machine Practices</td>
</tr>
<tr>
<td>MACH 151C</td>
<td>Applied Problems in Machine Shop Practices</td>
</tr>
<tr>
<td>MACH 153A</td>
<td>Operator/Programmer I</td>
</tr>
<tr>
<td>MACH 153B</td>
<td>Operator/Programmer II</td>
</tr>
</tbody>
</table>

**APPROVED ELECTIVES** — choose 4 units from the list below

**TOTAL** 36

**APPROVED MAJOR ELECTIVES:**

Choose from the following:

- **CIS 041** Introduction to Computer Information Systems (CAN BUS 6) 3
- **CT 120** Using Computers for Applied Science 2
- **MACH 098** Directed Studies 1-8
- **MACH 136** Occupational Work Experience 3-4
  - Parallel Plan
- **MACH 155** Introduction to CNC 4th Axis 3

**DEGREE REQUIREMENTS**

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Courses listed above</td>
<td>36</td>
</tr>
<tr>
<td>PHYSICAL ACTIVITY</td>
<td>1</td>
</tr>
<tr>
<td>GENERAL EDUCATION</td>
<td>24</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>61</strong></td>
</tr>
</tbody>
</table>

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**MASK DESIGN TECHNOLOGY**

Integrated circuit mask design is a specialized field within the larger microelectronics industry. Microelectronics is the technology of manufacturing miniature circuits on semiconductor wafers.

These miniature circuits are the building blocks of all electronic equipment, including computers, robots, communication devices, and consumer electronic equipment. Mask designers, also called layout designers, design the physical patterns needed to manufacture microelectronics circuits. This program focuses on layout design for digital integrated circuits that are built using complementary metal oxide semiconductor (CMOS) technology, such as microprocessor chips found in personal computers. In California most integrated circuit mask designers are employed by semiconductor manufacturers such as Intel, Hewlett Packard, Sun Microsystems, Micro Linear, LSI Logic, Cypress Semiconductor, Silicon Graphics, and National Semiconductor. Nation employers include Intel, Motorola, IBM, AMD, and Texas Instruments.

**CAREERS IN:**

- Integrated Circuit Mask Design
- Semiconductor Manufacturing Technician
- Disk Drive Technician
- General Electronics Technician

**For additional information, see your counselor, visit the Career/Transfer Center, or contact the following:**

Applied Science and Technology Division: (408) 288-3781
San José City College Web site: www.sjcc.edu

A minimum of three courses in the major must be taken at San José City College. A grade of "C" or better is required in each course in the major for the certificate.

**CERTIFICATE OF SPECIALIZATION:**

**TECHNICIAN**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELECT 062</td>
<td>General Electronics I</td>
</tr>
<tr>
<td>ELECT 063</td>
<td>General Electronics II</td>
</tr>
<tr>
<td>ELECT 105</td>
<td>CMOS Mask Design 1</td>
</tr>
<tr>
<td>ELECT 107</td>
<td>CMOS Mask Design 2</td>
</tr>
<tr>
<td>CT 077</td>
<td>Digital Circuits</td>
</tr>
<tr>
<td>CIS 157</td>
<td>Introduction to UNIX</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

---

**MULTIMEDIA/DIGITAL ARTS**

The Multimedia/Digital Arts program is a new program at SJCC that focuses on the growing Multimedia industry. The Multimedia industry is a creative industry that offers many career opportunities, including:

- Web designer
- Animator
- Instructional designer
- Sound designer
- CD ROM designer
- Digital artist
- Video producer
- Interface designer

Our proposed program features a cross-platform environment, industry-driven curriculum, relevant assignments, team projects and internships. This field offers excellent opportunities for self-employment, good salaries, stimulating work, flexibility of work schedules, and opportunities for growth.

The Certificate of Specialization would be the minimum requirement for an entry level position or paid internship. The majority of jobs would require a Certificate of Achievement or A.S. degree. A strong portfolio can garner a good position, regardless of the certificate or degree level.
For additional information, see your counselor, visit the Career/Transfer Center, or contact the following:
Judith Bell: (408) 298-2181 ext. 3226
E-mail: Judith.Bell@sjcc.edu
Humanities and Art Department: (408) 288-3785
San José City College Web site: www.sjcc.edu

◆ DIGITAL ARTS ◆

CERTIFICATE OF COMPETENCY

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 071</td>
<td>Introduction to Multimedia</td>
<td>3</td>
</tr>
<tr>
<td>ART 072</td>
<td>Computer Graphics</td>
<td>3</td>
</tr>
<tr>
<td>ART 074</td>
<td>Multimedia Design and Development</td>
<td>3</td>
</tr>
<tr>
<td>ART 078</td>
<td>Digital Media</td>
<td>3</td>
</tr>
<tr>
<td>CIS 041</td>
<td>Introduction to Computer Information Systems (CAN BUS 6)</td>
<td>3</td>
</tr>
<tr>
<td>CIS 131</td>
<td>Introduction to Internet</td>
<td>1</td>
</tr>
</tbody>
</table>

TOTAL 16

CERTIFICATE OF SPECIALIZATION
Completion of Certificate of Competency 16

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 076</td>
<td>Portfolio Preparation and Professional Development</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 076</td>
<td>Photoshop 1</td>
<td>3</td>
</tr>
</tbody>
</table>

APPROVED ELECTIVES - Choose 3 units from the following: 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 028</td>
<td>Digital Drawing and Painting</td>
<td>3</td>
</tr>
<tr>
<td>ART 077</td>
<td>Beginning 3D Animation</td>
<td>3</td>
</tr>
<tr>
<td>ART 079A</td>
<td>Web Design 1</td>
<td>3</td>
</tr>
<tr>
<td>CIS 042</td>
<td>Program Design and Development</td>
<td>3</td>
</tr>
<tr>
<td>CIS 132</td>
<td>Web Pages with HTML</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 077</td>
<td>Photoshop II</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 079</td>
<td>Digital Photography 1</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL 25

CERTIFICATE OF ACHIEVEMENT
Completion Certificate of Specialization 25

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 014</td>
<td>Color (CAN ART 22)</td>
<td>3</td>
</tr>
<tr>
<td>ART 024</td>
<td>Beginning Drawing (CAN ART 8)</td>
<td>3</td>
</tr>
</tbody>
</table>

APPROVED ELECTIVES - Choose 6 non-duplicated units from the following: 6

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 028</td>
<td>Digital Drawing and Painting</td>
<td>3</td>
</tr>
<tr>
<td>ART 077</td>
<td>Beginning 3D Animation</td>
<td>3</td>
</tr>
<tr>
<td>ART 079A</td>
<td>Web Design 1</td>
<td>3</td>
</tr>
<tr>
<td>CIS 042</td>
<td>Program Design and Development</td>
<td>3</td>
</tr>
<tr>
<td>CIS 132</td>
<td>Web Pages with HTML</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 077</td>
<td>Photoshop 2</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 079</td>
<td>Digital Photography 1</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL 34

DEGREE REQUIREMENTS
Completion of Certificate of Achievement 34

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 028</td>
<td>Digital Drawing and Painting</td>
<td>3</td>
</tr>
</tbody>
</table>

PHYSICAL ACTIVITY 1
GENERAL EDUCATION 24

TOTAL 62

◆ WEB DESIGN ◆

CERTIFICATE OF COMPETENCY

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 072</td>
<td>Computer Graphics</td>
<td>3</td>
</tr>
<tr>
<td>ART 079A</td>
<td>Web Design 1</td>
<td>3</td>
</tr>
<tr>
<td>CIS 041</td>
<td>Introduction to Computer Information Systems (CAN BUS 6)</td>
<td>3</td>
</tr>
<tr>
<td>CIS 042</td>
<td>Program Design and Development</td>
<td>3</td>
</tr>
<tr>
<td>CIS 131</td>
<td>Introduction to Internet</td>
<td>1</td>
</tr>
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</table>

TOTAL 16

CERTIFICATE OF SPECIALIZATION
Completion Certificate of Competency 16

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 076</td>
<td>Portfolio Preparation and Professional Development</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 077</td>
<td>Photoshop 2</td>
<td>3</td>
</tr>
<tr>
<td>CIS 084</td>
<td>JAVA Programming</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL 25

CERTIFICATE OF ACHIEVEMENT
Completion Certificate of Specialization 25

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 014</td>
<td>Color (CAN ART 22)</td>
<td>3</td>
</tr>
<tr>
<td>ART 024</td>
<td>Beginning Drawing (CAN ART 8)</td>
<td>3</td>
</tr>
<tr>
<td>ART 028</td>
<td>Digital Drawing and Painting</td>
<td>3</td>
</tr>
<tr>
<td>ART 077</td>
<td>Beginning 3D Animation</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 077</td>
<td>Photoshop 2</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 079</td>
<td>Digital Photography 1</td>
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</tbody>
</table>

TOTAL 31

DEGREE REQUIREMENTS
Completion of Certificate of Achievement 31

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 014</td>
<td>Color (CAN ART 22)</td>
<td>3</td>
</tr>
<tr>
<td>ART 024</td>
<td>Beginning Drawing (CAN ART 8)</td>
<td>3</td>
</tr>
<tr>
<td>ART 028</td>
<td>Digital Drawing and Painting</td>
<td>3</td>
</tr>
<tr>
<td>ART 077</td>
<td>Beginning 3D Animation</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 077</td>
<td>Photoshop 2</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 079</td>
<td>Digital Photography 1</td>
<td>3</td>
</tr>
</tbody>
</table>

PHYSICAL ACTIVITY 1
GENERAL EDUCATION 24

TOTAL 62
REAL ESTATE

Graduates of this program are qualified for employment in real estate offices and related housing and financial institutions and property management.

Real Estate Sales License applicants must have a minimum grade of "C" in Real Estate Principles (REST 122) before taking the License Examination and complete two other approved Real Estate courses, one of which must be Real Estate Practices (REST 125) within 18 months after passing the Sales Examination (if not completed before taking the test).

Real Estate Broker License applicants must complete 8 courses. Completion of the degree courses listed under Required Alternates and Group A Electives satisfies this requirement.

Real Estate Appraiser License applicants must complete a specified number of classroom hours to qualify for the various levels of state license. There are several licenses, each with their own requirements for classroom hours and job training: Trainee, Appraiser License, Certified Residential Appraiser, and Certified General. Each 3 unit and 1 unit course approved by Office of Real Estate Appraisers contains 54 and 16 hours respectfully.

For additional information, see your counselor, visit the Career/Transfer Center, or contact the following:
James Black: (408) 298-2181 ext. 3233
E-mail: James.Black@sjcc.edu
Business & Service Careers Division: (408) 288-3131
San José City College Web site: www.sjcc.edu

CERTIFICATE OF COMPETENCY:  

<table>
<thead>
<tr>
<th>Real Estate Sales</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>REST 122 Principles of Real Estate</td>
<td>3</td>
</tr>
<tr>
<td>REST 125 Real Estate Practice</td>
<td>3</td>
</tr>
<tr>
<td><strong>Plus one course from the following:</strong></td>
<td><strong>3</strong></td>
</tr>
<tr>
<td>BUS 071 Legal Environment for Business</td>
<td>3</td>
</tr>
<tr>
<td>REST 123 Real Estate Appraisal</td>
<td>3</td>
</tr>
<tr>
<td>REST 124 Legal Aspects of Real Estate</td>
<td>3</td>
</tr>
<tr>
<td>REST 126 Real Estate Finance</td>
<td>3</td>
</tr>
<tr>
<td>REST 127 Real Estate Property Management</td>
<td>3</td>
</tr>
<tr>
<td>REST 128 Real Estate Economics</td>
<td>3</td>
</tr>
<tr>
<td>REST 133 Advanced Real Estate Appraisal</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>

CERTIFICATE OF SPECIALIZATION:

<table>
<thead>
<tr>
<th>Real Estate Broker</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>REST 122 Principles of Real Estate</td>
<td>3</td>
</tr>
<tr>
<td>REST 123 Real Estate Appraisal</td>
<td>3</td>
</tr>
<tr>
<td>REST 124 Legal Aspects of Real Estate</td>
<td>3</td>
</tr>
<tr>
<td>REST 125 Real Estate Practice</td>
<td>3</td>
</tr>
<tr>
<td>REST 126 Real Estate Finance</td>
<td>3</td>
</tr>
<tr>
<td><strong>Plus two courses from the following:</strong></td>
<td><strong>6</strong></td>
</tr>
<tr>
<td>BUS 071 Legal Environment for Business</td>
<td>3</td>
</tr>
<tr>
<td>REST 127 Real Estate Property Management</td>
<td>3</td>
</tr>
<tr>
<td>REST 133 Advanced Real Estate Appraisal</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>24-25</strong></td>
</tr>
</tbody>
</table>

DEGREE REQUIREMENTS  

| BUS 071 Legal Environment for Business | 3 |
| REST 122 Principles of Real Estate | 3 |
| REST 123 Real Estate Appraisal | 3 |
| REST 124 Legal Aspects of Real Estate | 3 |
| REST 125 Real Estate Practice | 3 |
| REST 126 Real Estate Finance | 3 |
| REST 127 Real Estate Property Management | 3 |
| REST 128 Real Estate Economics | 3 |
| REST 133 Advanced Real Estate Appraisal | 3 |
| **Plus one course from the following:** | **3-4** |
| ACCTG 020 Financial Accounting (CAN BUS 2) | 4 |
| ACCTG 101 Bookkeeping for Small Business | 3 |
| **TOTAL** | **36-37** |

PHYSICAL ACTIVITY  

| GENERAL EDUCATION | 24 |
| **TOTAL** | **61-62** |
CHAPTER 6 — ASSOCIATE OF ARTS DEGREES

GRADUATION REQUIREMENTS
ASSOCIATE OF ARTS DEGREE

Completion of the Associate of Arts (A.A.), general education pattern is different from the California State University (C.S.U.) General Education requirements and the Associate in Science (A.S.). Every student will need to consult with a counselor to determine which pattern to follow.

MAJOR REQUIREMENTS

To be awarded the Associate Degree from San José City College, all students, regardless of their intent to transfer or not, shall complete a minimum of 60 units of instruction with an average grade of at least a “C” (2.0 grade point average) in all units attempted in a curriculum which the college accepts toward a degree, and complete the following minimum requirements:

Grades earned in nondegree applicable courses do not count in their GPA used in relationship to an A.A. or A.S. degree.

Per Title 5 Section 55002 (b)

I. A major consisting of a minimum of 18 semester units in a specialized or related field of study. The major may be in a special field or a general studies area. A grade of "C" or better is required in major courses for the degree.

II. A general education pattern, which shall include:

<table>
<thead>
<tr>
<th>CONTENT AREA</th>
<th>A.A. DEGREE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. English Communication</td>
<td>3 units</td>
</tr>
<tr>
<td>Written Communication</td>
<td>3 units</td>
</tr>
<tr>
<td>Oral Communication</td>
<td>3 units</td>
</tr>
<tr>
<td>Critical Thinking</td>
<td>0-3 units</td>
</tr>
<tr>
<td>B. Physical and Biological Sciences**</td>
<td>3 units</td>
</tr>
<tr>
<td>Science with Lab</td>
<td>3 units</td>
</tr>
<tr>
<td>Science with/without Lab or Math</td>
<td>0-6 units</td>
</tr>
<tr>
<td>Mathematics</td>
<td>3 units</td>
</tr>
<tr>
<td>C. Arts and Humanities***</td>
<td>3-6 units</td>
</tr>
<tr>
<td>Fine Arts</td>
<td>3-6 units</td>
</tr>
<tr>
<td>Humanities</td>
<td>3-6 units</td>
</tr>
<tr>
<td>D. Social and Behavioral Science***</td>
<td>6-12 units</td>
</tr>
<tr>
<td>Select two courses from the Social Science list for 6 units</td>
<td></td>
</tr>
<tr>
<td>E. Lifelong Understanding and Self Development****</td>
<td>3 units</td>
</tr>
</tbody>
</table>

Required Minimum 39 units

** Physical and Biological Sciences: A minimum of 3 units is required in the Sciences area. One course with laboratory activity must be included in this area. Students completing majors requiring 10 or more science units will have satisfied this requirement.

***Area D Social List - HIST 017A and HIST 017B or HIST 001 and POLSC 001.

Cultural Pluralism/Ethnic Studies: Students may take a cultural pluralism/ethnic studies class in either Area C or Area D.

**** Lifelong Understanding and Self Development: This requirement may be met by any 3 unit nonphysical activity course in Area E.
CHAPTER 6 — ASSOCIATE OF ARTS DEGREES

III. Within Requirements I and II, courses may satisfy only one graduation requirement except for Cultural Pluralism/Ethnic Studies and courses required in the major, which also fulfill general education requirements.

IV. Competency in reading, written expression, and mathematics to be demonstrated by satisfactory completion in the following:

1. Reading - ENGL 001A, English Composition
2. Written expression - ENGL 001A, English Composition
3. A college level Math course, with MATH 013 as prerequisite

If a student uses an approved or equivalent course to fulfill the competency requirement in reading or mathematics, a grade of “C” or better must be earned in that course.

V. Elective, major, and general education - applicable courses to total at least 60 units.

A grade of “C” or better is required in major courses for the degree.

VI. Residence requirement

1. Prior to the fulfillment of graduation requirements, no fewer than 12 A.A. units must have been earned within the District and no fewer than 6 of these units must have been earned at the college awarding the degree. An exception to this policy will be granted when the colleges jointly offer a program for which only one college has been approved.

2. A minimum of two courses (no fewer than 6 units) must have been completed in the major at the college awarding the degree. A major department may grant an exception to this requirement when able to verify competency equivalent to this requirement.

VII. Physical Activity

A minimum of (1) unit of physical activity must be taken unless exempt by a doctor’s excuse or prior military credit. The physical activity course must be selected from the approved courses listed in Area E of the District’s General Education/Graduation pattern.

(a) A student may use any catalog for graduation under which he/she was enrolled in the college to meet the general education and graduation requirements (excluding the major requirements as in (b), which follows).

(b) A student may use any catalog for graduation under which he/she was enrolled in the college to meet the major requirements provided that the catalog is not more than seven (7) years old by the time of graduation.

VIII. Catalog and major declared for graduation

(a) A major department may grant an exception to this requirement when able to verify competency equivalent to this requirement.

(b) A student is considered enrolled when the transcript shows one or more classes that the student was enrolled in for a semester, intersession or term. A student is not required to complete a class to be enrolled under the catalog. A catalog starts with the fall semester of the beginning year of the catalog and extends to the beginning of the fall semester of the ending year of the catalog.

COURSES COMPLETED AT EVERGREEN VALLEY COLLEGE

(a) A student who has completed all of the graduation requirements at EVC will be considered to have met the graduation requirements at SJCC (exception: see RESIDENCE REQUIREMENTS above for courses, which must be taken at SJCC).

(b) A student who has not completed all of the graduation requirements at EVC must meet the minimum graduation requirements at SJCC.

RECIPROCITY AGREEMENT A.A./A.S. DEGREE PATTERNS

San José City College participates in The California Articulation Region 4 Community College’s General Education/Graduation Reciprocity Program. Students completing all the General Education/Graduation pattern requirements at a participating college will be given full credit for having completed the SJ/ECCD General Education/Graduation requirements; including reading, writing, math competencies, and cultural pluralism/ethnic studies. For additional information consult with a SJCC counselor.

Participating Colleges:
- De Anza
- Evergreen Valley
- Foothill
- Gavilan
- Mission
- Ohlone
- San José City
- West Valley

GRADUATION APPEALS COMMITTEE

(a) A student may appeal a graduation decision through the Graduation Appeals Committee.

(b) San José City College shall maintain a Graduation Appeals committee to determine if the requirements for graduation have been met. The committee may grant exceptions to the general education and/or graduation requirements provided that the requirements either pose a hardship to the student, such as delaying his/her graduation, or were incorrectly communicated to the student by a college representative. Such exceptions shall not violate state-mandated requirements. The committee will work with the appropriate Division Dean when considering the graduation appeal.
## General Education Courses

### Area A: Communication in the English Language and Critical Thinking

**Units: 6-9**

- **Complete one course from area A1 and A2.**
  
  **ENGL 001A must be completed with a grade of "C" or better. Area A3 is recommended but not required. All Courses must be completed with a grade of "C" or better.**

#### A1: Oral Communication
- COMS 020, 020N, 040, 045

#### A2: Written Communication
- ENGL 001A

#### A3: Critical Thinking
- ENGL 001C; PHIL 060; COMS 040

### Area B: Physical Universe and Its Life Forms

**Units: 6-12**

- **Select one course from each category. One Physical or Life Science course must include a laboratory experience (underlined). Courses in area B4 must be completed with a grade of "C" or better.**

#### B1: Physical Science
- ASTRO 010, 010L, 012; CHEM 001A, 015, 032A, 032B; ENVIR 010; GEOL 010, 010L, 011, 011L; METEO 010; OCEAN 010; PHYS 002A, 003, 004A, 004B, 004C

#### B2: Life Science
- ANAT 001; BIOL 001, 020, 021A, 061, 063, 064; BOT 062; ENVIR 010

#### B3: Laboratory Activity
- Students must select at least one laboratory experience course (see underlined courses in areas B1 and B2)

#### B4: Mathematics and Quantitative Reasoning
- MATH 021, 022, 025, 051, 052, 061, 063, 070, 071, 072, 073, 078, 079

### Area C: Arts, Literature, Philosophy and Foreign Languages

**Units: 3-12**

- **Select a minimum of one course from area C1, and one course from area C2. One additional course (different discipline) from either C1 or C2 is recommended. Ethnic Studies/Cultural Pluralism requirement may be taken in either Area C or D.**

#### C1: Arts (Art, Dance, Music, Theatre)
- ART 091, 092; HUMNT 001; MUSIC 083, 091, 095, 099; THEAT 002, 020, 022, 040

#### C2: Humanities (Literature, Philosophy, Foreign Language)
- CHIN 001A; ENGL 001B, 028, 033, 061, 065, 073, 076A, 076B, 078, 079, 080, 082A, 082B, 085, 084A, 084B, 086A, 086B; FREN 001A, 001B, 002A, 002B, 015, 016, 017, 018; HUMNT 002; JAPAN 001A, 001B, 002A, 002B; PHIL 010, 011, 012, 051, 065, 070; SL 001A, 001B, 002A, 002B; SPAN 001A, 001B, 002A, 002B

### Area D: Social, Political and Economic Institutions and Behavior

**Units: 6-12**

- **Select one course from D1 through D0. Students are expected to complete the American Institutions requirement in this section (course identified in Area F). Ethnic Studies/Cultural Pluralism requirement may be taken in either Area C or D.**

#### D1: Anthropology and Archaeology
- ANTH 062, 063; SSCI 020, 030, 040

#### D2: Economics
- ECON 010A, 010B

#### D3: Ethnic Studies
- ENGL 080, 082A, 082B; ETH 026, 027; HIST 009, 021, 024; SSCI 020, 030, 031, 032, 040

#### D4: Gender Studies
- ENGL 033; ETH 026; HIST 009

#### D5: Geography
- GEOG 010, 011

#### D6: History
- ETH 027; HIST 001, 009, 010A, 010B, 017A, 017B, 021, 024

#### D7: Interdisciplinary Social or Behavioral Science
- CIS 041; FCS 070; JOURN 010; LABOR 015; SL 015, 016

#### D8: Political Science, Government and Legal Institutions
- POLSC 001, 002, 004

#### D9: Psychology
- FCS 070; PSYCH 010, 012, 020, 060, 092, 096, 099, 100

### Area E: Lifelong Understand and Self-Development

**Units: 3**

- Nonphysical: FCS 019, 070; HED 011; PSYCH 020, 060, 092, 096, 100; THEAT 005

### Area F: American Institutions

- **Option I**
  - HIST 017A
  - HIST 017B
  - OR
  - HIST 001 and POLSC 001

- **Option II**
  - HIST 001

### General Education Pattern Including Physical Activity

**Units: 39**

- Physical Activity: DANCE 010, 020, 021, 040, 050, 051, 062, 064; PED 001, 008, 009, 010, 012, 013, 014, 017, 018, 020, 024, 030, 034, 038, 039, 040, 042, 046, 048, 052, 055, 056, 098; APE 030E, 041E, 042E, 056E

### Cultural Pluralism/Ethnic Studies

**Units: 3**

- ENGL 033, 080, 082A, 082B; ETH 026, 027; HIST 009, 021, 024; SL 015; SSCI 020, 030, 031, 032, 040

### Major/Elective Requirement

**Units: 21**

**Total: 60**

## Associate of Arts Degree

### Index

- ADMINISTRATION OF JUSTICE
- ALCOHOL AND DRUG STUDIES
- ART
- BUSINESS
- CALIFORNIA STATE UNIVERSITY STUDIES
- CHEMISTRY
- COMPUTER SCIENCE
- CONSTRUCTION TECHNOLOGY
- GENERAL MAJOR
- LABOR STUDIES
- LIBERAL STUDIES
- UNIVERSITY OF CALIFORNIA STUDIES
**ADMINISTRATION OF JUSTICE**

San José City College offers both an Associate of Arts Degree and an Associate of Science Degree. Students planning to transfer should follow the Associate of Arts Degree. Students will be exposed to a series of courses within the major intended to develop social awareness, written communication skills, cultural sensitivity, concepts of law and the physical ability to cope with many of the demanding Administration of Justice careers.

Programs in Administration of Justice are designed to prepare students for careers in federal, state, and local law enforcement agencies, correctional agencies and institutions and private security agencies. Criminal justice programs also provide additional training for persons already involved in law enforcement administration, correctional administration, forensic science, and security management. Students study the roles and activities of people with regard to maintaining law and order, providing services, protecting life and property, and conducting administration, planning and research. Programs include two-year programs at community colleges, and Bachelor's Degree and Master's Degree programs at four-year baccalaureate institutions. San Jose State University's Major Sheet is available in the Counseling Office. A minimum of a "C" grade is required in all coursework for the major.

For additional information, see your counselor, visit the Career/Transfer Center, or contact the following:

**CAADAC:** (916) 368-9412

San José City College Web site: www.sjcc.edu

**DEGREE REQUIREMENTS**

<table>
<thead>
<tr>
<th>UNITS</th>
<th>APPROVED ELECTIVES: AJ classes not used in the core sequence above -</th>
</tr>
</thead>
<tbody>
<tr>
<td>AJ 010</td>
<td>Introduction to Administration of Justice (CAN AJ 2)</td>
</tr>
<tr>
<td>AJ 011</td>
<td>Criminal Law (CAN AJ 4)</td>
</tr>
<tr>
<td>AJ 013</td>
<td>Criminal Procedures</td>
</tr>
<tr>
<td>AJ 014</td>
<td>Police in Society</td>
</tr>
<tr>
<td>AJ 015</td>
<td>Introduction to Investigations (CAN AJ 8)</td>
</tr>
</tbody>
</table>

Choose 5 units from the Electives course list below |

- AJ 103: Patrol Procedures 3
- AJ 104: Report Writing 3
- AJ 111: Juvenile Law & Procedures 3
- AJ 112: Introduction to Evidence 3
- AJ 113: Crime and Violence in America 3

**TOTAL** 60

**APPROVED ELECTIVES:**

San José City College offers both an Associate of Arts Degree and an Associate of Science Degree. Students planning to transfer should follow the Associate of Arts Degree. The San José City College Chemical Dependency Certificate program is designed to meet the California Association of Alcohol and Drug Counselor (CAADAC) requirement of: 315 hours of approved Alcohol and Drug training education and 255 hours of Supervised Practicum.

Completion of the above requirements prepares students to sit for the written examination given by CAADAC, which is the first step toward certification. Following completion of the written examination, CAADAC Interns are required to document 4,000 to 6,000 hours or 2 years full time supervised work experience as a drug and alcohol abuse counselor. Completion of 4,000 to 6,000 hours will entitle Interns to apply for the oral examination given by CAADAC. When both the written and oral examinations have been successfully completed, the California Certification Board of Alcohol and Drug Counselors awards the following certification: Certified Alcohol Counselor (CAC) - 4,000 hour level; Certified Alcohol and Drug Counselor (CADC) - 6,000 hour level.

The Associate of Arts Degree is especially important for those students who desire future employment in a Medical Model treatment facility. This degree may not transfer to all universities, and students need to inquire of the universities if they have a bachelor's degree for their upper division course work.

**CAREERS IN:**

- Counselors in a Social Model county residential program
- Counselors in Pre-treatment, Inpatient, Outpatient, and After Care programs, in hospital-based Chemical Dependency Community Prevention and Education
- Employee Assistance Programs
- Chemical Dependency Marketing
- Recovery/Relapse counseling in the private sector upon completion of the CAADAC Certification process
- Counselors in Recovery Home/Sober Living environment

For additional information, see your counselor, visit the Career/Transfer Center, or contact the following:

**CAADAC:** (916) 368-9412

San José City College Web site: www.sjcc.edu

**DEGREE REQUIREMENTS**

<table>
<thead>
<tr>
<th>UNITS</th>
<th>PHYSICAL ACTIVITY 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>AJ 010</td>
<td>20</td>
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<tr>
<td>AJ 011</td>
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<td>AJ 012</td>
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<td>AJ 013</td>
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<tr>
<td>AJ 014</td>
<td>3</td>
</tr>
<tr>
<td>AJ 015</td>
<td>3</td>
</tr>
</tbody>
</table>

**APPROVED ELECTIVE:**

**ADDS 078 Current Issues in Alcohol & Drug Treatment** 3

**Note:** ADDS 070, 073, 074, 075 are required prior to taking ADDS 077A&B: Supervised Practicum.

**ART**

San José City College offers both an Associate of Arts Degree and an Associate of Science Degree. Students planning to transfer should follow the Associate of Arts Degree. A student will qualify for an Associate of Arts Degree and an Associate of Science Degree. Students planning to transfer should follow the Associate of Arts Degree. The San José City College Chemical Dependency Certificate program is designed to meet the California Association of Alcohol and Drug Counselor (CAADAC) requirement of: 315 hours of approved Alcohol and Drug training education and 255 hours of Supervised Practicum.

Completion of the above requirements prepares students to sit for the written examination given by CAADAC, which is the first step toward certification. Following completion of the written examination, CAADAC Interns are required to document 4,000 to 6,000 hours or 2 years full time supervised work experience as a drug and alcohol abuse counselor. Completion of 4,000 to 6,000 hours will entitle Interns to apply for the oral examination given by CAADAC. When both the written and oral examinations have been successfully completed, the California Certification Board of Alcohol and Drug Counselors awards the following certification: Certified Alcohol Counselor (CAC) - 4,000 hour level; Certified Alcohol and Drug Counselor (CADC) - 6,000 hour level.

The Associate of Arts Degree is especially important for those students who desire future employment in a Medical Model treatment facility. This degree may not transfer to all universities, and students need to inquire of the universities if they have a bachelor's degree for their upper division course work.

**CAREERS IN:**

- Advertising photography
- Fashion design and illustration
- Floral arranging and design
- Interior design
- Graphic design
- Illustration
- Textile design
- Dark room technician
RELATED OCCUPATIONS:
- Animation
- Art education and teaching
- Film and video production
- Marketing and advertising
- Service bureau technician
- Architecture
- Art direction
- Landscaping
- Medical illustration
- Photo Journalism

For additional information, see your counselor, visit the Career/Transfer Center, or contact the following:
Eve Page-Mathias: (408) 288-3785
San José City College Web site: www.sjcc.edu

DEGREE REQUIREMENTS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ART 012 Two Dimensional Design (CAN ART 14)</td>
<td>3</td>
</tr>
<tr>
<td>ART 013 Three Dimensional Design (CAN ART 16)</td>
<td>3</td>
</tr>
<tr>
<td>ART 014 Color (CAN ART 22)</td>
<td>3</td>
</tr>
<tr>
<td>ART 024 Beginning Drawing (CAN ART 8)</td>
<td>3</td>
</tr>
<tr>
<td>ART 025 Expressive Drawing</td>
<td>3</td>
</tr>
<tr>
<td>OR ART 026 Representational Drawing and Perspective</td>
<td>3</td>
</tr>
<tr>
<td>ART 091 Survey of Art History Prehistoric through Gothic (CAN ART 2)</td>
<td>3</td>
</tr>
<tr>
<td>ART 092 Survey of Art History, Renaissance to the Present (CAN ART 4)</td>
<td>3</td>
</tr>
</tbody>
</table>

PHYSICAL ACTIVITY 1

GENERAL EDUCATION 39

TOTAL 61

* ENGL 001B and MATH 061 may be counted as part of the General Education Pattern, with content credit earned toward the major.

BUSINESS

The Associate of Arts, Business Major meets the lower division course requirements necessary for San José State University's B.S. in Business Administration with a concentration in Accounting, Accounting and Management Information Systems (a formal dual concentration), Finance, Human Resources Management, International Business, Manufacturing Management, or Marketing.

A grade of "C" or better is required for all course work in the major.

For additional information, see your counselor, visit the Career/Transfer Center, or contact the following:
Stephen Tsih: (408) 298-2181 ext. 3232
E-mail: Stephen.Tsih@sjcc.edu
Dennis Wahler: (408) 298-2181 ext. 3243
E-mail: Dennis.Wahler@sjcc.edu
Business and Service Careers Division: (408) 288-3131
San José City College Web site: www.sjcc.edu

DEGREE REQUIREMENTS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ACCTG 020 Financial Accounting (CAN BUS 2, BUS SEQ 2)</td>
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<tr>
<td>ACCTG 021 Managerial Accounting (CAN BUS 4, BUS SEQ 2)</td>
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<tr>
<td>BUS 060 Fundamentals of Business Statistics (3)</td>
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<tr>
<td>OR MATH 063 Elementary Statistics (CAN STAT 2) (3)</td>
<td>3</td>
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<tr>
<td>BUS 071 Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 082 Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>CIS 041 Introduction to Computer</td>
<td>3</td>
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<tr>
<td>BUS SEQ 2</td>
<td>3</td>
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<tr>
<td>ECN 101 Principles of Macroeconomics</td>
<td>3</td>
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<tr>
<td>ECN 101B Theory (CAN ECON 2)</td>
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<tr>
<td>ECN 101B Theory (CAN ECON 4)</td>
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<td>ENGL 001B English Composition (CAN ENGL 4) (3)</td>
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<tr>
<td>MATH 061 Finite Mathematics (CAN MATH 12) (3)</td>
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</table>

PHYSICAL ACTIVITY 1

GENERAL EDUCATION 39

TOTAL 66

California State University

STUDIES

Upon completing the following requirements, students will complete an Associate of Arts Degree and the CSU General Education Pattern, which enables students to transfer to the California State University (CSU) system with all admissions and lower division general education requirements met. This degree does not guarantee admission to any specific campus of the CSU system, nor does it guarantee admission into a specific major.

This degree requires completion of 60 CSU transferable units, an ethnic studies course and a physical activity course. A minimum grade of "C" in all courses completed, and a cumulative 2.0 GPA is required. For majors with fewer then 20 units, the balance of units may be met with the substitution of CSU transferable courses.

The residency requirements mandate that a minimum of 12 units must be taken within the District and no less than six units taken at the college awarding the degree.

For additional information, see your counselor, visit the Career/Transfer Center, or contact the following:
Counseling Office: (408) 288-3750
San José City College Web site: www.sjcc.edu

All course work must be complete with a grade of "C" or better.

MAJOR REQUIREMENTS

Area A: Communication in the English Language and Critical Thinking:
Select one course from each area:
A2: Written Communication: ENGL 001A
A3: Critical Thinking: ENGL 001C; PHIL 060; COMS 040

Area B: Physical Universe and Its Life Forms:
Select one course from each area listed below. One of the courses must be a lab science course (see underlined courses in Area B1 and B2).
B1: Physical Science: ASTRO 010, 010L, 012; CHEM 001A, 015, 032A, 032B; ENVIR 010, 010L; GEOL 010, 010L, 011, 011L; METEO 010; OCEAN 010; PHYS 002A, 003, 004A, 004B
B2: Life Science: ANAT 001; BIOL 001, 020, 021A, 061, 063, 064, BOT 062; ENVIR 010
B4: Mathematics and Quantitative Reasoning: MATH 021, 022, 025, 051, 052, 061, 063, 070, 071, 072, 073, 078, 079

Area C: Arts, Literature, Philosophy and Foreign Languages:
Select one course from Area C1 and one course from C2, and one additional course (different discipline) from either C1 or C2.
C1: Arts (Art, Dance, Music, Theatre): ART 091, 092; HUMNT 001; MUSIC 083, 089, 091, 095, 099; THEAT 002, 020, 022, 040
C2: Humanities (Literature, Philosophy, Foreign Language): CHIN 001A; ENGL 001B, 028, 033, 061, 065, 073, 078, 079, 080, 082A, 082B, 083, 084A, 084B, 086A, 086B; FREN 001A, 001B, 002A, 028, 015, 016, 017, 018; HUMNT 002; JAPAN 001A, 001B, 002A, 002B; PHIL 010, 011, 012, 051, 065, 070; SL 001A, 001B, 002A, 002B; SPAN 001A, 001B, 002A, 002B
Chemistry is the study of the properties, composition and chemical transformations of all material substances. It is often referred to as the "central science" since it draws from mathematics and physics and forms a necessary background to the understanding of earth science and all the biological disciplines, including the various medical professions. The Chemistry program at SJCC offers courses that satisfy general education requirements, allied-health science, engineers, and chemistry, biology and physics majors.

Majoring in chemistry offers a diverse array of career opportunities in areas ranging from forensic science, genetic engineering, materials science, chemical education, environmental chemistry, to chemical engineering. As well, many students become eligible for research internships, scholarships and presentations at local and national conferences. Chemistry majors will gain skills in communication, computer technology and mathematics. The chemistry transfer program is also considered an excellent preparation for pharmacy and medical schools. For more information about careers in chemistry, see one of the chemistry faculty, a counselor or go to the American Chemical Society web site at www.acs.org.

As scientists, chemists seek to understand the ever changing and more complex world we live in. Chemists continue to discover more chemicals every year either by synthetic design or isolating them from living organisms, with many of these compounds having complex structural arrangements of their atoms. The employment opportunities afforded to chemists, includes the research and development of thousands of products which truly affects our daily lives —— the foods we eat, all of the chemicals and fuels we use, the air we breathe, the public policies we adopt, and even the clothes we wear. Thus, chemistry is a profoundly experimental science and much of the student's time will be spent in the laboratory.

A chemistry major usually transfers to a four-year institution to earn a bachelor’s, Masters or Ph.D. degrees, with advanced degrees commensurate with more rewarding careers and higher salaries. SJCC’s chemistry program is articulated with those of the UC and CSU systems and includes the standard courses needed to complete the first two years of the major.

Information on course equivalencies for major requirements at UC and CSU is available at www.assist.org.
Construction Technology

Successful completion of this program prepares the student for entry into the construction trades, which require a technical skill and understanding of construction processes.

Students planning on transferring to a four-year school should complete the A.A. Degree, which includes the 39-unit general education sequence of courses. Specific four-year institutions may require additional courses in the major to fulfill lower division requirements. These additional courses may be taken at SJCC or at the institution granting the four-year degree. This degree may not transfer to all universities, and students need to inquire of the universities if they have a bachelor’s degree for their upper division course work.

Careers in Construction Technology:
• Air Conditioning and Refrigeration
• Building Inspector
• Carpenter
• Concrete
• Construction Management
• Drywall Installer, Taper and Texture
• Electrical
• Furniture Making
• Home Improvement Material Retail Sales
• Insulation Installer
• Painting
• Plumbing
• Roofing
• Cabinet Making
• Ceramic Tile Installer
• Construction
• Contractor
• Estimator
• MillWrights
• Plasterer
• Residential Maintenance

A grade of "C" or better is required in the eight core Construction Technology classes (24 units). CNSTR 106 and 109A must be taken at San José City College. Construction Technology students may also benefit from one or more of the following introductory courses in the related fields:

• Air Conditioning and Refrigeration Technology
• General Business
• Labor Studies
• Real Estate

For additional information, see your counselor, visit the Career/Transfer Center, or contact the following:
Applied Science and Technology Division: (408) 288-3781
San José City College Web site: www.sjcc.edu

Lower Division Preparation for Transfer
San José City College offers both an Associate of Arts Degree and an Associate of Science Degree. Students planning to transfer should follow the Associate of Arts Degree. The Associate of Arts General Major is designed for students seeking a broad, general course of study or who are undecided on a specific major. This major allows students the maximum opportunity to take transferable elective classes to explore various fields of study. The students following this major might find that upon transfer and selection of their major, that they are in Junior status in units, but a Freshman in the major. This difference in status will occur if a student does not complete the lower division major courses during their Freshman and Sophomore years. Whenever possible, students should follow a specific major.

San Jose State University major sheets showing the specific department, general education requirements and majors are available in the Counseling Department. Students planning to transfer to San Jose State University can meet the lower division requirements at San José City College. In some cases, not all major related classes are available. The student should see a counselor for specific information.

For additional information, see your counselor, visit the Career/Transfer Center, or contact the following:
Counseling Office: (408) 288-3750
San José City College Web site: www.sjcc.edu

Degree Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 041</td>
<td>3</td>
</tr>
<tr>
<td>CNSTR 101A</td>
<td>4</td>
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<tr>
<td>CNSTR 102A</td>
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<td>CNSTR 102B</td>
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<td>CNSTR 106</td>
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<tr>
<td>CNSTR 110</td>
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<td>GENERAL EDUCATION</td>
<td>39</td>
</tr>
<tr>
<td>TOTAL</td>
<td>63</td>
</tr>
</tbody>
</table>

No course shall be used to meet more than one of the graduation requirements for general education, major, or electives. A grade of "C" or better is required in each major course.

Areas of Concentration
To satisfy the requirement in the chosen area of concentration a student must complete a minimum of 15 units in unduplicated courses offered in any of the following instructional fields with at least two CSU transferable courses totaling at least 6 units:

• Art
• Business
• Child and Family Studies
• Communication Studies, Dance & Theatre
• English/Humanities
• Ethnic Studies/Social Science
• Foreign Language
• Mathematics
• Music
• Philosophy
• Photography
• Psychology
• Science: Life
• Science: Physical
CHAPTER 6 — ASSOCIATE OF ARTS DEGREES

Areas of Concentration:

Recommendation: Use the SJCC CAN Course List for identified and qualified courses available in the Counseling Office and online at www.CAN.org.


COMMUNICATION STUDIES, DANCE, THEATRE: COMS: 020, 020N, 040, 045; DANCE: 010, 011, 014, 020, 021, 024, 040, 050, 051, 062, 063, 064, 065; THEAT: 002, 003, 005, 020, 022, 030, 031, 032, 033, 040


MATHEMATICS: MATH: 021, 021L, 022, 025, 051, 052, 052L, 061, 063, 070, 071, 071L, 072, 072L, 073, 078, 079, 082, 083, 098


PHILOSOPHY: PHIL: 010, 011, 012, 051, 060, 065, 070


PSYCHOLOGY: PSYCH: 010, 012, 020, 060, 092, 096, 098, 100

SCIENCE – LIFE: ANAT: 001; BIOL: 001, 002, 003, 020, 021A, 061, 063, 064; BOT: 062; ENVR: 010; MICRO: 070; PHYS: 060


LABOR STUDIES

San José City College offers both an Associate of Arts Degree and an Associate of Science Degree. Students planning to transfer should follow this Associate of Arts Degree. This degree may not transfer to all universities, and students need to inquire of the universities if they have a bachelor’s degree for their upper division course work. This program is designed to provide students with the skills and knowledge required to assume leadership in organized labor and in community organizations.

CAREERS IN:
- Community Organizing
- Governmental Agencies Regulating Employment Relations
- Human Resource Management
- Labor Union Leadership
- Labor Management Mediation
- Labor Arbitration
- Union Organizing

RELATED CAREERS:
- Commercial Arbitration
- Conflict Resolution
- Employee Relations

UNIVERSITIES MAJOR TRANSFERS TO: San Francisco State University

For additional information, see your counselor, visit the Career/Transfer Center, or contact the following:
Labor Studies Department: (408) 288-3705
San José City College Web site: www.sjcc.edu

Students must satisfactorily complete the following courses with a grade of "C" or better and at least four courses at San José City College. A minimum of two Labor courses must be taken at SJCC.

DEGREE REQUIREMENTS

<table>
<thead>
<tr>
<th>LABOR</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>LABOR 020</td>
<td>Workers’ Rights</td>
</tr>
<tr>
<td>LABOR 022</td>
<td>Negotiations and Dispute Resolutions</td>
</tr>
<tr>
<td>LABOR 023</td>
<td>Labor in American Society</td>
</tr>
<tr>
<td>LABOR 024</td>
<td>Leadership and Communication</td>
</tr>
<tr>
<td>LABOR 025</td>
<td>Organizing and Politics</td>
</tr>
<tr>
<td>LABOR 031</td>
<td>Survey of Contemp. Labor/Social Issues for Activist</td>
</tr>
<tr>
<td>LABOR 098</td>
<td>Directed Study</td>
</tr>
<tr>
<td>LABOR 136</td>
<td>Work Experience</td>
</tr>
</tbody>
</table>

Select 12 units from the following: 12

| COMS 040 | Introduction to Argumentation | 3 |
| ECON 010A | Principles of Macroeconomic Theory | 3 |
| HED 011 | Dynamic Health Concepts | 3 |
| LABOR 015 | Local Union and Community Leadership | 3 |
| PSYCH 012 | Introduction to Social Psychology | 3 |
| SOC 011 | Social Problems (CAN SOC 4) | 3 |

Select 3 units from the following: 3

| CIS 041 | Intro to Computer | 3 |
| MATH 063 | Elementary Statistics (CAN STAT 2) | 3 |

PHYSICAL ACTIVITY: 27
GENERAL EDUCATION: 39
TOTAL: 67
The Associate of Arts Liberal Studies Degree is offered for the student intending to transfer and obtain a Bachelors Degree leading toward the career of teaching. The program provides an excellent foundation in general education including the arts, sciences, humanities, and critical thinking. Students completing the degree will have completed the lower general education and will be able to have that series of courses certified at the time of transfer to San Jose State University. The major courses also further enhance the liberal studies emphasis for depth and breadth of study.

**GENERAL EDUCATION FOR THE LIBERAL STUDIES MAJOR**

<table>
<thead>
<tr>
<th>Area A: Communication in the English Language and Critical Thinking</th>
<th>9 UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 001A – English Composition (CAN ENGL 2)</td>
<td></td>
</tr>
<tr>
<td>ENGL 001C – Critical Thinking/Composition</td>
<td></td>
</tr>
<tr>
<td>COMS 020 – Oral Communication (CAN SPCH 4)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area B: Physical Universe and Its Life Forms</th>
<th>9 UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 021A – General Biology</td>
<td></td>
</tr>
<tr>
<td>CHEM 032A – Introduction to Chemistry (CAN CHEM 6)</td>
<td></td>
</tr>
<tr>
<td>MATH 052 – Mathematics for Elementary Education</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area C: Arts, Literature, Philosophy and Foreign Languages</th>
<th>9 UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 091A – Music Appreciation: Western Civilization (CAN MUS 12)</td>
<td></td>
</tr>
<tr>
<td>ENGL 001B – English Composition (CAN ENGL 4)</td>
<td></td>
</tr>
<tr>
<td>HUMNT 002 – Introduction to World Literature</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area D: Social, Political and Economic Institutions and Behavior</th>
<th>9 UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 017A – History of the United States (CAN HIST SEQ B)</td>
<td></td>
</tr>
<tr>
<td>HIST 017B – History of the United States (CAN HIST SEQ B)</td>
<td></td>
</tr>
<tr>
<td>Cultural Pluralism/Ethnic Studies (select one) – ENGL 033, 080, 082A, 082B; ETH 026, 027; HIST 009, 021, 024; SL 015; SSCI 020, 030, 031, 032, 040</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area E: Lifelong Understanding and Self-Development</th>
<th>5 UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYCH 092 – Developmental Psychology</td>
<td></td>
</tr>
<tr>
<td>Physical Education (2 units)</td>
<td></td>
</tr>
</tbody>
</table>

**Liberal Studies Requirements**

<table>
<thead>
<tr>
<th>19 UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 011 – Introduction to Cultural Geography (CAN GEOG 4)</td>
</tr>
<tr>
<td>GEOL 010 – Physical Geology (CAN GEOL 2)</td>
</tr>
<tr>
<td>GEOL 010L – Physical Geology Lab (CAN GEOL 2)</td>
</tr>
<tr>
<td>HIST 010A – Development of Western Culture (CAN HIST 2, SEQ A)</td>
</tr>
<tr>
<td>HIST 010B – Development of Western Culture (CAN SEQ A)</td>
</tr>
<tr>
<td>ART 091 – Survey of Art History (CAN ART 2)</td>
</tr>
<tr>
<td>PSYCH 010 – General Psychology (CAN PSY 2)</td>
</tr>
</tbody>
</table>

**TOTAL**

<table>
<thead>
<tr>
<th>60 UNITS</th>
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</thead>
</table>

**UNIVERSITY OF CALIFORNIA STUDIES**

Upon completing the following requirements, students will complete an Associate of Arts Transfer Degree and the UC IGETC Pattern, which enables students to transfer to the University of California (UC) system with all admissions and lower division general education requirements met.

This degree does not guarantee admission to any specific campus of the UC system, nor does it guarantee admission into a specific major. This degree requires completion of 60 UC transferable units, which includes an ethnic studies course and a physical activity course. A minimum grade of “C” or better is required in all courses and at least a 2.40 cumulative G.P.A is required for admissions.

For majors with fewer than 10 units, the balance may be met with the substitution of any UC transferable courses. The residency requirements mandate that a minimum of 12 units must be taken within the district and no less than 6 units taken at the college awarding the degree. All UC IGETC courses must be taken during the semester the course was approved for the UC, IGETC list.

For additional information, see your counselor, visit the Career/Transfer Center, or contact the following:

Counseling Office: (408) 288-3750
San José City College Web site: www.sjcc.edu

**MAJOR REQUIREMENTS**

<table>
<thead>
<tr>
<th>Area 1: English Communication: Select one (1) course from each area.</th>
<th>9 UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A: ENGL 001A</td>
<td></td>
</tr>
<tr>
<td>B: ENGL 001C</td>
<td></td>
</tr>
<tr>
<td>C: COMS 020, 040</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area 2: Mathematical Concepts &amp; Quantitative Reasoning: One (1) course required.</th>
<th>3-5 UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A: MATH 021, 025, 061, 063, 071, 072, 073, 078, 079</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area 3: Arts and Humanities: Three (3) courses required, one course from 3A and 3B; the 3rd course from either 3A or 3B. The Cultural Pluralism/Ethnic Studies Requirement, in bold print, can be completed in Area 3B or 4A.</th>
<th>9 UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A: Arts: 3 or 6 units: ART 091, 092; HUMNT 001; MUSIC 083, 089, 091, 095; THEAT 020, 022, 040</td>
<td></td>
</tr>
<tr>
<td>B: Humanities: 3 or 6 units: ENGL 001B, 002B, 033, 061, 065, 073, 076A, 076B, 078, 083, 084A, 084B, 086A, 086B; FREN 002A, 002B, 017, 018; HIST 010A, 010B; HUMNT 002; JAPAN 002A, 002B; PHIL 010, 012, 051, 065, 070; SL 001B, 002A, 002B; SPAN 002A, 002B</td>
<td></td>
</tr>
</tbody>
</table>

continued next page
Area 4: Social & Behavioral Sciences: 9
Three (3) courses are required, one course from 4A and two courses from 4B. A Cultural Pluralism/Ethnic Studies course is required in this area if not completed in Area 3B.

A: Cultural Pluralism/Ethnic Studies
Requirements: 3 units: ETH 026, 027; HIST 009, 021; SL 015; SSCI 020, 030, 032, 040

B: American Institutions: 6 units: Choose one of the two options
Option I - HIST 017A and HIST 017B
OR
Option II - HIST 001 and POLSC 001

Area 5: Physical and Biological Sciences: 7-9
Select one Physical Science and one Biological Science course. One course must have a lab as part of the class. Laboratory courses are underlined.

A: Physical Science: ASTRO 010; CHEM 001A, 015, 032A, 032B; ENVIR 010; GEOL 010, 010L, 011, 011L; METEO 010; OCEAN 010, PHYS 002A, 003, 004A, 004B, 004C

B: Biological Science: ANAT 001; BIOL 001, 020, 021A, 061, 063, 064; BOT 062; ENVIR 010; OCEAN 010

Area 6: Foreign Language Requirement: 0-5
Two (2) years of high school foreign language or Advanced Placement may be used to satisfy the UC System language requirement. Supporting Documents required.

A: CHIN 001A; FREN 001A, 015, 016; JAPAN 001A; SL 001A; SPAN 001A

ADDITIONAL DEGREE REQUIREMENTS: 4
Select one course from Group A and one course from Group B.

A: 3 units: FCS 019, 070; HED 011; PSYCH 012, 092, 096, 100; THEAT 005

B: 1 unit: DANCE 010, 011, 014, 020, 021, 024, 040, 050, 051, 062, 063 064, 065; PED 001, 009, 010, 011, 012, 013, 014, 017, 018, 020, 024, 024A, 030, 031, 034, 038, 039, 040, 042, 046, 048, 052, 055, 056; APE 030E, 041E, 042E, 056E

UNIT REQUIREMENT INFORMATION

Major/Electives UC Transferable 10-19
Graduation/Transfer Requirements 41-50
TOTAL 60
Students who are planning to transfer from San José City College to another college or university should plan their program to include both general education requirements and the specific major field requirements of a specific college or university. Students should work closely with their counselor in order to make the most appropriate course choices. Careful planning will permit transfer with junior standing, upper division status, to a four-year institution after two years of full time study at San José City College. Lower division requirements vary considerably from college to college. With careful planning, students can avoid taking classes that do not meet their requirements. Students should consult the current catalog of the institution to which they intend to transfer or view transfer requirements at www.ASSIST.org. Catalogs of the major universities and colleges are available for reference use in the Library and the Career/Transfer Center located in the Student Center.

**TRANSFER ADMISSION AGREEMENTS (TAA)**

**GUARANTEED ADMISSIONS**

San José City College and ten participating four-year institutions are offering a Transfer Admission Agreement (TAA) Program for students planning to transfer as juniors to four-year colleges and universities. The TAA Program is for students desiring to have an early confirmed guaranteed admission for the Fall semester transfer.

- Students will have early confirmation of guaranteed admission.
- Students are registered in the Career/Transfer Center as a transfer student, making them eligible to participate in workshops relating to transfer.
- TAA student’s San Jose City College transcript, General Education and IGETC Certificate are automatically sent to the four-year institution.
- TAA student’s name will be added to the transfer mailing list to receive updated information relating to transfer (i.e. Writing Skills Test (WST) information, etc.).
- The $55 application fee is waived at most CSU’s participating in the TAA program.

**TAA Participating Institutions:**

- University of California, Davis
- University of California, Irvine
- University of California, Riverside
- University of California, Santa Barbara
- University of California, Santa Cruz
- California State University, East Bay
- California State University, Monterey Bay
- San Francisco State University
- San Jose State University
- Santa Clara University
CHAPTER 7 — TRANSFER TO FOUR-YEAR INSTITUTIONS

ADMISSION TO THE UNIVERSITY OF CALIFORNIA — ALL CAMPUSES

TRANSFER ADMISSION REQUIREMENTS

The University of California considers you a transfer applicant if you graduated from high school and enrolled in a regular session at another college or university. Students cannot disregard their college record and apply as a freshman.

If students plan to attend a California community college before applying to the University, they should take courses that are transferable, that satisfy University and college requirements, and that fulfill prerequisites in their major. The counselor can help students in their planning.

The University publishes a booklet especially for transfer applicants called "Answers for Transfers". It is available in the Career/Transfer Center located in the Counseling Office.

Students who plan to transfer to the University of California should plan their program at San José City College to include required freshman and sophomore (lower division) courses of the University campus of their choice. Specific details regarding breadth and major requirements are outlined in the general catalog of each campus, in other publications of the University, or online at www.ASSIST.org.

University of California College Bulletins and other publications are available for reference use in the Library and the Career/Transfer Center in the Counseling Office. Students are encouraged to consult a counselor for help in the use of these materials to assure that their choice of courses at San José City College will fulfill both major and breadth requirements of the campus of their choice.

CALIFORNIA RESIDENTS

There are several ways to meet the University’s minimum admission requirements for transfer students, as described below. The path you use depends on the degree to which you satisfied UC’s minimum eligibility requirements for freshmen at the time you graduated from high school. In all cases, you must have at least a “C” (2.0) average in all transferable coursework.

The minimum requirements for freshmen are described in the individual campus catalogs. If you need assistance in determining whether you met the requirements, contact your Counselor or UC Admissions Office.

1. If you were eligible for admission to the University when you graduated from high school — meaning you satisfied the Subject, Scholarship and Examination requirements, or were identified by the University during your senior year in high school as eligible in the local context — you are eligible to transfer if you have a "C" (2.0) average in your transferable coursework.

2. If you met the Scholarship Requirement in high school but did not satisfy the Subject Requirement, you must clear the course deficiency by taking transferable college courses in the missing subjects, earning a "C" or better in each required course, and have an overall "C" average in all transferable coursework to be eligible to transfer.

3. If you were not eligible for admission to the University when you graduated from high school because you did not meet the Scholarship Requirement, you must:

   A. Complete 60 semester units of transferable college credit with a grade point average of at least 2.4 (no more than 14 semester units may be taken Pass/Not Pass), and;

   B. Complete the following course pattern requirement, earning a grade of "C" or better in each course:

      • two transferable college courses (3 semester units each) in English composition, and;
      • one transferable college course (3 semester units) in mathematical concepts and quantitative reasoning, and;
      • four transferable college courses (3 semester units each) chosen from at least two of the following subject areas: the arts and humanities, the social and behavioral sciences, and the physical and biological sciences.

   Students who satisfy the Intersegmental General Education Transfer Curriculum, IGETC, prior to transferring to UC may satisfy part 2 of the transfer admission requirements.

   In addition to these eligibility requirements, the University has specified additional requirements and rules about transfer GPA for transfer applicants.

DEADLINES FOR COMPLETING COURSES REQUIRED FOR ADMISSION

Prospective transfer applicants planning to meet the University’s minimum admission requirements for California residents must satisfy certain aspects of the requirements by the end of the spring term preceding fall enrollment at some UC campuses. If the prior spring term is not specified, students are permitted to satisfy the requirement during the preceding fall enrollment, although they are strongly encouraged to complete the courses earlier. Contact the UC campus Admissions Office for information about course completion deadlines for applicants for the winter and spring terms.

TRANSFER GPA

In 2004, the average GPA of transfer students admitted to the University was 3.3. However, the average GPA varies widely by campus and by major. Consult with your counselor or a UC campus representative to learn about the GPA that may be required for admission to particular campuses and majors. The GPA is only one factor by which an applicant is evaluated. Other factors, such as course patterns, are also important.

Each campus has its own selection criteria used to select students when the number of applicants exceeds the number of spaces available.

INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM (IGETC)

The Intersegmental General Education Transfer Curriculum (IGETC) consists of a series of courses that community college students can use to satisfy lower division general education requirements at a CSU or UC campus.

Certification of IGETC will permit the student to transfer from the 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 general education requirements.

The following courses have been approved by the Intersegmental Committee as fulfilling the IGETC requirements.

Courses next page
Chapter 7 — Transfer to Four-Year Institutions

San Jose City College
IGETC: Intersegmental General Education Transfer Curriculum
2005-2006

Area 1 - English Communication: 9 units
CSU - 3 courses required, one each from Group A, B, and C.
UC - 2 courses required, one each from Group A and B.
A: English Composition - ENGL 001A
B: Critical Thinking - ENGL 001C
C: Oral Communication (CSU requirement only) - COMS 020, 040

Area 2 - Mathematical Concepts and Quantitative Reasoning: 3 units
A: Math: MATH 021+, 025+, 061, 063+, 071+, 072, 073, 078, 079

Area 3 - Arts and Humanities: 9 units
At least 3 courses, with at least one course from the Arts and one course from the Humanities.
A: Arts: ART 091, 092; HUMNT 001; MUSIC 083, 091, 095; THEAT 020, 022, 040
B: Humanities: ENGL 001B, 028, 033, 061, 065, 073, 078, 083, 084A, 084B, 086A, 086B; FREN 002A, 002B, 017, 018; HIST 010A, 010B; HUMNT 002; JAPAN 002A, 002B; PHIL 010, 012, 051, 065, 073, 078, 083, 084A, 084B, 086A, 086B; FREN 002A, 002B, 017, 018; HIST 010A, 010B; HUMNT 002; JAPAN 002A, 002B; PHIL 010, 012, 051, 065, 070; SL 001B, 002A, 002B

Area 4 - Social and Behavioral Sciences: 9 units
At least 3 courses from at least 2 disciplines or an interdisciplinary sequence.
A: Anthropology and Archaeology: ANTH 062, 063
B: Economics: ECON 010A, 010B
C: Ethnic Studies: ETH 026, 027; HIST 009
D: Gender Studies: ETH 026; HIST 009
E: Geography: GEG 010, 011
F: History: ETH 027; HIST 001+*, 009, 017A+*, 017B+*, 021, 024
H: Political Science, Government & Legal Institutions: POLS 001+, 002, 004
I: Psychology: PSYCH 010, 092, 096, 100
J: Sociology & Criminology: JOURN 010, SL 015, SOC 010, 011

Area 5 - Physical and Biological Sciences: 7-9 units
At least 2 courses, one Physical Science course and one Biological Science course; at least one must include a laboratory. Courses in BOLD contain a laboratory component.
A: Physical Science: ASTRO 010; CHEM 001A+, 015+, 032A, 032B; ENVR 010*; GEOL 010, 010L, 011, 011L; METEO 010; OCEAN 010*; PHYS 002A+, 003, 004A+, 004B+
B: Biological Science: ANAT 001; BIOL 001A+, 020, 021A+, 061, 063, 064; BOT 062; ENVIR 010*; OCEAN 010*

Area 6 - UC Requirement Only: 5 units
Languages other than English:
- CHIN 001A
- FREN 001A, 015 & 016
- JAPAN 001A
- SL 001A
- SPAN 001A

Area 7 - CSU Graduation Requirement: 6 units
U.S. History, Constitution, and American Ideals (Not part of IGETC; may be completed prior to transfer)
Option #1: HIST 017A+* and HIST 017B+*
OR
Option #2: POLS 001+* and HIST 001+

Note: A minimum grade of "C" or better is required in each course.
* Course is listed in more than one area but shall not be certified in more than one area.
+ Transfer credit is limited by either UC or CSU or both. Please consult with a counselor.

Admission to California State University System

Upper Division Transfer Requirements
If you have at least 60 transferable units completed by the time you enter a California State University, CSU, you are considered an upper division applicant. To make admissions decisions the CSU admissions offices look at three factors:
- Your college grades
- The college coursework you have completed especially in general education
- Whether you are in good standing at the last college or university attended

Beginning Fall 2006, CSU campuses will be giving highest admission priority to California Community College upper division transfer students who have completed a Lower Division Transfer Pattern by Major (LDTPM). The LDTPM consists of completion of all lower division General Education Breadth courses and specific pre-major courses. Consult with a counselor for more information coming from the CSU.

General Education Requirements for Upper Division Transfers
More CSU campuses require students to complete 30 semester units of the General Education Breadth Requirements or the Intersegmental General Education Transfer Curriculum. Within either pattern, the highest priority classes are the three courses in the English language-oral communication, English composition, and critical thinking- along with a general education course in mathematics.

Completion of general education courses prior to transfer is usually the most efficient path to transfer. You can complete a maximum of 39 semester units of CSU GE Breadth before transferring to a CSU.
If you are enrolled in a high-unit major such as engineering, some math based fields, science, and other technical majors, you will need to work closely with a counselor to plan which classes you should take for upper-division transfer.

"Certification" or "Partial Certification" of the General Education Breadth may be requested on a Transcript request form available in the Admissions and Records Office.

**UPPER DIVISION GRADE REQUIREMENTS**

Your overall grade point average must be at least 2.0 (2.40 for California non residents). You must have a minimum of 60 semester units and the GPA is calculated on all of your transfer units attempted to meet minimum admission requirements.

Finally, general education courses in the English language and mathematics sections of general education must also be at a level of C or better for each course. These four courses are part of the 30 semester units of general education.

**CSU GENERAL EDUCATION BREADTH PATTERN 2005-2006**

General Education Breadth agreements consist of those courses that a student can complete at a community college to satisfy the General Education Breadth requirements at a CSU campus. Some of these requirements are to be completed after transfer, but most of the 39 semester units are to be completed during the freshman and sophomore years. All of Area A and B4 must be completed prior to transferring.

**Minimum Units**

**Area A:** Communication in the English Language and Critical Thinking: 9

Select one course from each category. All courses must be completed with a grade of "C" or better.

- **A1:** Oral Communication - COMS 020, 020N, 040, 045
- **A2:** Written Communication - ENGL 001A
- **A3:** Critical Thinking - ENGL 001C; PHIL 060; COMS 040

**Area B:** Physical Universe and Its Life Forms: 9

Select one course from each category. One Physical Science course must include a laboratory experience (underlined). Courses in area B4 must be completed with a grade of "C" or better.

- **B1:** Physical Science - ASTRO 010, 010L, 012; CHEM 001A, 015, 032A, 032B; ENVIR 010; GEOL 010, 010L, 011L; METEO 010; OCEAN 010; PHYS 002A, 003, 004A, 004B, 004C
- **B2:** Life Science - ANAT 001; BIOL 001, 020, 021A, 061, 063, 064; BOT 062; ENVIR 010
- **B3:** Laboratory Activity - Students must select at least one laboratory experience course (see underlined courses in areas B1 and B2).
- **B4:** Mathematics and Quantitative Reasoning - MATH 021, 022, 025, 051, 052, 061, 063, 070, 071, 072, 073, 078, 079

**Area C:** Arts, Literature, Philosophy and Foreign Languages: 9

Select one course from area C1, and one course from area C2, and one additional course (different discipline) from either C1 or C2.

- **C1:** Arts (Art, Dance, Music, Theatre) - ART 091, 092; HUMNT 001; MUSIC 083, 084; THEAT 002, 020, 022, 040
- **C2:** Humanities (Literature, Philosophy, Foreign Language) - CHIN 001A; ENGL 001B, 028, 033, 061, 065, 073, 078, 079, 080, 082A, 082B, 083, 084A, 084B, 086A, 086B; FREN 001A, 001B, 002A, 002B, 015, 016, 017, 018; HUMNT 002; JAPAN 001A, 001B, 002A, 002B; PHIL 010, 011, 012, 051, 065, 070; SL 001A, 001B, 002A, 002B; SPAN 001A, 001B, 002A, 002B

**Area D:** Social, Political and Economic Institutions and Behavior: 9

Select one course from D1 through D0. Students are expected to complete the American Institutions requirement in this section (course identified in section F1).

- **D1:** Anthropology and Archaeology - ANTH 062, 063; SSCI 020, 030, 040
- **D2:** Economics - ECON 010A, 010B
- **D3:** Ethnic Studies - ENGL 080, 082A, 082B; ETH 026, 027; HIST 009, 021, 024; SSCI 020, 030, 031, 032, 040
- **D4:** Gender Studies - ENGL 033; ETH 026; HIST 009
- **D5:** Geography - GEOG 010, 011
- **D6:** History - ETH 027; HIST 001, 009, 010A, 010B, 017A, 017B, 021, 024
- **D7:** Interdisciplinary Social or Behavioral Science - CIS 041; JOURN 010; LABOR 015; SL 015
- **D8:** Political Science, Government and Legal Institutions - POLSC 001, 002, 004
- **D9:** Psychology - FCS 070; PSYCH 010, 012, 020, 060, 092, 096, 099, 100
- **D0:** Sociology and Criminology - AJ 010, 011, 014; SOC 010, 011

**Area F1:** American Institutions - Select Option I or Option II in order to complete the American Institutions Requirement.

- **Option I** - HIST 017A and HIST 017B
- **OR** - **Option II** - HIST 001 and POLSC 001

**Area E:** Lifelong Understanding and Self-Development: 3 units minimum - Select one (a minimum of three units) course from Area I. Students may select one unit of credit for PE/Activity, Area II courses, in order to complete San José City College Graduation.

- **Area I** - FCS 019, 070; HED 001; PSYCH 020, 060, 092, 096, 100; THEAT 005
- **Area II** - Activity Courses: DANCE 010, 020, 021, 040, 050, 051, 062, 064; PED 001, 008, 009, 010, 011 012, 013, 014, 017, 018, 020, 024, 024A, 030, 034, 038, 039, 040, 042, 046, 048, 052, 055, 056, 098; APE 030E, 041E, 042E, 056E

**Note:**

Baccalaureate level courses are those that transfer to the California State University (C.S.U.). For a complete list of baccalaureate level courses, see your counselor or visit the Career/Transfer Center.
San José City College participates in the CAN System. This system uses a common number to identify some of the transferable lower division, introductory courses commonly taught within each academic discipline at California college campuses. The system assures students that CAN courses on one participating campus will be accepted "in lieu of" the comparable CAN courses on another participating campus. For example, CAN AJ 2 on one campus will be accepted for CAN AJ 2 on another participating campus, while each campus retains its own course number.

The CAN designator is included in the course description chapter of this catalog. A list of participating colleges and their qualified courses is available at the CAN Web Page www.cansystem.org. Counselors are also available to assist students.

<table>
<thead>
<tr>
<th>CAN NUMBER</th>
<th>SJCC COURSE</th>
<th>TITLE</th>
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<td>BIOL 003:</td>
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<td>General Microbiology</td>
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<td>Financial Accounting + Managerial Accounting</td>
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<td>FREN 001A+001B:</td>
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<td>CAN FREN SEQ B</td>
<td>FREN 002A+002B:</td>
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<td>GEOG 010:</td>
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<td>GEOG 011:</td>
<td>Introduction to Cultural Geography</td>
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<td>GEOL 010+010L:</td>
<td>Physical Geology + Physical Geology Laboratory</td>
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<tr>
<td>CAN GEOL 4</td>
<td>GEOL 011+011L:</td>
<td>Earth History + Earth History Laboratory</td>
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<td>CAN GOVT 2</td>
<td>POLSC 001:</td>
<td>Survey of American Government</td>
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<td>CAN HIST 2</td>
<td>HIST 010A:</td>
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<td>MATH 072:</td>
<td>Calculus II with Analytic Geometry</td>
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<td>CAN MATH 24</td>
<td>MATH 078:</td>
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CHAPTER 8 — ACADEMIC STANDARDS AND COURSE DESCRIPTIONS

IN THIS CHAPTER:

- Scholastic Standards
- Course Prerequisites and Corequisites
- Academic Terminology
- Advisory Levels
- Course Descriptions

Scholastic Standards

HONORS LISTS

Placement on an Honors List recognizes the student’s academic achievement during the previous semester.

To be eligible for any Honors List, the student must have earned at least 6 units of grades "A", "B", "C", or "D" within the semester. Optional "CR" and "NC" grades will exclude a student from any of the Honors Lists; however, the optional "CR" and "NC" can be converted to its corresponding letter grade, at which time the GPA will be recalculated and appropriate academic honors awarded. Mandatory "CR" grades will not exclude a student from any of the Honors Lists, as long as, the student has earned at least 6 units of grades "A", "B", "C", or "D" within the semester.

Dean's List

To be eligible, the student must earn between a 3.5 and a 3.99 grade point average.

President’s List

To be eligible, the student must earn a 4.0 grade point average.

HONORS AT GRADUATION

Graduation with Honors is granted to graduating students who earn an overall grade point average of between 3.5 and 3.99 in all units attempted from all accredited post secondary institutions.

To be eligible for Honors at graduation, a student must convert all optional "CR/NC" grades to the earned letter grade.

PROBATION AND DISMISSAL PROCEDURES

The probation procedure serves to inform the student that his/her academic performance is below minimum college standards. The combined probation and dismissal procedure is intended to encourage the student to take steps necessary for improvement, and those steps may include a reassessment of educational, vocational and personal goals. The dismissal procedure allows the student the opportunity to justify his/her continued enrollment through a plan of action which is judged by a counselor as enabling the student to meet the minimum academic standards during the next semester of enrollment.

Academic Probation

A student who has attempted at least 12 semester units of letter grades (A, B, C, D and F) shall be placed on Academic Probation if the student has earned a cumulative grade point average below 2.0.
CHAPTER 8 — ACADEMIC STANDARDS AND COURSE DESCRIPTIONS

Progress Probation

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

Continuing Probation

Students on Probation (Academic or Progress) will be placed on "Continuing Probation" for the next subsequent semester of enrollment if they have not earned the required grade point average necessary to be removed from Academic Probation, or have not received less than 50% of all accumulative grades in "I", "W", or "NC" to be removed from Progress Probation.

Academic Dismissal

A student who is on continuing Academic Probation shall be dismissed from the District when the student earns in letter grade classes (A, B, C, D and F) an accumulative grade point average of less than 2.0 in the next two subsequent terms of enrollment. (District Policy 6050.402)

Progress Dismissal

A student who is on continuing Progress Probation shall be dismissed if at the end of the second subsequent term of enrollment the percentage of units in which the student has been enrolled and for which entries of "I", "W", and "NC" are recorded reaches or exceeds fifty percent (50%). (District Policy 6050.402)

Clearing Probation or Dismissal

Students may clear Academic Probation or Dismissal when the students accumulated grade point average is 2.0 or higher. A student may clear Progress Probation or Dismissal by receiving less than 50% of all accumulative grades in "I", "W", or "NC". (District Policy 6050.402)

Re-admission after Dismissal

A student must petition for re-admission following dismissal. The petition must contain (1) an explanation of the situation which resulted in dismissal, (2) a plan for future success, and (3) a proposed list of classes for the coming semester. The student has the burden to clearly justify readmission.

Students who are dismissed will have their Petitions for Re-admission evaluated by a counselor. The counselor will carefully review the petition and possibly recommend changes in the plan for success or the list of classes. The counselor may also require that a semester or more intervene before re-admission.

Petitions that are approved are good for one semester only.

Dismissal contracts are available in the Counseling Office.

Students who are re-admitted will continue to be on dismissal status if their performance does not meet minimum academic standards as outlined in the previous section on probation.

ACADEMIC RENEWAL

It is the policy of the San Jose/Evergreen Community College District to grant Academic Renewal in the following ways:

Academic Renewal by Repetition

Students may repeat any course, one time only, for which they have received a "D" or "F" grade at this or another institution.

If the course is taken and repeated within the San Jose/ Evergreen Community College District, the first course will automatically be given the Academic Renewal (AR) designation. The change is posted on the San José City College/Evergreen Valley College permanent record card(s). This allows the students to have the benefit of the highest grade attained used in the computation of their grade point average (GPA). The students’ transcripts shall show the grades for all courses taken. If it is required that students take the course again to achieve a minimum grade of "C", the second and third grades will be averaged into the overall GPA.

If the course is initially taken at another institution, but repeated at San José City College, students, on their graduation petition, may request to use the highest grade attained in the calculation of their GPA for graduation. The change is not posted on the college permanent record card.

No student may repeat a course in which a final grade of “C”, “CR” or better has been received, unless the catalog indicates that the specific course may be repeated more than once.

ACADEMIC LEAVE

Academic Leave is intended to provide students an opportunity to pursue activities related to their academic program which would not be possible while otherwise enrolled.

Academic Leave is also intended for students who, for personal or medical reasons beyond their control, must have a break in attendance.

The application for Academic Leave must state clearly the basis for the requested leave and the duration of the leave. If the leave is for academic related reasons, that relationship must be clearly stated. Leave for personal or medical reasons must be substantiated by submitting additional appropriate documentation with the application. The College President or his designee approves academic leave.

Leave may be granted for two consecutive semesters for a maximum of three semesters. Extensions may be granted in extreme hardship.

Upon approval of the application for Academic Leave, the student’s transcripts at the college will be appropriately annotated to reflect the leave for the granted period.

TRANSCRIPTS

A student who plans to transfer to another college should complete a Request for Transcript and file it with the Office of Admissions and Records. The college will forward, without charge, two transcripts at the request of the student. After the first two, a charge for each transcript will be made.

AUDITING (ATTENDING CLASSES; NOT OFFICIALLY REGISTERED.)

Auditing of classes is not permitted. All students must be registered and all fees paid prior to attending any classes.
REPEATING COURSES

No students may repeat for credit any course in which they have already received a final grade of "C" or above unless the catalog entry with the course title indicates that credit may be earned for repeating the course or in the following circumstances.

A course may be repeated once for credit if:

- The student is repeating the course to alleviate substandard work which has been recorded in the student’s record. (Title 5, 58161)
- There has been a significant lapse of time since the student previously took the course (over 3 years). (Title 5, 58161)
- The student is currently enrolled in the course, but is failing. (Title 5, 58161,1b—extenuating circumstances).
- The student dropped the course for extenuating circumstances. (Title 5, 58161,1b)

"A student is not limited to the number of times he or she can take a course if it is a 'legally mandated training requirement as a condition of continued paid or volunteer employment.' A student may take these courses any number of times.

Per Title 5 section 58161

DUPLICATE COURSE REGISTRATION

Unless otherwise noted, students may register and receive credit only once for any course within the same semester, regardless of whether the course is repeatable or not.

ATTENDANCE

Satisfactory attendance, like successful scholarship, is the responsibility of the individual student. Excessive absences may cause disqualification from class with the likelihood that a failing grade for the course will be received.

At the discretion of the instructor, a student may be dropped from a class if the number of times absent exceeds the number of times the class meets in a week during 16-week semester.

Students should also be aware, they may be dropped from a class if they do not attend the first class meeting.

DROPPING CLASSES

A student may withdraw from a class by using the STARReg System to drop a class. Each student is ultimately responsible for dropping the class or classes and informing each instructor. The following rules apply to withdrawing from class:

A student who officially withdraws from a class during the first four weeks or 30% of a term, whichever is less, will not receive a grade or any notation on the student’s permanent record card.

Withdrawal between the end of the fourth week and the last day of the fourteenth week or 75% of a term, whichever is less, shall be recorded as a “W” on the student’s permanent record.

The permanent record of a student who withdraws after the end of the fourteenth week or 75% of a term, whichever is less, must reflect a grade other than a "W".

FAILURE TO CLEAR OBLIGATIONS

A student leaving the College is responsible for the clearance of all obligations at the College. The District will deny a student who does not clear all obligations at the college further service.

LECTER GRADES

Grade A — Distinguished
The student has mastered the content of the course, is able to apply information learned to new situations, and is able to relate it to other knowledge.

The student consistently distinguishes self in examinations, reports, projects, and class participation.

The student shows independent thinking in assignments and class discussion.

Work is consistently in proper form, shows evidence of careful research, and is submitted punctually.

Where achievement in the course involves development of hand or body skills, the student consistently demonstrates superior skills, ability, and performance.

The student complies with class attendance regulations.

In optional credit/no credit courses the grade of "A" converts to "CR".

Grade B — Above Average
The student consistently shows mastery of the course content and usually is able to apply it to new situations or to relate it to other knowledge.

The student is consistently above average in examinations, reports, projects, and class participation.

Work is in proper form, shows evidence of research, and is submitted punctually.

Where achievement in the course involves development of hand or body skills, the student consistently demonstrates above average skills, ability, and performance.

The student complies with class attendance regulations.

In optional credit/no credit courses the grade of “B” converts to “CR.”

Grade C — Average
The student shows evidence of a reasonable comprehension of the subject matter of the course and has an average mastery of the content. The student’s competence in the content is sufficient to indicate progression to the next course in the same field.

Assignments are completed in good form and on time.

If the subject carries transfer credit, the student has indicated sufficient competence in the content to continue in the subject field upon transfer.

The student consistently makes average scores on examinations, projects, and reports.

Where achievement in the course involves development of hand or body skills, the student consistently demonstrates average skills, ability, and performance.

In optional credit/no credit courses the grade of “C” converts to “CR.”
CHAPTER 8 — ACADEMIC STANDARDS AND COURSE DESCRIPTIONS

Grade D — Below Average Minimum Passing

The student falls below the average in examinations, projects and reports, and shows substandard competence in the assigned subject matters of the course, indicating probable difficulty completing the next course in the same field.

Assignments are completed in imperfect form, late, or of inconsistent quality.

Where achievement in the course involves development of hand or body skills, the student consistently demonstrates usable, but below-average skills, ability, and performance.

Grade “D” may permit passing to the next course depending upon course and discipline prerequisites.

The student complies with class attendance regulations.

In optional Credit/No Credit courses the grade of “D” converts to “NC.”

Grade F — Failing Grade No Credit Earned

The student makes unsatisfactory grades in examinations, projects, and reports.

The student does not show evidence of competence in the subject matter.

Assignments may be omitted or are incomplete.

Where achievement in the course involves development of hand or body skills, the student consistently demonstrates unsatisfactory skills, ability, and performance.

The student does not comply with class attendance regulations.

The “F” grade is used in computing the standards of Probation and Dismissal.

In optional Credit/No Credit classes the grade of “F” converts to “NC.”

Grade CR — Passing, Credit Earned

Grade “CR” is offered for two purposes: (1) to provide an opportunity for students to pursue areas outside their fields of major interest and to encourage general education, and/or (2) to indicate a successful completion of developmental courses.

(Optional) Grade “CR” can be converted to an A, B, or C.

(D” and “F” grades convert to “NC.”)

(Mandatory) Grade “CR” may be used to progress to the next higher level in designated developmental courses.

Grade NC — Less than Satisfactory, No Credit Earned

Grade “NC” is used in Credit/No Credit classes only.

The student makes unsatisfactory grades in examinations, projects, and reports.

The student does not show evidence of competence in the subject matter.

Assignments may be omitted or are incomplete.

Where achievement in the course involves development of hand or body skills, the student consistently demonstrates unsatisfactory skills, ability, and performance.

The student does not comply with class attendance regulations.

In optional Credit/No Credit classes “D” and “F” grades convert to “NC.”

The “NC” grade is used in computing Progress Probation or Dismissal.

Symbol W — Withdrawal

A student withdraws from a course or the College before the end of the 14th week of the semester (or 75% of the term, whichever is less).

The Permanent Record Card of a student who remains in class beyond the time limit must reflect a grade other than “W” (unless there are extenuating circumstances).

No notation (“W” or other) shall be made on the Permanent Record of the student who withdraws from a course or the College during the first four weeks or 30% of a term, whichever is less.

Withdrawal between the end of the fourth week and the 14th week or 75% of the term of instruction shall be recorded as a “W” on the student’s Permanent Record.

Withdrawal after the end of the 14th week (or 75% of the term, whichever is less) in extenuating circumstances, as determined by the instructor(s) or appropriate faculty, will be recorded as a “W”. Extenuating circumstances are defined as verifiable cases of accident, illness, or other circumstances beyond the control of the student.

“W” shall not be used in calculating grade point averages, but excessive “W’s” shall be used in calculation of Progress Probation and Dismissal.

Symbol I — Incomplete

Incomplete academic work for unforeseeable, emergency and justifiable reasons at the end of the term may result in a temporary “I” symbol being entered in the student’s record.

The “I” may be given only upon agreement between the student and the instructor.

The instructor in a written record shall state the condition for removal of the “I”. This record shall contain the conditions for removal of the “I” and the grade assigned in lieu of its removal. This record must be given to the student with a copy on file with the Office of Admissions and Records until the “I” is made up or the time limit has passed. A final grade shall be assigned when the work stipulated has been completed and evaluated, or when the time limit for completing the work has passed.

The “I” may be made up no later than one year following the end of the term in which it was assigned.

The student may not clear the Incomplete by reenrolling in the course.

The symbol of “I” is assigned no grade points in computing the grade point average.

The “I” is used in calculating Progress Probation and Dismissal.

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Symbol IP — In Progress

The "IP" symbol shall be used to denote that the class extends beyond the normal end of the academic term. It indicates that work is "in progress," but that assignment of a substantive grade must await its completion. The "IP" symbol shall remain on the student's permanent record in order to satisfy enrollment documentation. The appropriate evaluative grade and unit credit shall be assigned and appear on the student's record for the term in which the course is completed. The "IP" shall not be used in calculating grade point averages.

"IP" may be assigned only by the Office of Admissions and Records.

Symbol RD — Report Delayed

The "RD" symbol may be assigned by the Office of Admissions and Records only. It is to be used when there is a delay in reporting the grade.

UNITS

A unit shall be defined as the course credit granted for one attendance hour per week of lecture-recitation, seminar or other approved course activity plus two hours of outside work throughout a semester (or equivalent when a course is offered at time intervals other than a semester). A unit of credit shall also be granted for three hours per week of laboratory time.

For practical purposes, the following terms are synonymous: unit, semester unit, semester hour, credit, and credit hour.

GRADE-POINT AVERAGES

The Office of Admissions and Records issues final grades officially at the end of each semester. Letter grades are assigned grade points according to the following system:

\[
\begin{align*}
A & \quad 4 \\
B & \quad 3 \\
C & \quad 2 \\
D & \quad 1 \\
F & \quad 0 \\
W & \quad 0
\end{align*}
\]

Units for courses with grades of "W", "CR", "I", "NC", "IP", or "RD" do not affect the grade point average.

Grade-point average is computed by the following formula:

\[
\text{Grade-point avg.} = \frac{\text{Total grade points earned}}{\text{Total semester units attempted}}
\]

DEVELOPMENTAL COURSES

All developmental courses are graded only on a "CR" and "NC" basis. If a course is passed, a grade of "CR" is entered in the grade column of the official record. If the course work is unsatisfactory, a grade of "NC" is entered in the grade column. Neither the grade of "CR" nor "NC" is considered in computing grade-point average. These grades may not be converted to the letter grade system at any time.

OPTIONAL CREDIT/NO-CREDIT GRADING

To provide the opportunity for students to pursue studies beyond their field of major interest and to encourage general education, specified courses may be taken with a credit/no-credit grade assigned ("CR" or "NC").

Courses which may be taken for an optional credit/no-credit grade are identified in the class schedule each semester by a plus sign (+) in the credit column.

Students must declare their intention to receive a letter grade or a credit/no-credit grade by the end of the fifth week of semester-length courses, or before the end of the first 30% of the class, whichever is less.

Upon completion of the semester, for the optional credit/no-credit grade, the student may request a change of grade from "CR" or "NC" to the letter grade earned by applying to the Office of Admissions and Records.

Credit earned on a credit/no-credit basis may be counted toward satisfactory completion of an Associate in Arts degree, but is not used in computing either the grade point average or honors.

STUDENT RECORDS

All official school records are maintained in the Office of Admissions and Records under the custody of the Director of that office. These records consist of a complete listing of all course work attempted at the College (Permanent Record): placement test scores, a transcript from other schools and colleges, Application forms and supporting documents and Change of Record forms. Each college instructor's complete roll book is also kept on file, along with the record of grades for students in the class. The College maintains no other official record.

Student Access to Records

Any student may review the contents of his/her file by contacting either a counselor or the Office of Admissions and Records during regular working hours. Only the records which pertain directly to that student may be reviewed. A student may challenge the contents and accuracy of the records, by a written request for a review of the records with the Director of Admissions and Records. All such requests will be honored within 15 calendar days.

DESCRIPTION OF COURSES

COURSE PREREQUISITES AND COREQUISITES

Definitions: "Prerequisite" means a condition of enrollment that a student is required to meet in order to demonstrate current readiness for enrollment in a course or educational program.

"Corequisite" means a condition of enrollment consisting of a course that a student is required to simultaneously take in order to enroll in another course.

Location: Pre- and Corequisites are listed under each course in the schedule and catalog.
Challenge: A prerequisite or corequisite may be challenged for any of the following reasons:

- The adopted district process did not establish the prerequisite
- The prerequisite was established in violation of Title 5
- The prerequisite is discriminatory or applied in a discriminatory manner
- The student has the knowledge or ability to succeed despite not meeting the prerequisite
- The student will be delayed because the prerequisite course has not been made reasonably available

Verification of Equivalency: A student who believes that he/she has completed the prerequisite(s) or corequisite(s) for a course as listed in the Schedule of Classes or catalog based on previous coursework at another institution should do the following:

- Make an appointment to see a college counselor
- Bring transcripts or other evidence of meeting the course prerequisite

Challenge Process: A student who believes that he/she has completed the prerequisite(s) or corequisite(s) for a course as listed in the Schedule of Classes or catalog for any of these reasons should do the following:

- Pick up a prerequisite challenge form at the Office of Admissions and Records or the Counseling Office, complete the required information
- Make an appointment to see a counselor to help the student review his/her experience and guide him/her in the challenge process. If the counselor cannot make a determination about his/her experience, the counselor will refer the student to the instructional dean who supervises the area in which the student wishes to take the course
- If there are any unresolved issues after the student meets with the instructional dean, the student may present his/her case to the Dean of Counseling and Matriculation

Space Available: If space is available in a course when a student files a challenge to a prerequisite or corequisite, the college will reserve a seat for the student and allow that student to enroll in the course if the challenge is successful.

When no space is available in the course when a challenge is filed and the challenge is upheld, the student shall be permitted to enroll if space is available when the student registers for the subsequent term.

ADVISORIES ON RECOMMENDED PREPARATION (ADVISORY LEVELS)

Definition: “Advisory on recommended preparation” means a condition of enrollment that a student is advised, but not required, to meet before or in conjunction with, enrollment in a course or educational program.

Advisory Levels are typically met through completion of reading, writing, or math courses listed in the schedule of classes and catalog. Although these levels are advisory rather than mandatory, students are very strongly encouraged to adhere to them and to follow the advice of their counselors related to the advisory levels.

Location: Advisory Levels are listed under each course in the schedule and catalog.

Definitions of Advisory Reading, Writing, and Math Levels

ADVISORY READ LEVEL 1: having the ability to find stated and implied main ideas in simple passages; identify important details; understand the use of new vocabulary in textbook reading passages, utilize textbook reading strategies, and understand what it means to read critically.

List of courses that will provide students this skill level:

- READ 350 (6 units) or ESL (322 & 323 & 324): "C" or "CR" grade required in all of these courses or placement based on assessment

ADVISORY READ LEVEL 2: having the ability to find the stated and main idea in simple and complex passages; summarize information; sequence information in complicated texts, engage in inferential analysis of college reading materials; use study techniques for college textbooks; and use note taking systems.

List of courses that will provide students this skill level:

- READ 301 or ESL 302: "C" or "CR" grade required in all of these courses or placement based on assessment

ADVISORY READ LEVEL 3: having the ability to identify the thesis statement in college materials; understand and identify main ideas and supporting details; recognize and identify organizational patterns; make complex inferences; summarize and paraphrase information; separate fact from opinion; recognize connotation and denotation; detect bias; recognize errors in reasoning; use a college level vocabulary; use rate flexibility in reading a wide range of college materials; and to use range of other college level reading skills.

List of courses that will provide students this skill level:

- READ 101 or ESL 091: "C" or "CR" grade required in all of these courses or placement based on assessment

ADVISORY WRITE LEVEL 2: having the ability to write simple, compound, and complex sentences; develop a written paragraph; and to use correct grammar and spelling.

List of courses that will provide students this skill level:

- ENGL 335 (4 units): "C" or "CR" grade required in all of these courses or placement based on assessment
ADVISORY WRITE LEVEL 3: having the ability to write a well-organized five-paragraph essay; use rhetorical modes and methods of organization; write paragraphs with unity and coherence; and use the basic mechanical skills and syntactical arrangements in writing paragraphs.

List of courses that will provide students this skill level:
- ENGL 092 or ESL 091 (6 units): "C" or "CR" grade required in all of these courses or placement based on assessment

ADVISORY WRITE LEVEL 4: having the ability to write a well organized paragraph essay in support of a clearly stated thesis; apply an analytical understanding of college level text; use basic research skills; apply critical thinking skills; and recognize audience, purpose and tone.

List of courses that will provide students this skill level:
- ENGL 001A: "C" grade required

ADVISORY MATH LEVEL 1: Arithmetic skills including fractions, decimals, and percents

List of courses that will provide students this skill level:
- 3 units of MATH 310 with a "CR" grade or higher or
- BUS 001 or 060 or
- ELECT 062 or 121 or 122 or two units of ELECT 320 or
- ACCTG 101
- MATH 011A or 011R or 011S and courses in other disciplines requiring arithmetic skills

ADVISORY MATH LEVEL 2: Algebra I skills

List of courses that will provide students this skill level:
- MATH 011A or 011R or 011S, with "C" grades or higher or
- BUS 060 or
- ELECT 062 or 122

ADVISORY MATH LEVEL 3: Intermediate Algebra

List of courses that will provide students this skill level:
- MATH 013, with a "C" grade or higher or
- BUS 060 or
- ELECT 062 or 122

ADVISORY MATH LEVEL 4: Advanced Algebra and Trigonometry (sometimes called precalculus)

List of courses that will provide students this skill level:
- MATH 025 or (021 and 022), all with a "C" grade or higher

ADVISORY MATH LEVEL 5: First semester calculus

List of courses that will provide students this skill level:
- MATH 071, both with a "C" grade or higher

ADVISORY MATH LEVEL 6: Second semester calculus

List of courses that will provide students this skill level:
- MATH 072, both with a "C" grade or higher

ADVISORY MATH LEVEL 7: Multivariable Calculus or Differential Equations or Linear Algebra

List of courses that will provide students this skill level:
- MATH 073 or 078 or 079, all with a "C" grade or higher

Math levels are advisory only for courses outside of the math discipline

OPEN CURRICULUM

Open Curriculum classes have a class that has no prerequisites of any kind. However, some courses such as ESL 342 and MATH 310 may require that placement test results be on file prior to the first day of class. Classes such as this with an additional requirement are marked with an * after the words “open curriculum.”

TRANSFER VALUE

The San José City College Counseling Staff maintains current information on transfer programs (and/or course equivalent lists) to neighboring four-year institutions.

College catalogs are available in the College Library and Career/Transfer Center.

California State universities will not give credit for 300 series courses in this catalog, or for courses numbered in the 200 series. Any other course may be offered for elective credit upon transfer, but credit will be allowed at state colleges for graduation to the extent that free electives are available in the course pattern for the major selected by the student.

A student who plans to transfer to a state university should consult a counselor about the transfer value of courses that may be offered.

ABBREVIATIONS AND SYMBOLS

Kind of Grading
- L = Letter Grade Only
- K = Mandatory Credit/No Credit
- O = Optional Credit/No Credit
- N = Non-Graded
- E = Credit by Exam

Transfer Status
- CSU = meets baccalaureate criteria for the California State University system
- UC = accepted by the University of California system
- UC+ = University of California will accept 6 total units of the courses with some stipulations

Degree Applicability
- A.A. = applies to the Associate of Arts Degree
- A.S. = applies to the Associate of Science Degree
- NAA = offered for credit but does not apply to the A.A. or A.S. Degree
- NC = No Credit courses
- DistrictGE = meets criteria for district General Education
- CSU GE = meets criteria for California State University General Education
- IGETC = meets criteria for Intersegmental General Education Transfer Curriculum (applicable to both the California State University system and the University of California system)
This introductory course is designed for transfer students in business, information systems and/or accounting. Topics include the accounting cycle, preparation and analysis of financial statements, internal control, depreciation, inventories, receivables, liabilities, stockholders’ equity, and accounting as a decision-making tool.

Lecture Hours: 5  Lab Hours: None  Repeatable: No  Grading: L

Prerequisite: BUS 001 or ACCTG 101 or MATH 011A or MATH 011R or MATH 011S or MATH 012, all with C or better

Corequisite: ACCTG 200

Recommended: Knowledge of Computerized Spreadsheets such as Excel.

Can: None

Advisory Level: Read: 2  Write: 2  Math: None

Transfer Status: CSU/UC  Degree Applicable: AA/AS

CSU GE: None  District GE: None  IGETC: None

This transfer course introduces students to managerial decision making using accounting information. Topics include knowledge and preparation of the master budget; cost-volume-profit relationships; contribution margin approach to decision making; cost behavior analysis; job order and process costing; activity-based costing and just-in-time manufacturing; standard costs; responsibility accounting; cost performance reporting; special business decisions, incremental analysis and break-even analysis; pricing under absorption and variable costing; Statement of Cash Flows; and financial statement analysis.

Lecture Hours: 5  Lab Hours: None  Repeatable: No  Grading: L

Prerequisite: ACCTG 020 with C or better

Corequisite: ACCTG 200

Recommended: Knowledge of Computerized Spreadsheets such as Excel.

Can: None

Advisory Level: Read: 2  Write: 2  Math: 2

Transfer Status: CSU/UC  Degree Applicable: AA/AS

CSU GE: None  District GE: None  IGETC: None

This course is intended for students desiring knowledge of computerized accounting principles; it employs the ‘hands on’ approach with user-friendly software. This course will provide an overview of the impact of the computer on accounting procedures and identifies some of the major differences between manual and computerized accounting systems on an IBM PC microcomputer system.

Lecture Hours: 2.5  Lab Hours: 1.5  Repeatable: No  Grading: O

Prerequisite: ACCTG 101 or ACCTG 020

Corequisite: ACCTG 200

Can: None

Advisory Level: Read: 2  Write: 2  Math: 1

Transfer Status: CSU  Degree Applicable: AA/AS

CSU GE: None  District GE: None  IGETC: None

This course provides students with cost accounting principles, including essentials of job order, process cost, and standard cost accounting systems. The central focus of the course is how cost accounting helps managers make better decisions for planning, controlling, and profitability analysis in a business environment as well as cost accounting concepts for products, services, and customers. Topics covered in this course are of significant value in personal financial management as well.

Lecture Hours: 5  Lab Hours: None  Repeatable: No  Grading: L

Prerequisite: ACCTG 021 with C or better

Can: None

Advisory Level: Read: 2  Write: 2  Math: 2

Transfer Status: CSU  Degree Applicable: AA/AS

CSU GE: None  District GE: None  IGETC: None

This course emphasizes the measurement techniques and disclosure requirements under current Generally Accepted Accounting Principles for the Statement of Financial Position, Income Statement, the Statement of Cash Flows, the Retained Earnings Statement, and the Statement of Comprehensive Income. In-depth study of investments in securities, both equity and debt, inventories, operational assets, liabilities, capital structure, and revenue recognition methods will prepare the student with the knowledge of accounting theory and practical application to perform the duties on an entry-level position such as an accountant, loan officer, or similar position.

Lecture Hours: 5  Lab Hours: None  Repeatable: No  Grading: L

Prerequisite: ACCTG 021 with C or better

Can: None

Advisory Level: Read: 2  Write: 2  Math: None

Transfer Status: CSU  Degree Applicable: AA/AS

CSU GE: None  District GE: None  IGETC: None

This course is an introduction to Federal Individual Income Taxation with emphasis on statutory materials, principles, procedures and terminology. Special attention is made to tax problems encountered by individual taxpayers and the basic concepts of gross income, exclusions, adjusted gross income, deductions, exemptions and tax credits. Tax-avoiding and tax planning techniques will be explored. Other tax entities, like corporations, partnerships and fiduciaries will be covered. Issues of gift and estate taxation will also be discussed. A comparative analysis of California tax law will be provided.

Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: L

Can: None

Advisory Level: Read: 2  Write: 2  Math: 1

Transfer Status: CSU  Degree Applicable: AA/AS

CSU GE: None  District GE: None  IGETC: None

Individual or small groups of students who would benefit from Independent Study under the direction of faculty members in specific or related disciplines may develop individualized learning contracts designed to enhance their individual instructional programs. The students and the faculty member in consultation with the Division Dean will determine appropriate learning objectives and activities as well as the number of units to be earned. Instructions and the Learning Contract forms are available in the Division Office. Repeatable to a maximum of 9 units across all disciplines.

Lecture Hours: None  Lab Hours: 1.5 - 27  Repeatable: 17  Grading: O

Recommended: 3 units of Math 310 with CR or placement based on assessment.

Can: None

Advisory Level: Read: 2  Write: 2  Math: 1

Transfer Status: CSU  Degree Applicable: AA/AS

CSU GE: None  District GE: None  IGETC: None

An introduction to accounting principles and procedures that apply to the operations of a small business. The material is presented through lecture and simulation activities and may include microcomputer and/or WebCT Applications for discussion groups and general information. Transactions are analyzed and processed, financial statements are developed, and records are adjusted and closed for a complete accounting cycle for service and merchandising businesses. This course prepares students for positions as accounting assistants or entry level bookkeepers.

Lecture Hours: 3  Lab Hours: 1  Repeatable: No  Grading: O

Corequisite: ACCTG 200

Can: None

Advisory Level: Read: 2  Write: 2  Math: 1

Transfer Status: CSU  Degree Applicable: AA/AS

CSU GE: None  District GE: None  IGETC: None
ACCTG-136 - Accounting Occupational Work Experience-Parallel Plan

Occupational Work Experience is designed for students who work or volunteer in a field related to their vocational major. Students are required to provide evidence that they are enrolled in a vocational program (e.g., educational plan or coursework in a vocational subject area). The Parallel Plan is designed for students who wish to take classes and work during the same semester. A maximum of 4 units of Occupational Work Experience credit may be earned during any one semester, to a maximum of 15 units total. Students must be enrolled in at least 7 units including Work Experience units. Courses taken at other accredited colleges or equivalent course work may meet this requirement. Internship/job placement is not guaranteed.

Lecture Hours: None Lab Hours: 3 - 12 Repeatable: 15 Grading: O
Corequisite: 1) Be enrolled during the regular semester in a minimum of 7 units at any accredited college, including Work Experience units or; 2) During a summer session, be enrolled in at least one other class in addition to Work Experience; and 3) Be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.

CAN: None
Advisory Level: Read: 3 Write: 3 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

ACCTG-138 - Accounting Occupational Work Experience-Aльтernate Plan

Occupational Work Experience is designed for students who work or volunteer in a field related to their vocational major. Students are required to provide evidence that they are enrolled in a vocational program (e.g., educational plan or coursework in a vocational subject area). The Alternate Plan is designed to allow students attend school one semester and work the next. A maximum of 8 units of Occupational Work Experience credit may be earned during any one semester, to a maximum of 16 units total. Students may only take one (if any) class in addition to work experience. Internship/job placement is not guaranteed.

Lecture Hours: None Lab Hours: 3 - 24 Repeatable: 15 Grading: O
Corequisite: 1. Need not be enrolled in any other class during the semester besides Work Experience. 2. May be enrolled in at least one other class in addition to Work Experience. 3. Must be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.

CAN: None
Advisory Level: Read: 3 Write: 3 Math: 2
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

ACCTG-200 - Accounting Supervised Skills Lab Units: None

Supplemental practice and/or instruction is offered students in a specific discipline. Projects are assigned in courses of concurrent enrollment. General consultation and supervision are provided by the faculty members in charge.

Lecture Hours: 0 Lab Hours: 0 Repeatable: 19 Grading: N
Corequisite: ACCTG 020 or ACCTG 021 or ACCTG 030 or ACCTG 101

CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: None Degree Applicable: NC
CSU GE: None District GE: None IGETC: None

APE-030E - Adapted Physical Education - Units: 0.5 - 1

Adapted Fitness For Life

This course is designed for students with disabilities who are unable to participate in regular physical education Fitness class due to their disability and functional limitations. Students will learn physical fitness and wellness exercises and concepts. Students will learn individual and group fitness exercise programs that will enhance muscular strength, flexibility, and endurance.

Lecture Hours: None Lab Hours: 2 - 3 Repeatable: 7 Grading: O
Open Curriculum: No prerequisite, corequisite or levels
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: E2 District GE: E2 IGETC: None

APE-041E - Adapted Physical Education - Units: 0.5 - 1

Adapted Motor Skill Development

This course is designed for students with disabilities who are unable to participate in regular physical education due to their disability and functional limitations. Students with disabilities will learn how to improve motor development skills, balance, mat exercises, and gait training skills.

Lecture Hours: None Lab Hours: 2 - 3 Repeatable: 7 Grading: O
Open Curriculum: No prerequisite, corequisite or levels
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: E2 District GE: E2 IGETC: None

APE-042E - Adapted Physical Education - Units: 0.5 - 1

Adapted Aquatics

This course is designed for students with disabilities who are unable to participate in regular physical education swim class due to their disability and functional limitations. Students will learn aquatic exercises and learn swim strokes adapted to their disability. Students will learn proper breathing mechanics, treading water, and water safety techniques.

Lecture Hours: None Lab Hours: 2 - 3 Repeatable: 7 Grading: O
Open Curriculum: No prerequisite, corequisite or levels
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: E2 District GE: E2 IGETC: None

APE-056E - Adapted Physical Education - Units: 0.5 - 1

Adapted Weight Training

This course is designed for students with disabilities who are unable to participate in regular physical education Weight Training due to their disability and functional limitations. Students will learn proper Weight Training Techniques and Concepts. Students will learn their Student Education Contract Goals (S.E.C.) that will enhance muscular strength, flexibility, and endurance. Students with disabilities will learn how to perform progressive resistive exercises. Students will learn how to utilize nautilus and universal machineries in the fitness center.

Lecture Hours: None Lab Hours: 2 - 3 Repeatable: 7 Grading: O
Open Curriculum: No prerequisite, corequisite or levels
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: E2 District GE: E2 IGETC: None
Administration of Justice

**AJ-010 - Introduction to Administration of Justice**

This course covers the history and philosophy of administration of justice as it evolved throughout the world. It involves in-depth study of the American system and the various sub-systems; study of the roles and role expectations of criminal justice agents in their interrelationships in society; study of the concepts of crime causation, punishments and rehabilitation; and study of ethics, education and training for professionalism in the social system. This course is required for the major.

- **Lecture Hours:** 3
- **Lab Hours:** None
- **Repeatable:** No
- **Grading:** L

**AJ-011 - Criminal Law**

This course presents the historical development, philosophy and constitutional provisions of the law. It includes definitions and classifications of crime, and their applications to the system of administration of justice, legal research, review of case law methodology and concepts of law as a social force will be reviewed. It explores crimes against persons, property, and the state as a social, religious, and historical ideology. This course is required for the major.

- **Lecture Hours:** 3
- **Lab Hours:** None
- **Repeatable:** No
- **Grading:** L

**AJ-013 - Criminal Procedures**

This course covers legal processes from pre-arrest through trial, sentencing, and correctional procedures. It includes a review of the history of a case and common law; conceptual interpretation of law as reflected in court decisions; a study of case law methodology and case research as the decisions impact upon the procedures of the justice system. This course is required for the major.

- **Lecture Hours:** 3
- **Lab Hours:** None
- **Repeatable:** No
- **Grading:** L

**AJ-014 - Police and Society**

This course broadly views the relationship between police organizations and the diverse racial, ethnic and cultural communities they serve. Specific strategies for crime prevention and community policing, conflict resolution and victim assistance are studied as well as consideration of police relationships with the media, handling citizen complaints, and building amicable cross-cultural interaction. (Required for majors)

- **Lecture Hours:** 3
- **Lab Hours:** None
- **Repeatable:** No
- **Grading:** L

**AJ-015 - Introduction to Investigation**

This course covers the fundamentals of investigation, including techniques of crime scene search and recording, collection and preservation of physical evidence, modus operandi processes, sources of information, interview and interrogation, and follow-up investigation. This course is required for the major.

- **Lecture Hours:** 3
- **Lab Hours:** None
- **Repeatable:** No
- **Grading:** L

**AJ-103 - Patrol Procedures**

This course explores theories, methods, and concepts related to the roles expectations of the line enforcement officer. Emphasis is placed on the principal aspects and techniques of patrol, traffic, and public service responsibilities and their relationship to the Administration of Justice system.

- **Lecture Hours:** 3
- **Lab Hours:** None
- **Repeatable:** No
- **Grading:** L

**AJ-104 - Report Writing**

This course includes basic concepts of organization, content, and modus operandi reporting. It emphasizes felony and misdemeanor crime reporting and meets State of California requirements. It is strongly recommended for Administration of Justice majors who intend to enroll in Law Enforcement Academy and Reserve Officer Training courses.

- **Lecture Hours:** 3
- **Lab Hours:** None
- **Repeatable:** No
- **Grading:** L

**AJ-111 - Juvenile Law and Procedures**

This course covers the application of specific statutes from the Welfare and Institutions Code and the California Penal Code to the juvenile justice system. Particular focus is placed on the role of law enforcement, probation services, schools, and parents/guardians in responding to delinquency issues. Also included are discussions relating to gangs, juvenile sex offenders, mentally ill juvenile offenders, and juvenile victimization and exploitation.

- **Lecture Hours:** 3
- **Lab Hours:** None
- **Repeatable:** No
- **Grading:** L
**AJ-112** - Introduction to Evidence  
Units: 3  
The laws of evidence relating to burden of proof, admission and exclusion of evidence, the hearsay rule and its exceptions, relevance, the use of writings and real evidence, judicial notice, order of proof and presumptions, and issues relating to witness examination, competency and privileges.  
Lecture Hours: 3  
Lab Hours: 0  
Repeatable: No  
Grading: L  
CAN: None  
Advisory Level: Read: 2  
Write: 2  
Math: None  
Transfer Status: CSU  
Degree Applicable: AA/AS  
CSU GE: None  
District GE: None  
IGETC: None  

**AJ-113** - Crime and Violence in America  
Units: 3  
This course introduces theories of violence, predictors of violence, and approaches to crime measurement. Different forms of criminal homicide, sexual offenses, terrorism, gang and hate crimes, marital violence and elder abuse are addressed. The course examines the impact of violence on quality of life issues as well as exploring crime prevention and intervention strategies.  
Lecture Hours: 3  
Lab Hours: 0  
Repeatable: No  
Grading: L  
CAN: None  
Advisory Level: Read: 2  
Write: 2  
Math: None  
Transfer Status: CSU  
Degree Applicable: AA/AS  
CSU GE: None  
District GE: None  
IGETC: None  

**AJ-136** - Administration of Justice  
Occupational Work Experience-Parallel Plan  
Units: 1 - 4  
Occupational Work Experience is designed for students who work or volunteer in a field related to their vocational major. Students are required to provide evidence that they are enrolled in a vocational program (e.g., educational plan or coursework in a vocational subject area). The Parallel Plan is designed for students who wish to take classes and work during the same semester. A maximum of 4 units of Occupational Work Experience credit may be earned during any one semester, to a maximum of 16 units total. Students must be enrolled in at least 7 units including Work Experience units. Courses taken at other accredited colleges or equivalent course work may meet this requirement. Internship/job placement is not guaranteed.  
Lecture Hours: None  
Lab Hours: 3 - 12  
Repeatable: 15  
Grading: O  
Corequisite: 1) Be enrolled during the regular semester in a minimum of 7 units at any accredited college, including Work Experience units or; 2) During a summer session, be enrolled in at least one other class in addition to Work Experience; and 3) Be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.  
CAN: None  
Advisory Level: Read: 3  
Write: 3  
Math: None  
Transfer Status: CSU  
Degree Applicable: AA/AS  
CSU GE: None  
District GE: None  
IGETC: None  

**AJ-138** - Administration of Justice  
Occupational Work Experience-Artermate Plan  
Units: 1 - 8  
This course consists of AJ career-oriented work experience. It provides the student with new on-the-job-experiences or further develops and extends career skills previously learned or currently being developed by means of college career-oriented courses and disciplines. Emphasis is placed on application of learned knowledge and skills at the worksite and active employer participation. It must be taken during a semester during which the student is primarily working rather than taking college courses. Repeatable to a maximum of 16 units, including 8 units of general work experience.  
Lecture Hours: None  
Lab Hours: 3 - 24  
Repeatable: 15  
Grading: O  
Corequisite: 1. Need not be enrolled in any other class during the semester besides Work Experience. 2. May be enrolled in at most one other class in addition to Work Experience. 3. Must be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.  
CAN: None  
Advisory Level: Read: 3  
Write: 3  
Math: None  
Transfer Status: CSU  
Degree Applicable: AA/AS  
CSU GE: None  
District GE: None  
IGETC: None  

**Air Conditioning**  
**AI RC-098** - Directed Study in Air Conditioning  
Units: 0.5 - 9  
Individual or small groups of students who would benefit from Independent Study under the direction of faculty members in specific or related disciplines may develop individualized learning contracts designed to enhance their individual instructional programs. The students and the faculty member in consultation with the Division Dean will determine appropriate learning objectives and activities as well as the number of units to be earned. Instructions and the Learning Contract forms are available in the Division office. Repeatable to a maximum of 9 units across all disciplines.  
Lecture Hours: None  
Lab Hours: 1.5 - 27  
Repeatable: 17  
Grading: O  
CAN: None  
Advisory Level: Read: 2  
Write: 2  
Math: None  
Transfer Status: CSU  
Degree Applicable: AA/AS  
CSU GE: None  
District GE: None  
IGETC: None  

**AI RC-121** - Electrical Principles for Air Conditioning/Refrigeration  
Units: 4  
This introductory Air Conditioning course includes measurements and the fundamentals of psychrometrics, electrical control systems for heating and cooling, wiring techniques, and reading, drawing and interpreting schematic diagrams for air conditioning. Laboratory projects require application.  
Lecture Hours: 3  
Lab Hours: 3  
Repeatable: No  
Grading: L  
Credit by Exam: Yes  
Recommended: 3 units of MATH 310 with CR or placement based on assessment.  
CAN: None  
Advisory Level: Read: 2  
Write: 2  
Math: 1  
Transfer Status: None  
Degree Applicable: AS  
CSU GE: None  
District GE: None  
IGETC: None
AlRC-122 - Refrigeration Principles
This course introduces students to the tools, fittings, and materials involved in the construction of and servicing of refrigeration systems. Presented are the fundamentals of vapor compression systems, characteristics of refrigerants, compressors, heat exchangers, metering devices, evaporators, condensers, gas laws and basic thermodynamics. Instruction includes leak testing, evacuating, recovery/recycling and charging methods used in a variety of system types. This course does not include electrical systems.

Lecture Hours: 3  Lab Hours: 3  Repeatable: No  Grading: L
Credit by Exam: Yes
Recommended: 3 units of MATH 310 with CR or placement based on assessment.
CAN: None
Advisory Level: Read: 2  Write: 2  Math: 1
Transfer Status: None  Degree Applicable: AS
CSU GE: None  District GE: None  IGETC: None

AlRC-131 - Intermediate Air Conditioning
This course, a continuation of Air Conditioning 121 and 122, analyzes the total HVAC system including the air flow, water flow and electrical systems of common systems used in commercial and residential buildings. Emphasis is placed on the construction, operation, adjustment and troubleshooting of each system type.

Lecture Hours: 4  Lab Hours: 1.5  Repeatable: No  Grading: L
Prerequisite: A IRC 121 and A IRC 122, both with C or better
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: None  Degree Applicable: AS
CSU GE: None  District GE: None  IGETC: None

AlRC-132 - Refrigeration Service
This course covers refrigeration systems service, construction, operation, installation and repair. Commercial piping, line sizing, equipment selection and heat load calculations are introduced. Instruction includes walk-in coolers and freezers, ice machines, display cases, multiple evaporator systems, defrost systems and special application.

Lecture Hours: 4.5  Lab Hours: None  Repeatable: No  Grading: L
Prerequisite: A IRC 121 and A IRC 122, both with C or better
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: None  Degree Applicable: AS
CSU GE: None  District GE: None  IGETC: None

AlRC-136 - Air Conditioning Occupational Work Experience-Parallel Plan
Occupational Work Experience is designed for students who work or volunteer in a field related to their vocational major. Students are required to provide evidence that they are enrolled in a vocational program (e.g., educational plan or coursework in a vocational subject area). The Parallel Plan is designed for students who wish to take classes and work during the same semester. A maximum of 4 units of Occupational Work Experience credit may be earned during any one semester, to a maximum of 16 units total. Students may only take one (if any) class in addition to work experience. Internship/job placement is not guaranteed.

Lecture Hours: None  Lab Hours: 3 - 12  Repeatable: 15  Grading: O
Corequisite: 1) Be employed during the regular semester in a minimum of 7 units at any accredited college, including Work Experience units or; 2) During a summer session, be enrolled in at least one other class in addition to Work Experience; and 3) Be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.
CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

AlRC-138 - Air Conditioning Occupational Work Experience -- Alternate Plan
Occupational Work Experience is designed for students who work or volunteer in a field related to their vocational major. Students are required to provide evidence that they are enrolled in a vocational program (e.g., educational plan or coursework in a vocational subject area). The Alternate Plan is designed to allow students attend school one semester and work the next. A maximum of 8 units of Occupational Work Experience credit may be earned during any one semester, to a maximum of 16 units total. Students may only take one (if any) class in addition to work experience. Internship/job placement is not guaranteed.

Lecture Hours: None  Lab Hours: 3 - 24  Repeatable: 15  Grading: O
Corequisite: 1. Need not be enrolled in any other class during the semester besides Work Experience. 2. May be enrolled in at most one other class in addition to Work Experience. 3. Must be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.
CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

AlRC-141 - Hydronics and Air Distribution
This course includes the design, installation and service of hydronics heating and cooling systems and air distribution systems for air conditioning. Details of individual components such as fans, blowers, pumps, valves, ducts and piping. Boiler operation and safety are included. Related controls are discussed.

Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: L
Prerequisite: A IRC 131 and A IRC 132 or A IRC 101B and A IRC 102B, with C or better
CAN: None
Advisory Level: Read: 2  Write: 2  Math: 1
Transfer Status: None  Degree Applicable: AS
CSU GE: None  District GE: None  IGETC: None

AlRC-142 - Air Conditioning Control Systems
This course presents the theory, application and operation of HVAC control systems, including electric, pneumatic, solid state and digital control systems.

Lecture Hours: 4  Lab Hours: None  Repeatable: No  Grading: L
Prerequisite: A IRC 131 and A IRC 132 or A IRC 101B and A IRC 102B, with C or better
CAN: None
Advisory Level: Read: 2  Write: 2  Math: 1
Transfer Status: None  Degree Applicable: AS
CSU GE: None  District GE: None  IGETC: None

Alcohol and Drug Studies
ADS-070 - Introduction to Chemical Dependency
This course provides an overview of chemical dependency issues, including a historical perspective on alcohol and drug abuse and its impact on the community; the sociocultural factors that contribute to the use of drugs; issues for special populations; and the pattern and progression of chemical addiction.

Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: O
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

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<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
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<tr>
<td>ADS-071</td>
<td>Pharmacology/Physiology of Addiction</td>
<td>3</td>
<td>This course provides an in-depth look at the pharmacological and physiological effects of alcohol and other drugs; physical consequences of chemical dependency; and pharmacological/physiological treatment and recovery strategies.</td>
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<td>Degree Applicable: AA/AS</td>
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<td>CSU GE:</td>
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<tr>
<td>ADS-072</td>
<td>Codependency &amp; Family Dynamics</td>
<td>3</td>
<td>This course approaches codependency from both a medical and development model approach. Course topics include definitions and characteristics; Pia Mellody's Five Core Symptoms; genograms; dysfunctional and health family systems; inner child work; codependency and parenting; culture and codependency; reparenting; approaches to recovery; and tools of recovery.</td>
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<td>CSU GE:</td>
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<td>District GE: None</td>
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<tr>
<td>ADS-073</td>
<td>Case Management: Chemical Dependency</td>
<td>3</td>
<td>This course addresses assessment, orientation, treatment planning, recordkeeping, and relapse prevention (aftercare planning) from both medical and social models.</td>
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<td>CSU GE:</td>
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<tr>
<td>ADS-074</td>
<td>Ethics, Personal and Professional Growth</td>
<td>3</td>
<td>This course will address ethical, personal and professional concerns for alcohol and drug counselors, with an emphasis on continued individual growth and development. Ethical and professional standards, credentialing requirements, assessment of personal strengths and weaknesses, burnout and stress management, recovery implications for counselors, and peer networking will be examined as components of a personal professional growth plan.</td>
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<td>CAN:</td>
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<td>CSU GE:</td>
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<td>District GE: None</td>
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<tr>
<td>ADS-075</td>
<td>Individual, Family, Group Counseling</td>
<td>3</td>
<td>This course addresses the theories and purposes of various counseling approaches with individuals, groups, and families. Counseling is defined here as a relationship in which the counselor helps the client to mobilize resources to resolve his/her problem and/or to modify attitudes and behavior.</td>
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<td>CSU GE:</td>
<td>None</td>
<td>District GE: None</td>
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<tr>
<td>ADS-076</td>
<td>Law and Prevention: Community Response</td>
<td>3</td>
<td>This course examines how the community responds to addiction through alcohol and drug laws, prevention programs, education programs, outreach programs and referral programs.</td>
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<tr>
<td>ADS-077A</td>
<td>Supervised Practicum A</td>
<td>3</td>
<td>A student in this course will begin the 255 hours of clinical counseling experience in an approved CD treatment facility where direct supervision is provided by a staff person meeting CAADAC approved standards. The instructor provides general supervision and guidance for integrating the components of the course and consults at regular intervals with the student and agency supervisor. The field work practicum is the means by which students learn to apply and integrate the acquired knowledge and values, and to refine the skills taught in the classroom. This &quot;learning by doing&quot; practicum is required for certification and essential to adequate preparation for professional practice.</td>
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<td>CSU GE:</td>
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<tr>
<td>ADS-077B</td>
<td>Supervised Practicum B</td>
<td>3</td>
<td>A student in this course will complete the 255 hours of clinical counseling experience in an approved CD treatment facility where direct supervision is provided by a staff person meeting CAADAC approved standards. The instructor provides general supervision and guidance for integrating the components of the course and consults at regular intervals with the student and agency supervisor. The field work practicum is the means by which students learn to apply and integrate the acquired knowledge and values, and to refine the skills taught in the classroom. This &quot;learning by doing&quot; practicum is required for certification and essential to adequate preparation for professional practice.</td>
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<td>CSU GE:</td>
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ADS-078 - Current Issues in Alcohol and Drug Treatment

This course explores current trends and controversies in the Chemical Dependency Treatment field. Instruction will provide the most current information available for a variety of topics including: dual diagnosis, criminal justice and addiction, multicultural issues in treatment, developments in program design and outcome studies, advances in adolescent treatment application of current research to the treatment of special population groups, treatment philosophies of harm reduction vs. abstinence as a marker of successful treatment of special population groups, treatment philosophies of harm reduction vs. abstinence as a marker of successful treatment, effective use of outside resources, such as self-help groups, spirituality, and alternative medicine, and relapse prevention.

Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: O

Prequisite: ADS 070

CAN: None

Advisory Level:
Read: 2  Write: 2  Math: None

Transfer Status: CSU
Degree Applicable: AA/AS

CSU GE: None  District GE: None  IGETC: None

ADS-136 - Alcohol and Drug Studies

Occupational Work Experience is designed for students who work or volunteer in a field related to their vocational major. Students are required to provide evidence that they are enrolled in a vocational program (e.g., educational plan or coursework in a vocational subject area). The Parallel Plan is designed for students who wish to take classes and work during the same semester. A maximum of 4 units of Occupational Work Experience credit may be earned during any one semester, to a maximum of 16 units total. Students must be enrolled in at least 7 units including Work Experience units. Courses taken at other accredited colleges or equivalent course work may meet this requirement.

Lecture Hours: None  Lab Hours: 3 - 12  Repeatable: 15  Grading: O

Corequisite: 1) Be enrolled during the regular semester in a minimum of 7 units at any accredited college, including Work Experience units or; 2) During a summer session, be enrolled in at least one other class in addition to Work Experience; and 3) Be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 or 60 unpaid hours of work.

CAN: None

Advisory Level:
Read: 3  Write: 3  Math: None

Transfer Status: CSU
Degree Applicable: AA/AS

CSU GE: None  District GE: None  IGETC: None

ANTH-062 - Introduction to Physical Anthropology

The course will examine human variation including adaptive and non-adaptive variation in genetic and physical traits. Topics will include evolutionary mechanisms, genetic anomalies and diseases, world distributions of genetic variants, and human evolution. By studying the behavior and genetics of our closest relatives, the primates, the course will derive hypotheses about our ancestry. Finally, this course will examine fossil evidence to reconstruct the life and times of our ancestors.

Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: L

CAN: ANTH 2

Advisory Level:
Read: 2  Write: 2  Math: None

Transfer Status: CSU/UC
Degree Applicable: AA/AS

CSU GE: D1  District GE: D  IGETC: 4A

ANTH-063 - Introduction to Social and Cultural Anthropology

Cultural factors in anthropology including the nature, growth, and history of culture and cultural phenomena, social organization, religion, and language. The objective of this course is to introduce the student to the basic concepts, terminology, theories and methods of cultural anthropology and to explain the relationships of ethnology to the discipline of anthropology as a whole. The approach is explanatory and comparative. Topics will include concepts of culture and cultural processes; folkways, norms and sanctions; structuralism; proto-human beginnings; communication, language and culture; human ecology; economic patterns, technology and culture; mating, marriage, family and kinship systems; social groups, social strata, social control; governance; ideologies; conflict and war; magic and religion; philosophy and ethics; and human creativeness.

Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: L

CAN: ANTH 4

Advisory Level:
Read: 2  Write: 2  Math: None

Transfer Status: CSU/UC
Degree Applicable: AA/AS

CSU GE: D1  District GE: D  IGETC: 4A

ART-012 - Two-Dimensional Design

This course is an introduction to the theories and application of design in two-dimensional (flat surface) form. Students study the elements and principles of design, using a variety of tools, techniques, and mediums which may include graphite, charcoal, ink, cut paper, collage, water-based paints, and other materials at the instructor's discretion, in a studio lab setting. Concepts are introduced and clarified through lecture and demonstration. Field trips may be included. This course is 3 units, with two hours of lab for every hour of lecture. Two Dimensional Design is a core foundation art course for AA degree and transfer.

Lecture Hours: 2  Lab Hours: 4  Repeatable: No  Grading: O

CAN: ART 14

Advisory Level:
Read: 3  Write: 3  Math: 1

Transfer Status: CSU/UC
Degree Applicable: AA/AS

CSU GE: None  District GE: None  IGETC: None

ANTH-062 - Introduction to Physical Anthropology

The course will examine human variation including adaptive and non-adaptive variation in genetic and physical traits. Topics will include evolutionary mechanisms, genetic anomalies and diseases, world distributions of genetic variants, and human evolution. By studying the behavior and genetics of our closest relatives, the primates, the course will derive hypotheses about our ancestry. Finally, this course will examine fossil evidence to reconstruct the life and times of our ancestors.

Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: L

CAN: ANTH 2

Advisory Level:
Read: 2  Write: 2  Math: None

Transfer Status: CSU/UC
Degree Applicable: AA/AS

CSU GE: D1  District GE: D  IGETC: 4A

ANTH-063 - Introduction to Social and Cultural Anthropology

Cultural factors in anthropology including the nature, growth, and history of culture and cultural phenomena, social organization, religion, and language. The objective of this course is to introduce the student to the basic concepts, terminology, theories and methods of cultural anthropology and to explain the relationships of ethnology to the discipline of anthropology as a whole. The approach is explanatory and comparative. Topics will include concepts of culture and cultural processes; folkways, norms and sanctions; structuralism; proto-human beginnings; communication, language and culture; human ecology; economic patterns, technology and culture; mating, marriage, family and kinship systems; social groups, social strata, social control; governance; ideologies; conflict and war; magic and religion; philosophy and ethics; and human creativeness.

Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: L

CAN: ANTH 4

Advisory Level:
Read: 2  Write: 2  Math: None

Transfer Status: CSU/UC
Degree Applicable: AA/AS

CSU GE: D1  District GE: D  IGETC: 4A

ART-012 - Two-Dimensional Design

This course is an introduction to the theories and application of design in two-dimensional (flat surface) form. Students study the elements and principles of design, using a variety of tools, techniques, and mediums which may include graphite, charcoal, ink, cut paper, collage, water-based paints, and other materials at the instructor's discretion, in a studio lab setting. Concepts are introduced and clarified through lecture and demonstration. Field trips may be included. This course is 3 units, with two hours of lab for every hour of lecture. Two Dimensional Design is a core foundation art course for AA degree and transfer.

Lecture Hours: 2  Lab Hours: 4  Repeatable: No  Grading: O

CAN: ART 14

Advisory Level:
Read: 3  Write: 3  Math: 1

Transfer Status: CSU/UC
Degree Applicable: AA/AS

CSU GE: None  District GE: None  IGETC: None

ANTH-062 - Introduction to Physical Anthropology

The course will examine human variation including adaptive and non-adaptive variation in genetic and physical traits. Topics will include evolutionary mechanisms, genetic anomalies and diseases, world distributions of genetic variants, and human evolution. By studying the behavior and genetics of our closest relatives, the primates, the course will derive hypotheses about our ancestry. Finally, this course will examine fossil evidence to reconstruct the life and times of our ancestors.

Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: L

CAN: ANTH 2

Advisory Level:
Read: 2  Write: 2  Math: None

Transfer Status: CSU/UC
Degree Applicable: AA/AS

CSU GE: D1  District GE: D  IGETC: 4A

ANTH-063 - Introduction to Social and Cultural Anthropology

Cultural factors in anthropology including the nature, growth, and history of culture and cultural phenomena, social organization, religion, and language. The objective of this course is to introduce the student to the basic concepts, terminology, theories and methods of cultural anthropology and to explain the relationships of ethnology to the discipline of anthropology as a whole. The approach is explanatory and comparative. Topics will include concepts of culture and cultural processes; folkways, norms and sanctions; structuralism; proto-human beginnings; communication, language and culture; human ecology; economic patterns, technology and culture; mating, marriage, family and kinship systems; social groups, social strata, social control; governance; ideologies; conflict and war; magic and religion; philosophy and ethics; and human creativeness.

Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: L

CAN: ANTH 4

Advisory Level:
Read: 2  Write: 2  Math: None

Transfer Status: CSU/UC
Degree Applicable: AA/AS

CSU GE: D1  District GE: D  IGETC: 4A

ART-012 - Two-Dimensional Design

This course is an introduction to the theories and application of design in two-dimensional (flat surface) form. Students study the elements and principles of design, using a variety of tools, techniques, and mediums which may include graphite, charcoal, ink, cut paper, collage, water-based paints, and other materials at the instructor's discretion, in a studio lab setting. Concepts are introduced and clarified through lecture and demonstration. Field trips may be included. This course is 3 units, with two hours of lab for every hour of lecture. Two Dimensional Design is a core foundation art course for AA degree and transfer.

Lecture Hours: 2  Lab Hours: 4  Repeatable: No  Grading: O

CAN: ART 14

Advisory Level:
Read: 3  Write: 3  Math: 1

Transfer Status: CSU/UC
Degree Applicable: AA/AS

CSU GE: None  District GE: None  IGETC: None
ART-013 - Three-Dimensional Design  Units: 3
This course is an introduction to the theories and applications of design in three-dimensional form in space. Students study the elements and principles of design, using a variety of tools, techniques, and mediums which may include wire, cardboard, clay, wood, plaster, and other materials at the instructor's discretion, in a studio lab setting. Concepts are introduced and clarified through lecture and demonstration. Field trips may be included. This course is 3 units, with two hours of lab for every hour of lecture. Three-Dimensional Design is a core foundation art course for AA degree and transfer.
Lecture Hours: 2  Lab Hours: 4  Repeatable: No  Grading: O
CAN: ART 16
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

ART-014 - Color  Units: 3
Color Theory is a course in the principles of color and its design as relating to the fine art, applied art and design concentration. The physical, psychological, and emotional properties of color are explored in a laboratory setting emphasizing direct application in the art studio. Field trips may be taken as needed. Color is a core art course for AA degree and transfer art program (NACAD).
Lecture Hours: 2  Lab Hours: 4  Repeatable: No  Grading: O
Open Curriculum: No prerequisite, corequisite or levels
CAN: ART 22
Advisory Level: Read: None  Write: None  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

ART-024 - Beginning Drawing  Units: 3
This course is an introduction to the fundamental elements and principles of drawing. Lecture and studio practice will emphasize a variety of media, tools, and techniques in studying the elements of line, form, volume, space, value, perspective, texture, and color. The compositional interrelationship of these elements will include the study of balance, proportion, unity, contrast, rhythm, repetition, and scales. The course will also include field trips and journal writing. Basic drawing is a core course for the AA degree and transfer.
Lecture Hours: 2  Lab Hours: 4  Repeatable: No  Grading: O
Open Curriculum: No prerequisite, corequisite or levels
CAN: ART 8
Advisory Level: Read: None  Write: None  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

ART-025 - Expressive Drawing  Units: 3
Expressive drawing is a course which expands the use of the principles, materials, and tools of drawing into the visual fields of emotion, psychology, and social comment, emphasizing both the inner and outer worlds. The course will stress developing personal imagery in independent projects. It will encourage developing a philosophy about a way of working and making statements. The course will also include field trips and journal writing. Expressive drawing is a core for the Art AA degree and transfer.
Lecture Hours: 2  Lab Hours: 4  Repeatable: No  Grading: O
Prerequisite: ART 024
CAN: None
Advisory Level: Read: None  Write: None  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

ART-026 - Representational Drawing and Perspective  Units: 3
The representational drawing course teaches students to draw accurate, realistic two-dimensional representations of three-dimensional subjects, based on visual observation. While there will be particular emphasis on the drawing elements of light, volume and linear perspective in this course, compositional principles will also be explored. A variety of drawing media, techniques and methods will be used during this course. This is a core course for the Art AA and transfer major and is highly recommended for graphics and interior design majors.
Lecture Hours: 2  Lab Hours: 4  Repeatable: No  Grading: O
Prerequisite: ART 024
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

ART-028 - Digital Drawing and Painting  Units: 3
This is an introductory course in drawing and painting on the computer. Students will learn traditional and contemporary techniques in conjunction with digital imaging software and pressure-sensitive tablets. Students will also create a digital portfolio and learn about preparing work for printing and other forms of output.
Lecture Hours: 2  Lab Hours: 4  Repeatable: No  Grading: O
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

ART-028L - Digital Drawing and Painting Laboratory  Units: 1
This laboratory course is subsequent and supplementary to Art 28, Digital Drawing and Painting, and provides hands-on computer experience using digital imaging software and pressure-sensitive tablets to augment and demonstrate concepts presented in Art 28. Students will also create a digital portfolio and learn about preparing work for printing and other forms of output. Repeatable to a maximum of 4 units.
Lecture Hours: None  Lab Hours: 3  Repeatable: 3  Grading: O
Prerequisite: ART 028
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

ART-046A - Beginning Ceramics I  Units: 3
This course is a beginning clay construction including pinch, coil and slab, methods of ornamentation, glazing, and firing, introduction to the potter's wheel. Field trips may be required.
Lecture Hours: 2  Lab Hours: 4  Repeatable: No  Grading: O
Open Curriculum: No prerequisite, corequisite or levels
CAN: ART 6
Advisory Level: Read: None  Write: None  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None
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<tr>
<td>ART-046B</td>
<td>- Beginning Ceramics II</td>
<td>3</td>
<td>This is a course emphasizing individual aesthetic development and personal expression through the use of the potter’s wheel and advanced building technique. Glaze testing and field trips will be required.</td>
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<td>Lecture Hours: 2</td>
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<td>Lab Hours: 4</td>
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<tr>
<td></td>
<td>Prerequisite: ART 046A</td>
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<td>Transfer Status: CSU/UC</td>
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<td>Degree Applicable: AA/AS</td>
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<tr>
<td>ART-047</td>
<td>- Graphic Design I</td>
<td>3</td>
<td>This course deals with problem solving in graphic communication with the concrete application of theories and techniques of graphic design, including typography, page layout, color use, designing for the internet and prepress issues. The emphasis will be on the development of projects from concept to completion.</td>
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<tr>
<td></td>
<td>Lecture Hours: 2</td>
<td></td>
<td>Lab Hours: 4</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: ART 012</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Recommended: ART 028 or ART 072 or PHOTO 076</td>
<td></td>
<td>Students should be familiar with the computer.</td>
</tr>
<tr>
<td></td>
<td>CAN: None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART-047B</td>
<td>- Graphic Design 2</td>
<td>3</td>
<td>In this course, students who have completed Graphic Design 1 will complete more advanced analysis and creation of graphic design projects in a computer-based lab setting.</td>
</tr>
<tr>
<td></td>
<td>Lecture Hours: 2</td>
<td></td>
<td>Lab Hours: 4</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: ART 047</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART-055A</td>
<td>- Life Drawing I</td>
<td>3</td>
<td>Life Drawing I is introduction to drawing the human figure. Live models and photo references are used in this course to give students the opportunity to practice drawing a variety of views of the figure. The techniques of gesture, contour, and volumetric rendering will be explored through various media. Students will gain knowledge of proportion, anatomy and foreshortening by practicing the skills of sighting, substructure and construction utilizing the skeleton as well as model. Recommended for all Art majors.</td>
</tr>
<tr>
<td></td>
<td>Lecture Hours: 2</td>
<td></td>
<td>Lab Hours: 4</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: ART 024</td>
<td></td>
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<tr>
<td></td>
<td>Transfer Status: CSU/UC</td>
<td></td>
<td>Degree Applicable: AA/AS</td>
</tr>
<tr>
<td>ART-055B</td>
<td>- Life Drawing II</td>
<td>3</td>
<td>Life Drawing II is an intermediate course in drawing the human figure. Composition, issues of content, and individual techniques are stressed, encouraging the student to use the figure as a means of expression in aesthetically resolved art work. This course also introduces the use of color in relation to the figure.</td>
</tr>
<tr>
<td></td>
<td>Lecture Hours: 2</td>
<td></td>
<td>Lab Hours: 4</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: ART 055A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART-060</td>
<td>- Beginning Painting I</td>
<td>3</td>
<td>This course provides studio practice in painting, using traditional and experimental oil and water base media. Demonstrations and illustrated lecture using the different media on canvas and synthetic supports given and traditional and contemporary painting methods will be explored. Recommended for all Art majors.</td>
</tr>
<tr>
<td></td>
<td>Lecture Hours: 2</td>
<td></td>
<td>Lab Hours: 4</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: ART 014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART-061</td>
<td>- Beginning Painting II</td>
<td>3</td>
<td>In this course, individual style and personal aesthetic development are emphasized. Students can work in either acrylic or oils. Stretching canvas and framing paintings are learned. In addition to studio projects, curriculum may include critiques, slide lectures and field trips.</td>
</tr>
<tr>
<td></td>
<td>Lecture Hours: 2</td>
<td></td>
<td>Lab Hours: 4</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: ART 060</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART-071</td>
<td>- Introduction to Multimedia</td>
<td>3</td>
<td>This course will cover the key concepts of interactive multimedia, including its history, hardware and software, current applications, tools and techniques, aesthetics, content development, and career development. It will also include the development of a short multimedia piece. Field trips may be scheduled.</td>
</tr>
<tr>
<td></td>
<td>Lecture Hours: 2</td>
<td></td>
<td>Lab Hours: 4</td>
</tr>
<tr>
<td></td>
<td>CAN: None</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transfer Status: CSU</td>
<td></td>
<td>Degree Applicable: AA/AS</td>
</tr>
</tbody>
</table>
ART-072 - Computer Graphics  Units: 3
This is a computer based course in the fundamental elements and principles of design that are used by all designers. Topics will include composition, balance, line, shape, texture, value, color and scale. Technical issues such as resolution, color depth, types of color systems (RGB, CYMK) and anti-aliasing will also be covered.
Lecture Hours: 2  Lab Hours: 4  Repeatable: No  Grading: O
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

ART-074 - Multimedia Design and Development  Units: 3
This course will focus on how to develop, analyze and produce a multimedia project. Topics will include script writing, storyboard, organizational models, interaction and interface design, authoring and production methods. Students will use authoring, digitizing and imaging software to develop a short interactive multimedia production.
Lecture Hours: 2  Lab Hours: 4  Repeatable: No  Grading: O
Prerequisite: ART 071 or ART 078 or ART 084 or ART 084A with C or better
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

ART-076 - Portfolio Preparation and Professional Development  Units: 3
This course deals with the professional aspects of a career in multimedia. Students will focus on developing a high quality portfolio and presenting their portfolio to professionals for review. The course will also include an in depth analysis of various multimedia careers and the challenges they pose, including the rapid rate of evolution in the field and the importance of time and money management for temporary workers.
Lecture Hours: 2  Lab Hours: 4  Repeatable: No  Grading: O
Prerequisite: ART 074
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

ART-077 - Beginning 3D Animation  Units: 3
In this course, students will learn the basic principles of 3D modeling and animation using professional level software. Concepts and practices such as object modeling, surface and texture maps, motion theory and rendering will be covered. Field trips may be required.
Lecture Hours: 2  Lab Hours: 4  Repeatable: No  Grading: L
Recommended: ART 072
CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

ART-078 - Digital Video  Units: 3
In this course, students will learn how to shoot, download, edit and digitize video for use in a variety of media. Topics will include an overview of tools available for digital video production, selecting and/or creating video, audio and graphic elements, digitizing and editing video and audio elements. Copyright and legal issues will be discussed. Field trips may be required.
Lecture Hours: 2  Lab Hours: 4  Repeatable: No  Grading: L
CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

ART-079A - Web Design I  Units: 3
This course will cover the key concepts of building well-designed and functional web sites. Topics will include analysis of web architecture, an introduction to HTML, creation of web appropriate graphics, and web usability issues.
Lecture Hours: 2  Lab Hours: 4  Repeatable: No  Grading: L
CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

ART-079B - Web Design 2  Units: 3
In this course, students who have completed Web Design 1 will take their skills to the next level. Topics will include analysis and deconstruction of a variety of web sites, site mapping and information design, marketing, advanced design concepts, integrating media. Students will work on individual and group projects.
Lecture Hours: 2  Lab Hours: 4  Repeatable: No  Grading: L
Prerequisite: ART 079A with C or better
CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

ART-081 - Intermediate 3D Animation  Units: 3
In this course, students build upon the basic skills of 3D modeling and animation learned in Introduction to 3D animation. Concepts and practices such as complex object modeling, advanced surfaces, lighting strategies, character development and animation, rendering and output will be covered.
Lecture Hours: 2  Lab Hours: 4  Repeatable: No  Grading: L
Prerequisite: ART 077
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None
<table>
<thead>
<tr>
<th>ART-083</th>
<th>Multimedia Project Studio</th>
<th>Units: 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>In this course, students will work in teams to plan and produce multimedia projects for real clients. This will give students the kind of experience that is crucial for employment in the multimedia field. The emphasis will be on applying skills in writing, editing, design, production and presentation, meeting deadlines, working with clients, managing projects and developing team skills. Projects developed by students will be included in their portfolios.</td>
<td></td>
<td></td>
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<tr>
<td>Lecture Hours: 2</td>
<td>Lab Hours: 4</td>
<td>Repeatable: No</td>
</tr>
</tbody>
</table>

Recommended: Computer Literacy, knowledge of imaging software.

CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

<table>
<thead>
<tr>
<th>ART-084A</th>
<th>Flash 1</th>
<th>Units: 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>In this course, students will plan, develop, test and post a Web site using Macromedia Flash, a powerful tool for creating animated Web sites. Topics include vector and bitmap graphic images, two and three dimensional animation, labels and actions, audio and video for the web, interface elements and design, symbols and libraries, commands and scripting, testing, integration and distribution.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lecture Hours: 2</td>
<td>Lab Hours: 4</td>
<td>Repeatable: No</td>
</tr>
</tbody>
</table>

CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

<table>
<thead>
<tr>
<th>ART-084B</th>
<th>Flash 2</th>
<th>Units: 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>In this course, students will learn to create animation and interactivity using Macromedia Flash. The emphasis will be on learning basic ActionScript script writing and developing more complex presentations in Flash.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lecture Hours: 2</td>
<td>Lab Hours: 4</td>
<td>Repeatable: No</td>
</tr>
</tbody>
</table>

Prerequisite: ART 084 or ART 084A with C or better
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

<table>
<thead>
<tr>
<th>ART-085</th>
<th>The Digital Documentary</th>
<th>Units: 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>This course combines communication and writing with digital video production. Students work individually and in teams to script, storyboard, shoot and edit documentary projects on a variety of subjects.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lecture Hours: 3 - 2</td>
<td>Lab Hours: 4</td>
<td>Repeatable: No</td>
</tr>
</tbody>
</table>

Prerequisite: ART 078 with C or better
Corequisite: Or Concurrent enrollment in ART 078
CAN: None
Advisory Level: Read: 3 Write: 3 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

<table>
<thead>
<tr>
<th>ART-089</th>
<th>Special Projects in Ceramics</th>
<th>Units: 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplemental work for ceramics students to provide opportunities to improve and develop skills in a specialized area of ceramic art.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lecture Hours: 2</td>
<td>Lab Hours: 4</td>
<td>Repeatable: No</td>
</tr>
</tbody>
</table>

Prerequisite: ART 046B
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

<table>
<thead>
<tr>
<th>ART-091</th>
<th>Survey of Art History: Prehistoric Through Gothic</th>
<th>Units: 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>This course is an illustrated survey of Art History from prehistoric times through the Middle Ages. Course content emphasizes architecture, painting and sculpture from the most important civilized centers of the world, and how art reflects historical occurrences and the social, political, and religious attitudes of the time. Presentation of the material is through visual presentation using current technologies that includes comparative analysis and critical evaluation of aesthetics. Topics include ancient Egyptian, Mesopotamian, Greek, Roman, early and medieval Christian, and Islamic art, plus units on major artistic movements that were occurring in Africa, Latin America and Asia. Field trips may be included.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lecture Hours: 3</td>
<td>Lab Hours: None</td>
<td>Repeatable: No</td>
</tr>
</tbody>
</table>

CAN: ART 2; ART SEQ A = ART 91+92
Advisory Level: Read: 3 Write: 3 Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: C1 District GE: C1 IGETC: 3A

<table>
<thead>
<tr>
<th>ART-092</th>
<th>Survey of Art History: Renaissance to the Present</th>
<th>Units: 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>This course is an illustrated survey of Art History from the early Italian Renaissance to the present day. Course content emphasizes architecture, painting and sculpture from the most important civilized centers of the world, and how art reflects historical occurrences and the social, political, and religious attitudes of the time. Presentation of the material is through visual presentation using current technologies that includes comparative analysis and critical evaluation of aesthetics. This course will also present alternative modes of art making, such as performance art, and non-traditional, non-western trends in artistic expression. Field trips may be included.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lecture Hours: 3</td>
<td>Lab Hours: None</td>
<td>Repeatable: No</td>
</tr>
</tbody>
</table>

CAN: ART 4; ART SEQ A = ART 92+91
Advisory Level: Read: 3 Write: 3 Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: C1 District GE: C1 IGETC: 3A

<table>
<thead>
<tr>
<th>ART-098</th>
<th>Directed Study in Art</th>
<th>Units: 0.5 - 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual or small groups of students who would benefit from Independent Study under the direction of faculty members in specific or related disciplines may develop individualized learning contracts designed to enhance their individual instructional programs. The students and the faculty member in consultation with the Division Dean will determine appropriate learning objectives and activities as well as the number of units to be earned. Instructions and the Learning Contract forms are available in the Division office. Repeatable to a maximum of 9 units across all disciplines.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lecture Hours: None</td>
<td>Lab Hours: 1.5 - 18</td>
<td>Repeatable: 17</td>
</tr>
</tbody>
</table>

CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None
ASTRO-010 - Introduction to Astronomy  Units: 3

Astronomy 10 is an introductory course in general astronomy. Its topics include the history of astronomy and the development of modern astrophysics, the structure and origin of the solar system and the Milky Way, the birth and death of stars, galaxies, and the search for extraterrestrial life. The Scientific Method and the fundamental laws of physics are stressed. Special emphasis is placed on recent research in astronomy and the latest discoveries and tools used in modern astronomy. Astronomy 10 satisfies the requirement for a general education course in Physical Science without lab.

Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: L

CAN: None
Advisory Level: Read: 2  Write: 2  Math: 1
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: B1  District GE: B  IGETC: 5A

ASTRO-010L - Introductory Astronomy Lab  Units: 1

Astronomy 10L is an introductory laboratory course in general astronomy. It can be taken alone or in conjunction with Astronomy 10. The course includes the use of telescopes and other tools of the astronomer, exploration of the motions of the planets, stars and galaxies, and the search for intelligent life in the Universe.

Lecture Hours: None  Lab Hours: 3  Repeatable: 1  Grading: L

CAN: None
Advisory Level: Read: 3  Write: 3  Math: 1
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: B1, B3  District GE: B1, BL  IGETC: None

ASTRO-012 - Introduction to Cosmology  Units: 3

Survey of modern cosmology - the origin and nature of the Universe and mankind's place in it. Topics will include all the recent observational discoveries in cosmology and the proposed cosmological models, theories of structure formation in the universe, black-holes, quasars, vacuum energy, string theory and extra-terrestrial life.

Lecture Hours: 3  Lab Hours: 0  Repeatable: No  Grading: L

Recommended: Basic astronomy course

CAN: None
Advisory Level: Read: 3  Write: 3  Math: 2
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: B1  District GE: B  IGETC: 5A

Athletics Intercollegiate Men

ATHM-010 - Intercollegiate Baseball  Units: 3

Intercollegiate baseball emphasizes intercollegiate team competition. The player must have participated in high school varsity baseball or equivalent to take this class.

Lecture Hours: None  Lab Hours: 10  Repeatable: 3  Grading: L

Corequisite: ATHM 200, medical examination clearance and athletic eligibility per Commission on Athletics Constitution and by-laws.

CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

ATHM-012 - Intercollegiate Basketball  Units: 3

This is an athletic course designed to teach students the basic fundamental skills of basketball and to develop a total team concept, while competing on a very high level of competition. This class may be offered at the intermediate or advanced skill level.

Lecture Hours: None  Lab Hours: 10  Repeatable: 3  Grading: L

Corequisite: ATHM 200, medical examination clearance and athletic eligibility per Commission on Athletics Constitution and by-laws.

CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

ATHM-018 - Intercollegiate Cross Country  Units: 3

This is a physical activity course designed to teach students the skills needed for cross country. Students will be given an opportunity to practice and compete on an intercollegiate level.

Lecture Hours: None  Lab Hours: 10  Repeatable: 3  Grading: L

Corequisite: ATHM 200, medical examination clearance and athletic eligibility per Commission on Athletics Constitution and by-laws.

CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None
ATHM-020  -  Intercollegiate Football  Units: 3

This is a physical education football activities course, with emphasis on
intercollegiate competition in team sports.

Lecture Hours: None  Lab Hours: 10  Repeatable: 3  Grading: L

Corequisite: ATHM 200, medical examination clearance and athletic eligibility per
Commission on Athletics Constitution and by-laws.

CAN: None
Advisory Level:  Read: 3  Write: 3  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

ATHM-024  -  Intercollegiate Golf  Units: 3

This course emphasizes all aspects of intercollegiate golf on a competitive level.
The course will cover all shot making techniques as well as the philosophical and
psychological approaches to the game.

Lecture Hours: None  Lab Hours: 10  Repeatable: 3  Grading: L

Corequisite: ATHM 200, medical examination clearance and athletic eligibility per
Commission on Athletics Constitution and by-laws.

CAN: None
Advisory Level:  Read: 3  Write: 3  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

ATHM-048  -  Intercollegiate Track and Field  Units: 3

This course emphasizes all aspects of intercollegiate track and field on a
competitive level. Students will be given the opportunity to practice and compete
on an intercollegiate basis.

Lecture Hours: None  Lab Hours: 10  Repeatable: 3  Grading: L

Corequisite: ATHM 200, medical examination clearance and athletic eligibility per
Commission on Athletics Constitution and by-laws.

CAN: None
Advisory Level:  Read: 3  Write: 3  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

ATHM-098  -  Directed Study in Athletics-  Units: 0.5 - 9
Intercollegiate Men

Individual or small groups of students who would benefit from Independent Study
under the direction of faculty members in specific or related disciplines may
develop individualized learning contracts designed to enhance their individual
instructional programs. The students and the faculty member in consultation with
the Division Dean will determine appropriate learning objectives and activities as
well as the number of units to be earned. Instructions and the Learning Contract
forms are available in the Division office. Repeatable to a maximum of 9 units
across all disciplines.

Lecture Hours: None  Lab Hours: 1.5 - 27  Repeatable: 17  Grading: O

CAN: None
Advisory Level:  Read: 2  Write: 2  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

ATHM-200  -  Supervised Skills Lab  Units: None

Supplemental practice and/or instruction is offered students in a specific
discipline. Projects are assigned in courses of concurrent enrollment. General
consultation and supervision are provided by the faculty members in charge.

Lecture Hours: 0  Lab Hours: 0  Repeatable: 19 Grading: N

Corequisite: ATHM 010 or ATHM 012 or ATHM 018 or ATHM 020 or ATHM 024 or
ATHM 48

CAN: None
Advisory Level:  Read: None  Write: None  Math: None
Transfer Status: None  Degree Applicable: NC
CSU GE: None  District GE: None  IGETC: None

ATHW-012  -  Intercollegiate Basketball  Units: 3

This is an athletic course designed to help students increase their knowledge and
physical skills required for playing basketball. This class may be offered at the
intermediate or advanced skill level.

Lecture Hours: None  Lab Hours: 10  Repeatable: 3  Grading: L

Corequisite: ATHW 200, medical examination clearance and athletic eligibility per
Commission on Athletics Constitution and by-laws.

CAN: None
Advisory Level:  Read: 3  Write: 3  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

ATHW-018  -  Intercollegiate Cross Country  Units: 3

This is a physical activity course designed to teach students the skills needed for
cross country. Students will be given an opportunity to practice and compete on
an intercollegiate level.

Lecture Hours: None  Lab Hours: 10  Repeatable: 3  Grading: L

Corequisite: ATHW 200, medical examination clearance and athletic eligibility per
Commission on Athletics Constitution and by-laws.

CAN: None
Advisory Level:  Read: 3  Write: 3  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

ATHW-040  -  Intercollegiate Softball  Units: 3

This course is designed to teach the student various aspects of intercollegiate
softball. Emphasis will be placed on developing skills necessary to compete at
the collegiate level.

Lecture Hours: None  Lab Hours: 10  Repeatable: 3 Grading: L

Corequisite: ATHM 200, medical examination clearance and athletic eligibility per
Commission on Athletics Constitution and by-laws.

CAN: None
Advisory Level:  Read: 3  Write: 3  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None
ATHW-048 - Intercollegiate Track and Field  Units: 3
This course emphasizes all aspects of intercollegiate track and field on a competitive level. Students will be given the opportunity to practice and compete on an intercollegiate basis.
Lecture Hours: None  Lab Hours: 10  Repeatable: 3  Grading: L
Corequisite: ATHM 200, medical examination clearance and athletic eligibility per Commission on Athletics Constitution and by-laws.
CAN: None
Advisory Level:  Read: 3  Write: 3  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

ATHW-052 - Intercollegiate Volleyball  Units: 3
This course is designed to teach students various aspects of intercollegiate volleyball. Emphasis will be placed on developing the skills necessary to compete at the collegiate level.
Lecture Hours: None  Lab Hours: 10  Repeatable: 3  Grading: L
Corequisite: ATHW 200, medical examination clearance and athletic eligibility per Commission on Athletics Constitution and By-Laws.
CAN: None
Advisory Level:  Read: 3  Write: 3  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

ATHW-098 - Directed Study in Athletics Intercollegiate Women  Units: 0.5 - 9
Individual or small groups of students who would benefit from Independent Study under the direction of faculty members in specific or related disciplines may develop individualized learning contracts designed to enhance their individual instructional programs. The students and the faculty member in consultation with the Division Dean will determine appropriate learning objectives and activities as well as the number of units to be earned. Instructions and the Learning Contract forms are available in the Division Office. Repeatable to a maximum of 9 units across all disciplines.
Lecture Hours: None  Lab Hours: 1.5 - 27  Repeatable: 17  Grading: O
CAN: None
Advisory Level:  Read: 2  Write: 2  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

ATHW-200 - Supervised Skills Lab  Units: None
Supplemental practice and/or instruction is offered students in a specific discipline. Projects are assigned in courses of concurrent enrollment. General consultation and supervision are provided by the faculty members in charge.
Lecture Hours: 0  Lab Hours: 0  Repeatable: 19  Grading: N
Corequisite: ATHW 012 or ATHW 018 or ATHW 40 or ATHW 48 or ATHW 052
CAN: None
Advisory Level:  Read: None  Write: None  Math: None
Transfer Status: None  Degree Applicable: NC
CSU GE: None  District GE: None  IGETC: None

BIOL-001 - General Principles of Biology  Units: 5
Biology 1 is the introductory course to a three term sequence for students exploring a career in the life sciences, teaching, medicine, or biochemistry. This lecture and laboratory course emphasizes fundamental biological principles and the process of science. During the first half of the term, students will learn about the cell, focusing on its chemistry, structure, energetics, and reproduction. The remainder of the course will provide the student with a strong foundation in genetics, evolution, and ecology. Field trips may be required.
Lecture Hours: 3  Lab Hours: 6  Repeatable: No  Grading: L
Prerequisite: MATH 013 with C or better
CAN: BIOL 4; BIOL SEQ A = BIOL 1+2+3
Advisory Level:  Read: 3  Write: 3  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: B2,B3  District GE: B2, BL  IGETC: 5B

BIOL-002 - Organismal Biology  Units: 5
Biology 002 is the second course in a three term sequence for students exploring a career in the sciences, teaching, medicine, or biochemistry. This lecture and laboratory course emphasizes plant and animal organismal biology, with central themes of homeostasis, integration, and structure. The first third of the course considers higher plant anatomy and physiology, the second third addresses animals, reproduction, and the introduction to the concept of homeostasis, while the last third considers the structure and control mechanisms of human organ systems.
Lecture Hours: 3  Lab Hours: 6  Repeatable: No  Grading: L
Prerequisite: BIOL 001 and (CHEM 001A or CHEM 015), with C or better
Corequisite: Or BIOL 001 with C or better and concurrent enrollment in CHEM 001A or CHEM 015.
Recommended: Completion of ENGL 102 or READ 101 and ENGL (092 or 104). A solid command of the English language, particularly strong reading and writing skills, is recommended.
CAN: BIOL 6; BIOL SEQ A = BIOL 2+1+3
Advisory Level:  Read: 3  Write: 3  Math: 3
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: B2,B3  District GE: None  IGETC: None

BIOL-003 - Cell and Molecular Biology  Units: 4
Biology 3 is a sequence course for majors covering the cellular, chemical and molecular nature of living systems; integrating cell structure with macromolecular and biological energy reactions; gene regulation; cell interaction and development. Field trips may be required. This course is one of three in the biology series for all biological science and related pre-professional majors.
Lecture Hours: 3  Lab Hours: 3  Repeatable: No  Grading: L
Prerequisite: BIOL 001 and (CHEM 001A or CHEM 015); all with C or better
Recommended: A solid command of the English language, particularly strong reading and writing skills.
CAN: BIOL 2; BIOL SEQ A = BIOL 3+1+2
Advisory Level:  Read: 3  Write: 3  Math: 3
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

BIOL-020 - Human Biology  Units: 4
The principles of human biology is intended for non-science majors to meet general education science requirements. It covers basic body structure and function including reproduction, genetic diseases, biotechnology and human ecology. The format includes lecture and laboratory.
Lecture Hours: 3  Lab Hours: 3  Repeatable: No  Grading: L
CAN: None
Advisory Level:  Read: 2  Write: 2  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: B2,B3  District GE: B2, BL  IGETC: 5B
BIOL-021A - General Biology Units: 4
This introductory course covers the general principles and basic concepts of biology for the non-science major. The course includes characteristics and classification of living systems, the cell, metabolism, development, reproduction, genetics, evolution, ecology and dissection. This course is not open to biology or related pre-professional majors.
Lecture Hours: 3 Lab Hours: 3 Repeatable: No Grading: L
Recommended: 3 units of MATH 310 with CR or placement based on assessment.
Advisory Level: Read: 2 Write: 2 Math: 1
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: B2,B3 District GE: B2, BL IGETC: 5B

BIOL-061 - Human Heredity Units: 3
This course stresses the importance of human heredity in our lives. Student's learn how to keep up with the rapidly changing areas of human heredity and how to learn more about specific genetic disorders that are of interest to each individual student and their family. It covers the role and importance of genetic counselors and the genetic tests for disorders. The course includes the role of genetics in medicine, agriculture, and Recombinant DNA Technology. This transferable general education science course provides an understanding of the biology of human genetics at the non-science major level.
Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L
CAN: None
Advisory Level: Read: 2 Write: 3 Math: 1
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: B2,B3 District GE: B IGETC: 5B

BIOL-063 - Ecology Units: 3
This is a general biological science course designed for non-majors and carrying elective science transfer credit. Emphasis is placed on energy and matter and their relationships to natural cycles, to principles of ecology and ecological systems, to succession and conservation, and to the multiple ecological crises in the world today.
Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L
CAN: None
Advisory Level: Read: 3 Write: 3 Math: 2
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: B2 District GE: B IGETC: 5B

BIOL-064 - Marine Biology Units: 4
This is a lecture, lab and field course that investigates animals, plants, microorganisms, plankton, human impacts, physical factors of the sea, human oceanic history, technology, and uses of the sea such as mariculture, energy production, and fisheries biology. Special topics on tropical habitats, shark biology, whaling operations and local marine habitats are presented in depth through lecture, laboratory and field investigations. The biology of San Francisco Bay and Monterey Bay is accentuated in this course.
Lecture Hours: 3 Lab Hours: 3 Repeatable: No Grading: O
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: B2,B3 District GE: B2, BL IGETC: 5B

BIOL-098 - Directed Study in Biology Units: 0.5 - 9
Individual or small groups of students who would benefit from Independent Study under the direction of faculty members in specific or related disciplines may develop individualized learning contracts designed to enhance their individual instructional programs. The students and the faculty member in consultation with the Division Dean will determine appropriate learning objectives and activities as well as the number of units to be earned. Instructions and the Learning Contract forms are available in the Division office. Repeatable to a maximum of 9 units across all disciplines.
Lecture Hours: None Lab Hours: 1.5 - 27 Repeatable: 17 Grading: O
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

BOT-062 - Plants and Human Welfare Units: 3
This course is a lecture-demonstration course dealing with the world of plants and their ecological importance to humans; their impact on the development of civilizations; the need for conservation; and an appreciation for plants in the total environment. At least one field trip is required.
Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L
CAN: None
Advisory Level: Read: 3 Write: 3 Math: 2
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: B2 District GE: B IGETC: 5B

BUS-007A - Business Language Skills Units: 3
The course provides students the opportunity to review and apply business English skills for business letter writing. Areas treated include grammar, word and number usage, punctuation, vocabulary, spelling, and other mechanics that apply to business writing. Successful completion of this course prepares the student for Business 7B, Business Writing.
Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: O
Credit by Exam: Yes
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None
BUS-007B - Business Writing  Units: 3
This course features the development of content and presentation in business letters and memos. The planning, development, composition, and editing of a variety of messages are presented. Letter styles and formatting are reviewed.
Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: O
Prerequisite: BUS 007A or BUS 007A
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

BUS-008 - Business English and Writing  Units: 3
This course helps students understand how to communicate effectively in various business formats. Writing skills are necessary for almost any profession. This course teaches the basics of oral and written communication, including grammatical standards, styles, and audience considerations. Students will learn how to design and write documentation, memoranda, letters, e-mail messages, and business research reports using effective grammar and syntax. They will write and analyze business communication, and develop information suitable for distribution on the World Wide Web.
Lecture Hours: 3  Lab Hours: 0  Repeatable: No  Grading: L
CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

BUS-017 - Business/Medical Records Technician  Units: 3

This course is geared towards students who want to be employed in the medical arena. Students will learn a combination of specialized clerical and procedural tasks that are performed by the Business/Medical Records Technician. Topics will include effective practice procedures, scheduling appointments, teamwork and diversity training, job/patient interviewing, telephone screening, and medical insurance billing. Students will gain the knowledge and skill sets necessary to perform the typical duties of a Front Office Business/Medical Records Technician.
Lecture Hours: 2.5  Lab Hours: 1.5  Repeatable: No  Grading: L
Recommended: Basic touch keyboarding skill of 25 net words a minute
CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: None  Degree Applicable: AS
CSU GE: None  District GE: None  IGETC: None

BUS-025 - Introduction to Investments  Units: 3
This is an introductory course that focuses on the fundamentals of personal investing. The student will be introduced to the stock market, mutual funds, bonds, stock options, real estate as well as other types of financial investments. The student will learn about financial markets and how financial institutions work. Topics such as portfolio management, tax consequences, and risk management are covered. The student will also be introduced to basic retirement and estate planning concepts.
Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: L
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

BUS-050 - Survey of International Business  Units: 3
A comprehensive overview of international business designed to provide a global perspective on international trade, including foreign investments, impact of financial markets, international marketing, and the operation of multinational companies.
Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: O
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

BUS-059 - Introduction to Importing and Exporting  Units: 3
An introductory course designed primarily to acquaint the student with the vocabulary, acronyms, and the basic information needed for an understanding of importing and exporting goods and services. In the future the growth of the American economy will depend on global sales through exporting and importing. The idea of a global consumer culture as a way of positioning products in a variety of markets is a new and interesting concept for the 21st century.
Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: L
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

BUS-060 - Fundamentals of Business Statistics  Units: 3
This course introduces statistics with an emphasis on business applications. Students will learn how to collect, analyze, interpret, and present numerical data for the purpose of making more effective decisions. Topics include: collection and presentation of data, measures of central value and spread, probability, sampling and the sampling distribution of the sample average, estimation via confidence intervals, hypothesis testing, and regression and correlation.
Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: L
Prerequisite: MATH 013 with C or better
Recommended: Math 061 Finite Mathematics, with C or better, or equivalent.
CAN: STAT 2
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

BUS-068 - Small Business Management  Units: 3
This course familiarizes students with the basic elements of starting and managing a small business. It reviews management fundamentals including planning, organizing, staffing, directing and controlling. Students are expected to develop a business plan which includes the following: site location; legal form of business; capital requirements and how the capital will be raised; developing a cash flow budget; marketing and promotional plans. The use of personal computers by small businesses is introduced.
Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: L
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None
BUS-071 - Legal Environment of Business Units: 3
This course covers laws and regulations affecting business decisions including legal concepts and cases in areas of ethics, employment, consumer transactions, competition, the environment, business torts and crimes, contracts, agency and business organizations.
Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L
CAN: BUS 8
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

BUS-075 - Business Ethics and Society Units: 3
This course is built around the following five aspects of business ethics: 1) introduction of business ethics, 2) business ethics from a business perspective, 3) external stakeholders, 4) internal stakeholders, 5) strategic management.
Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

BUS-082 - Introduction to Business Units: 3
This course is an introduction to the business functions and practices as they have developed over time in the U.S. economic system. Students will be introduced to topics including organizational structure and behavior, management, marketing, finance and accounting, operations and information systems, and ethical responsibilities of corporations. Special emphasis will be placed in the emergence of global business, its impact and the significance of small businesses.
Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L
CAN: None
Advisory Level: Read: 2 Write: 2 Math: 2
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

BUS-098 - Directed Study in Business Units: 0.5 - 9
Individual or small groups of students who would benefit from Independent Study under the direction of faculty members in specific or related disciplines may develop individualized learning contracts designed to enhance their individual instructional programs. The students and the faculty member in consultation with the Division Dean will determine appropriate learning objectives and activities as well as the number of units to be earned. Instructions and the Learning Contract forms are available in the Division office. Repeatable to a maximum of 9 units across all disciplines.
Lecture Hours: None Lab Hours: 1.5 - 27 Repeatable: 17 Grading: L
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

BUS-113 - Principles of Management Units: 3
This course provides the fundamentals of theories of management, staffing, planning, organizing, controlling and leading as well as management concepts of motivation and communications. It also examines the application of formal organizational structure and studies the impact of individual and small group behavior on organizational processes and performance. Case studies are included.
Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

BUS-114 - Human Resources Management Units: 3
This is an introduction to the fundamental understanding of the management of human resources and its impact and accountability to the organization as a part of the strategic plan. Emphasis is placed on overall planning activities in recruiting, training and development, compensation and benefits and performance evaluation. Also covered in this course are social and organizational realities, legal implications and employee rights, union/non-union practices and global human resources environment.
Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

BUS-135 - Human Relations and Leadership Units: 3
Basic concepts of individual, group, and organizational human behavior in relationship to interpersonal skills affecting productivity, performance and human relations in the workplace. This course will focus on the interpersonal, informal and formal communication processes, development of leadership, employer-employee and cross cultural relationship.
Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

BUS-136 - Business Occupational Work Experience-Parallel Plan Units: 1 - 4
Occupational Work Experience is designed for students who work or volunteer in a field related to their vocational major. Students are required to provide evidence that they are enrolled in a vocational program (e.g., educational plan or coursework in a vocational subject area). The Parallel Plan is designed for students who wish to take classes and work during the same semester. A maximum of 4 units of Occupational Work Experience credit may be earned during any one semester, to a maximum of 16 units total. Students must be enrolled in at least 7 units including Work Experience units. Courses taken at other accredited colleges or equivalent course work may meet this requirement. Internship/job placement is not guaranteed.
Lecture Hours: None Lab Hours: 3 - 12 Repeatable: 15 Grading: O
Corequisite: 1) Be enrolled during the regular semester in a minimum of 7 units at any accredited college, including Work Experience units or; 2) During a summer session, be enrolled in at least one other course in addition to Work Experience; and 3) Be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.
CAN: None
Advisory Level: Read: 3 Write: 3 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None
Chemistry

CHEM-001A - General Chemistry

This course is the first semester of the one year college level general chemistry sequence. It covers basic chemical principles: classification of matter, atomic structure and periodicity, chemical nomenclature, types of reactions, stoichiometry, thermochemistry, chemical bonds, physical states of matter and solution chemistry. This course is required for students majoring in physical and biological sciences and pre-professional majors such as pre-medicine and dentistry. Chemistry 1A also meets the one-semester requirement for all engineering majors.

Lecture Hours: 3 Lab Hours: 6 Repeatable: No Grading: L

Prerequisite: CHEM 015 and MATH 013, both with C or better

Corequisite: Or CHEM 015 with C or better and concurrent enrollment in MATH 013

CAN: CHEM 2;CHEM SEQ A = CHEM 1A+1B

Advisory Level: Read: 2 Write: 2 Math: None

Transfer Status: CSU/UC Degree Applicable: AA/AS

CSU GE: B1,B3 District GE: B1, BL IGETC: 5A

CHEM-001B - General Chemistry

This course is a continuation of Chemistry 1A, the second semester of a one year college level general chemistry sequence. The content includes organic chemistry, thermodynamics, chemical kinetics, chemical equilibrium, electrochemistry, coordination compounds, and nuclear chemistry. The laboratory emphasizes qualitative and quantitative analysis of inorganic compounds and introduces electronic instrumentation. The course is required for students majoring in physical and biological sciences and pre-professional majors such as pre-medicine and dentistry. The course also completes the basic chemistry requirements for students majoring in chemical and materials engineering.

Lecture Hours: 3 Lab Hours: 6 Repeatable: No Grading: L

Prerequisite: CHEM 001A with C or better

CAN: CHEM 4;CHEM SEQ A = CHEM 1B + 1A

Advisory Level: Read: 2 Write: 2 Math: None

Transfer Status: CSU/UC Degree Applicable: AA/AS

CSU GE: None District GE: None IGETC: None

CHEM-012A - Organic Chemistry

This is the first semester of the year-long organic chemistry course designed to acquire a comprehensive understanding with emphasis on structure, reactions, and spectroscopic studies of organic compounds. Problem-solving techniques will be used to elucidate mechanistic and structural and stereochemical features of reactions and molecules, respectively. Lectures and laboratory methods will focus on synthesis, isolation, purification, elucidation and identification of organic structures as well as instrumental methods and data interpretation.

Lecture Hours: 3 Lab Hours: 6 Repeatable: No Grading: L

Prerequisite: CHEM 001B with C or better

CAN: None

Advisory Level: Read: 2 Write: 2 Math: None

Transfer Status: CSU/UC Degree Applicable: AA/AS

CSU GE: None District GE: None IGETC: None

CHEM-012B - Organic Chemistry

The second semester of the year-long chemistry course designed to follow Chemistry 012A. Topics include nomenclature, stereochemistry, mechanisms, reactions, and spectroscopic studies of aliphatic and aromatic alcohols, aldehydes, ketones, acids, and other classes of organic and biological compounds (such as amino acids, proteins, and nucleic acids). Problem-solving techniques will be used to elucidate mechanistic and structural and stereochemical features of reactions and molecules, respectively. Lectures and laboratory methods will focus on synthesis, isolation, purification, elucidation and identification of organic structures as well as instrumental methods and data interpretation.

Lecture Hours: 3 Lab Hours: 6 Repeatable: No Grading: L

Prerequisite: CHEM 012A with C or better

CAN: None

Advisory Level: Read: 2 Write: 2 Math: None

Transfer Status: CSU/UC Degree Applicable: AA/AS

CSU GE: None District GE: None IGETC: None

CHEM-015 - Fundamentals of Chemistry

This course is a preparatory chemistry course covering the fundamentals of modern inorganic chemistry with emphasis in classification of matter, atomic structure, chemical formula and nomenclature, chemical equations and their stoichiometry, gas laws and solutions. Chemistry 15 is intended primarily as a preparation for students planning to take college level Chemistry 1A. This course also meets the associate degree General Education science requirement with lab for non-science majors.

Lecture Hours: 3 Lab Hours: 3 Repeatable: No Grading: L

CAN: None

Advisory Level: Read: 2 Write: 2 Math: 2

Transfer Status: CSU/UC Degree Applicable: AA/AS

CSU GE: B1,B3 District GE: B1, BL IGETC: 5A
Chemistry

CHEM-032A - Intro to General, Organic, & Biological Chemistry
Units: 4
An introductory course covering basic principles of chemistry more descriptive than quantitative in emphasis. Topics include atomic structure, trends in the periodic table, the three states of matter (i.e. gas, liquid, solid), energy, chemical bonding in ionic and molecular compounds, nomenclature, measurement and the metric system, chemical reactions and equations, solutions, acids, bases, salts and electrolyte systems. Applicable to health care paraprofessionals and can be taken by non-science majors.
Lecture Hours: 3 Lab Hours: 3 Repeatable: No Grading: L
CAN: None
Advisory Level: Read: 3 Write: 3 Math: 1
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: B1,B3 District GE: B1, BL IGETC: 5A

CHEM-032B - Intro to General, Organic & Biological Chemistry
Units: 4
This course is the second-semester sequence in introductory chemistry covering the basic classes of organic and biochemical compounds as they relate to the chemistry of life processes (i.e. metabolic pathways). It is designed to support students majoring in allied health-related fields and the emergency technician program. This course also meets part of GE physical science requirement. Content includes further study of hydrocarbons including aromatics, as well as alcohols, phenols, ethers, thiols, disulfides, alkyl halides, amines, aldehydes, ketones, carboxylic acids and derivatives thereof (i.e. esters, amides), carbohydrates, lipids, amino acids, vitamins, enzymes, polymers and nucleic acids.
Lecture Hours: 3 Lab Hours: 3 Repeatable: No Grading: L
Prerequisite: CHEM 030A or CHEM 032A or CHEM 015 or CHEM 001A; all with C or better
CAN: None
Advisory Level: Read: 3 Write: 3 Math: 1
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: B1,B3 District GE: B1, BL IGETC: 5A

CHEM-065 - Quantitative Analysis
Units: 4
This course is an introduction to the theory and practice of traditional gravimetric and volumetric analysis. Tools and techniques of electroanalytical and spectrophotometric analytical methods will be investigated. This course is highly recommended for students who are majoring in chemistry, biochemistry, marine biology, applied microbiology, biotechnology and for those who want to gain practical analytical laboratory techniques. This course also prepares students for the A.A. degree in chemistry which facilitates transfer to CSU, UC or other four year private and public colleges and universities nationwide.
Lecture Hours: 2 Lab Hours: 6 Repeatable: No Grading: L
Prerequisite: CHEM 001B with C or better
CAN: None
Advisory Level: Read: 3 Write: 3 Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

Chinese

CHI-N-001A - Elementary Mandarin
Units: 5
A comprehensive introduction to elementary Mandarin as a second language for students with no background in Mandarin; equal emphasis on listening, speaking, reading, writing Mandarin characters and translation; active vocabulary of about 300 single Chinese characters and over a hundred phrases and idiomatic expressions.
Lecture Hours: 5 Lab Hours: None Repeatable: No Grading: O
Corequisite: CHIN 200
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: C2 District GE: C2 IGETC: 6A

CHI-N-091A - Conversational Mandarin, Level 1
Units: 3
This course introduces the students to elementary communication skills of Mandarin. The course emphasizes practical communication for everyday use and business, particularly conversational fluency. Basic pinyin pronunciation and writing system will be introduced. Instruction also provides cultural information.
Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: O
CAN: None
Advisory Level: Read: 3 Write: 3 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

CHI-N-091B - Conversational Mandarin, Level II
Units: 3
This course introduces the students to intermediate communication skills of Mandarin who have completed Conversational Mandarin 091A or equivalent. The course emphasizes practical communication for everyday use and business, particularly conversational fluency. Pinyin and writing system also will be reviewed. Instruction provides cultural information.
Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L
CAN: None
Advisory Level: Read: 3 Write: 3 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

CHI-N-098 - Directed Study in Chinese
Units: 0.5 - 9
Individual or small groups of students who would benefit from Independent Study under the direction of faculty members in specific or related disciplines may develop individualized learning contracts designed to enhance their individual instructional programs. The students and the faculty member in consultation with the Division Dean will determine appropriate learning objectives and activities as well as the number of units to be earned. Instructions and the Learning Contract forms are available in the Division Office. Repeatable to a maximum of 9 units across all disciplines.
Lecture Hours: None Lab Hours: 1.5 - 27 Repeatable: 17 Grading: O
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

CHI-N-200 - Chinese Language Supervised Skills Lab
Units: None
Supplemental practice and/or instruction is offered students in a specific discipline. Projects are assigned in courses of concurrent enrollment. General consultation and supervision are provided by the faculty members in charge.
Lecture Hours: None Lab Hours: None Repeatable: 19 Grading: N
Corequisite: CHIN 001A
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: None Degree Applicable: NC
CSU GE: None District GE: None IGETC: None
Communication Studies

**COMS-020 - Oral Communication** Units: 3

This course introduces students to public speaking and rhetorical theory. Students learn how to evaluate a topic, the speech situation, and the audience, with emphasis on developing an awareness of the relatedness and interdependence of ideas in various contexts. Students develop skills in methods of research, organization, and delivery. The chief emphasis is on developing clear and cogent support for statements of position. Critical listening and analytical faculties are developed through the application of rhetorical theory to exemplary speeches on a variety of universal topics and to classroom presentations. Students are required to review and analyze video speeches in the lab.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: O

CAN: SPCH 4
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: A1 District GE: A1 IGETC: 1C

**COMS-020N - Oral Communication for Non-native Speakers** Units: 3

This is a public speaking course designed for the non-native speaker. Course content is identical to Communication Studies 20 with a voice and articulation emphasis. This course introduces students to public speaking and rhetorical theory. Students learn how to evaluate a topic, the speech situation, and the audience, with emphasis on developing an awareness of the relatedness and interdependence of ideas in various contexts. Students develop skills in methods of research, organization, and delivery. The chief emphasis is on developing clear and cogent support for statements of position. Critical listening and analytical faculties are developed through the application of rhetorical theory to exemplary speeches on a variety of universal topics and to classroom presentations. Though open to all students, issues and concerns regarding speakers of English as a second language will be addressed. This course shall provide a supportive learning environment for non-native speakers.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: O

CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: A1 District GE: A1 IGETC: None

**COMS-040 - Introduction to Argumentation** Units: 3

This course provides students with an understanding of how to support intelligent decisions by using reasoned discourse. Instruction in: logical analysis of modern controversies; the formulation of propositions for argument; constructing arguments; practical application through discussion and debate. Emphasizes the social importance of competent advocacy in a free society.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

CAN: SPCH 6
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: A1,A3 District GE: A1,A3 IGETC: 1C

**COMS-045 - Small Group Communication** Units: 3

Emphasis will be placed on two perspectives within the group content—decision making and communication. Communication is considered the organizing means of the group; decision making is the purpose of the group. Concepts such as group interaction; leadership, status, and power; conflict and cohesiveness; rules and roles; verbal and non-verbal messages and problem-solving as they apply to social and political institutions as well as the world of work in both the public and private sectors will be investigated.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: O

CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: A1 District GE: A1 IGETC: None

Computer Applications

**CA-010A - Computer Keyboarding** Units: 1

This course is designed for students with no prior keyboarding experience. Keyboard mastery is developed using touch techniques. Skill development and measurement are addressed as well as proofreading skills.

Lecture Hours: None Lab Hours: 3 Repeatable: No Grading: O

Corequisite: CA 200
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

**CA-011 - Speed and Accuracy** Units: 1

This course provides an intense program to improve proficiency in keyboarding. Using effective practice materials, students will achieve statistically significant gains in speed and accuracy. Speed and accuracy is appropriate for students enrolled in computer application, word processing, or MOS certification courses. It is also recommended for students wishing to upgrade or refresh their keyboarding skills. Repeatable in a separate semester to a maximum of 2 units.

Lecture Hours: None Lab Hours: 3 Repeatable: 1 Grading: L

Recommended: Basic touch keyboarding skill of at least 25 net words a minute.

Open Curriculum: No prerequisite, corequisite or levels
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: None Degree Applicable: AS
CSU GE: None District GE: None IGETC: None

**CA-015A - Document Processing** Units: 2

This course is a continuation of CA 010A and assumes keyboard touch typing skills of 25+ wpm. Keyboard mastery is emphasized and skill development, proofreading, and measurement are addressed. Students will construct basic business letters, memos, tables, and reports.

Lecture Hours: 1 Lab Hours: 3 Repeatable: No Grading: O

Prerequisite: CA 010A with C or better or OTP 011A or OTP 145 or type 25 words per minute
Corequisite: CA 200
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

**CA-020A - Microsoft Windows 2000** Units: 1

This is an introductory course in the use of Windows 2000. Topics covered include using a graphical user interface, starting and exiting Windows, adding, arranging, and deleting windows and icons on the desktop, creating and manipulating folders, running multiple applications, transferring information from one application to another, and saving and retrieving files from the disk.

Lecture Hours: 0.5 Lab Hours: 1.5 Repeatable: No Grading: O

Corequisite: CA 200
Recommended: Basic touch keyboarding skill of 25 net words a minute.
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None
### Computer Applications

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
<th>Description</th>
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<tbody>
<tr>
<td>CA-030A</td>
<td>Internet for Beginners</td>
<td>1</td>
<td>Fundamentals of the Internet: Student will learn to use a browser, search the Web using search tools and techniques, and download information and software. They will learn to use the Internet for Business and personal use.</td>
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<td>Lecture Hours: 0.5</td>
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<td>Corequisite: CA 200</td>
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<td>Recommended: Basic touch keyboarding skill of 25 net words a minute</td>
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<td>Advisory Level: Read: 2</td>
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<td>Transfer Status: CSU</td>
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<td>CSU GE: None</td>
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</table>

| CA-040C     | Microsoft Word 2003          | 2     | Students will prepare for International Computer Driver's License (ICDL-US) and Microsoft Office Specialist (MOS) Certification Exams using introductory and advanced applications of Microsoft Word 2003. The course covers such topics as entering text into a document, editing and formatting documents, tables and graphs, styles and templates, columns, and drawing tools. |
|             |                              |       | Lecture Hours: 1 | Lab Hours: 3 | Repeatable: No | Grading: L |
|             |                              |       | Recommended: Basic touch keyboarding skill of 25 net words a minute |
|             |                              |       | CAN: None |
|             |                              |       | Advisory Level: Read: 2 | Write: 2 | Math: None |
|             |                              |       | Transfer Status: None |
|             |                              |       | CSU GE: None | District GE: None | IGETC: None |

| CA-040D     | Microsoft Word Specialist    | 1     | Students will prepare for Microsoft Office Specialist (MOS) and International Computer Driver's License (ICDL-US) certification exams at the Specialist Level. Students will also learn how to apply borders and shading; create and modify graphics and special characters; experiment with macros, generate a mail merge, and managing documents. |
|             |                              |       | Lecture Hours: 0 | Lab Hours: 3 | Repeatable: No | Grading: O |
|             |                              |       | Recommended: Basic touch keyboarding of 25 net words a minute |
|             |                              |       | CAN: None |
|             |                              |       | Advisory Level: Read: 2 | Write: 2 | Math: None |
|             |                              |       | Transfer Status: None |
|             |                              |       | CSU GE: None | District GE: None | IGETC: None |

| CA-050C     | Microsoft Excel 2003         | 2     | Students will prepare for International Computer Driver's License (ICDL-US) and Microsoft Office Specialist (MOS) Certification Exams using introductory and advanced applications of Microsoft Excel 2003. Students will create spreadsheets and graphics for different types of spreadsheets useful in a variety of business environments. They will design and format worksheets, use lists, print, audit workbooks, use advanced functionality, use macros, import and export data, use templates, multiple workbooks, and use advanced data analysis techniques. |
|             |                              |       | Lecture Hours: 1 | Lab Hours: 3 | Repeatable: No | Grading: O |
|             |                              |       | Recommended: Basic touch keyboarding skill of 25 net words a minute |
|             |                              |       | CAN: None |
|             |                              |       | Advisory Level: Read: 2 | Write: 2 | Math: None |
|             |                              |       | Transfer Status: None |
|             |                              |       | CSU GE: None | District GE: None | IGETC: None |

| CA-050D     | Microsoft Excel Specialist   | 1     | Students will prepare for Microsoft Office Specialist (MOS) and International Computer Driver's License (ICDL-US) certification exams at the Specialist Level. Topics will include creating, organizing, and formatting content, working with cells and cell data, formatting, modifying, printing, and managing workbooks. Students will also create, edit, and revise formulas, and modify graphics using workgroup collaboration. |
|             |                              |       | Lecture Hours: 0 | Lab Hours: 3 | Repeatable: No | Grading: L |
|             |                              |       | Recommended: Basic touch keyboarding skill of 25 net words a minute |
|             |                              |       | CAN: None |
|             |                              |       | Advisory Level: Read: 2 | Write: 2 | Math: None |
|             |                              |       | Transfer Status: None |
|             |                              |       | CSU GE: None | District GE: None | IGETC: None |

| CA-055D     | Microsoft Excel Expert       | 1     | Students will prepare for Microsoft Office Specialist (MOS) and International Computer Driver's License (ICDL-US) certification exams at the Expert Level by using advanced functions of Microsoft Excel. Students will learn to import and export data, manage workbooks, format numbers, use macros, use templates, use named ranges, use lookup and reference functions, customize Excel, audit worksheets, analyze and summarize data, and manage workgroup collaboration. |
|             |                              |       | Lecture Hours: 0 | Lab Hours: 3 | Repeatable: No | Grading: O |
|             |                              |       | Recommended: Basic touch keyboarding skill of 25 net words a minute and completion of CA 050D is strongly recommended |
|             |                              |       | CAN: None |
|             |                              |       | Advisory Level: Read: 2 | Write: 2 | Math: None |
|             |                              |       | Transfer Status: None |
|             |                              |       | CSU GE: None | District GE: None | IGETC: None |

| CA-060C     | Microsoft Access 2003        | 2     | Students will prepare for International Computer Driver's License (ICDL-US) and Microsoft Office Specialist (MOS) Certification Exams using introductory and advanced applications of Microsoft Access 2003. Students will learn to design databases and applications as used in businesses. Students will learn to create database objects such as tables, queries, forms, reports, and macros, import and export data, and make use of templates and wizards. |
|             |                              |       | Lecture Hours: 1 | Lab Hours: 3 | Repeatable: No | Grading: O |
|             |                              |       | Recommended: Basic touch keyboarding skill of 25 net words a minute |
|             |                              |       | CAN: None |
|             |                              |       | Advisory Level: Read: 2 | Write: 2 | Math: None |
|             |                              |       | Transfer Status: None |
|             |                              |       | CSU GE: None | District GE: None | IGETC: None |
CA-060D  -  Microsoft Access Specialist  
Units:  1

Students will prepare for Microsoft Office Specialist (MOS) and International Computer Driver's License (ICDL-US) certification exams at the Specialist Level by using functions of Microsoft Access. Students will learn to design databases and applications as used in businesses. Students will also learn to create database objects such as tables, queries, forms, reports, and macros, import and export data, and make use of templates and wizards.

Lecture Hours: 0  Lab Hours: 3  Repeatable: No  Grading: O

Recommended  
Basic touch keyboarding skill of 25 net words a minute

CAN:  None
Advisory Level:  
Read:  2  Write:  2  Math:  None
Transfer Status: None  Degree Applicable: AS
CSU GE:  None  District GE: None  IGETC:  None

CA-065D  -  Microsoft Access Expert  
Units:  1

Students will prepare for Microsoft Office Specialist (MOS) and International Computer Driver's License (ICDL-US) certification exams at the Expert Level by using functions of Microsoft Access. Students will design and format worksheets, use lists, print, audit workbooks, use advanced functionality, use macros, import and export data, use templates, multiple workbooks, and use advanced data analysis techniques.

Lecture Hours: 0  Lab Hours: 3  Repeatable: No  Grading: O

Recommended  
Basic touch keyboarding skill of 25 net words a minute and completion of CA 060D is strongly recommended.

CAN:  None
Advisory Level:  
Read:  2  Write:  2  Math:  None
Transfer Status: None  Degree Applicable: AS
CSU GE:  None  District GE: None  IGETC:  None

CA-070C  -  Microsoft PowerPoint 2003  
Units:  2

Students will prepare for International Computer Driver's License (ICDL-US) and Microsoft Office Specialist (MOS) Certification exams using introductory and advanced applications of Microsoft PowerPoint 2003. Students will develop and apply decision-making and problem-solving skills in the creation, development, modification, and delivery of a PowerPoint slide show presentation. They will also learn how to scan images, use rehearsal timings, the internet for graphics and sounds, and incorporate transitions and effects into their presentations.

Lecture Hours: 1  Lab Hours: 3  Repeatable: No  Grading: O

Recommended  
Basic touch keyboarding skill of 25 net words a minute

CAN:  None
Advisory Level:  
Read:  2  Write:  2  Math:  None
Transfer Status: None  Degree Applicable: AS
CSU GE:  None  District GE: None  IGETC:  None

CA-070D  -  Microsoft PowerPoint Specialist  
Units:  1

Students will prepare for International Computer Driver's License (ICDL-US) and Microsoft Office Specialist (MOS) Certification Exams using introductory applications of Microsoft PowerPoint. Students will develop and apply decision-making and problem-solving skills in the creation, development, modification, and delivery of a PowerPoint slide show presentation. They will also learn how to scan images, use rehearsal timings, the internet for graphics and sounds, and incorporate transitions and effects into their presentations.

Lecture Hours: 0  Lab Hours: 3  Repeatable: No  Grading: O

Recommended  
Basic touch keyboarding skill of 25 net words a minute

CAN:  None
Advisory Level:  
Read:  2  Write:  2  Math:  None
Transfer Status: None  Degree Applicable: AS
CSU GE:  None  District GE: None  IGETC:  None

CA-075D  -  Microsoft PowerPoint Expert  
Units:  1

Students will prepare for International Computer Driver's License (ICDL-US) and Microsoft Office Specialist (MOS) Certification Exams using introductory and advanced applications of Microsoft PowerPoint. Students will develop and apply decision-making and problem-solving skills in the creation, development, modification, and delivery of a PowerPoint slide show presentation. They will also learn how to scan images, use rehearsal timings, the internet for graphics and sounds, and incorporate transitions and effects into their presentations.

Lecture Hours: 0  Lab Hours: 0  Repeatable: No  Grading: O

CAN:  None
Advisory Level:  
Read:  2  Write:  2  Math:  None
Transfer Status: None  Degree Applicable: AS
CSU GE:  None  District GE: None  IGETC:  None

CA-080C  -  Microsoft Outlook 2003  
Units:  2

Students will prepare for International Computer Driver's License (ICDL-US) and Microsoft Office Specialist (MOS) Certification exams using introductory and advanced applications of Microsoft Access 2003. Students will learn to design databases and applications as used in businesses. Students will learn to create database objects such as tables, queries, forms, reports, and macros, import and export data, and make use of templates and wizards.

Lecture Hours: 1  Lab Hours: 3  Repeatable: No  Grading: O

Recommended  
Basic touch keyboarding skill of 25 net words a minute

CAN:  None
Advisory Level:  
Read:  2  Write:  2  Math:  None
Transfer Status: None  Degree Applicable: AS
CSU GE:  None  District GE: None  IGETC:  None

CA-080D  -  Microsoft Outlook  
Units:  1

This is a basic course in the use of Microsoft Outlook. The course covers communicating with Outlook (e-mail), and the use of calendars, scheduling appointments, creating and managing contacts, tasks, and notes. The course content reflects current academic and industry trends leading to Microsoft Office Specialist (MOS) and International Computer Driver's License (ICDL-US) certification. This course will offer the most current release of Microsoft Outlook available and will provide students with information and opportunity to certify their Microsoft Office skills.

Lecture Hours: 0  Lab Hours: 3  Repeatable: No  Grading: O

CAN:  None
Advisory Level:  
Read:  2  Write:  2  Math:  None
Transfer Status: None  Degree Applicable: AS
CSU GE:  None  District GE: None  IGETC:  None

CA-096  -  Getting Started with Critical Thinking and Problem Solving  
Units:  3

This course helps students learn the fundamentals of effective problem solving. Software simulation programs are used to reinforce collecting, analyzing and organizing information from a variety of sources. The course emphasizes making decisions, applying creative thinking, and developing reading, writing, and listening skills as applied to academic and workplace environments. The skills learned in this class will help students succeed in jobs that require critical thinking skills necessary to solve writing, computer, math, or scientific problems. Students learn how to analyze and describe problems, gather and organize information, propose solutions, and communicate the results of their research.

Lecture Hours: 3  Lab Hours: 0  Repeatable: No  Grading: O

CAN:  None
Advisory Level:  
Read:  2  Write:  2  Math:  None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE:  None  District GE: None  IGETC:  None
Computer Applications

CA-100C - Introduction to Microsoft Office 2003 Units: 1

Students will prepare for International Computer Driver's License (ICDL-US) and Microsoft Office Specialist (MOS) Certification Exams using introductory and advanced applications of Microsoft Office 2003. This is a basic course in the use of Microsoft Outlook 2003. The course covers communicating with Outlook (e-mail), and the use of calendars, contact lists, tasks and notes.

Lecture Hours: 0.5 Lab Hours: 1.5 Repeatable: No Grading: O

Recommended: Basic touch keyboarding skills of 25 net words a minute and familiarity with MS Windows

CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: None Degree Applicable: AS
CSU GE: None District GE: None IGETC: None

CA-100D - Microsoft Office Units: 3

Students will prepare for International Computer Driver's License (ICDL-US) and Microsoft Office Specialist (MOS) Certification Exams using introductory and advanced applications of Microsoft Office. Students will gain practical hands-on experience in creating business documents using Microsoft Windows and MS Office applications. Students will learn to create and integrate word-processing and spreadsheet documents. Additionally, students will learn database and presentation documents in a Windows environment and the integration of all office applications.

Lecture Hours: 2.5 Lab Hours: 1.5 Repeatable: No Grading: O

Recommended: Basic touch keyboarding skill of at least 25 net words a minute

CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: None Degree Applicable: AS
CSU GE: None District GE: None IGETC: None

CA-102C - Advanced MS Office 2003 Units: 3

Students will learn to use advanced features of MS Office and be prepared for International Computer Driver's License (ICDL-US) and Microsoft Office Specialist (MOS) Certification. In Word, students will learn to insert document tables, watermarks, and charts and will create newsletters, form letters, and mailing labels. In Excel, students will learn to use predefined functions, sorting and managing lists, and templates. In Access, students will learn to create forms, reports, macros, and application systems. In PowerPoint students will learn to use visual effects to enhance presentations. Students will learn to integrate MS Office applications and the Web to illustrate sharing data and workgroup collaboration.

Lecture Hours: 2.5 Lab Hours: 1.5 Repeatable: No Grading: O

Recommended: Understanding of basic concepts in MS Office 2003 applications (Word, Excel, Access, PowerPoint)

CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: None Degree Applicable: AS
CSU GE: None District GE: None IGETC: None

CA-102D - Advanced MS Office Units: 3

Students will learn to use advanced features of MS Office and be prepared for International Computer Driver's License (ICDL-US) and Microsoft Office Specialist (MOS) Certification. In Word, students will learn to insert document tables, watermarks, and charts and will create newsletters, form letters, and mailing labels. In Excel, students will learn to use predefined functions, sorting and managing lists, and templates. In Access, students will learn to create forms, reports, macros, and application systems. In PowerPoint students will learn to use visual effects to enhance presentations. Students will learn to integrate MS Office applications and the Web to illustrate sharing data and workgroup collaboration.

Lecture Hours: 2.5 Lab Hours: 1.5 Repeatable: No Grading: O

CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: None Degree Applicable: AS
CSU GE: None District GE: None IGETC: None

CA-136 - Computer Applications Units: 1 - 4

Occupational Work Experience - Parallel Plan

Occupational Work Experience is designed for students who work or volunteer in a field related to their vocational major. Students are required to provide evidence that they are enrolled in a vocational program (e.g., educational plan or coursework in a vocational subject area). The Parallel Plan is designed for students who wish to take classes and work during the same semester. A maximum of 4 units of Occupational Work Experience credit may be earned during any one semester, to a maximum of 16 units total. Students must be enrolled in at least 7 units including Work Experience units. Courses taken at other accredited colleges or equivalent course work may meet this requirement. Internship/job placement is not guaranteed.

Lecture Hours: None Lab Hours: 3 - 12 Repeatable: 15 Grading: O

Corequisite: 1) Be enrolled during the regular semester in a minimum of 7 units at any accredited college, including Work Experience units or; 2) During a summer session, be enrolled in at least one other class in addition to Work Experience; and 3) Be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.

CAN: None
Advisory Level: Read: 3 Write: 3 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

CA-138 - Computer Applications Units: 1 - 8

Occupational Work Experience - Alternate Plan

Occupational Work Experience is designed for students who work or volunteer in a field related to their vocational major. Students are required to provide evidence that they are enrolled in a vocational program (e.g., educational plan or coursework in a vocational subject area). The Alternate Plan is designed to allow students attend school one semester and work the next. A maximum of 8 units of Occupational Work Experience credit may be earned during any one semester, to a maximum of 16 units total. Students may only take one (if any) class in addition to work experience. Internship/job placement is not guaranteed.

Lecture Hours: None Lab Hours: 3 - 12 Repeatable: 15 Grading: O

Corequisite: 1) Need not be enrolled in any other class during the semester besides Work Experience. 2) May be enrolled in at most one other class in addition to Work Experience. 3) Must be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.

CAN: None
Advisory Level: Read: 3 Write: 3 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

CA-200 - Supervised Skills Lab Units: None

Supplemental practice and/or instruction is offered to CA 200 students. Projects are assigned in courses of concurrent enrollment. Faculty members in charge provide general consultation and supervision.

Lecture Hours: None Lab Hours: None Repeatable: 19 Grading: N

Corequisite: CA 010A or CA 015A or CA 020A or CA 030A
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: None Degree Applicable: NC
CSU GE: None District GE: None IGETC: None

100
CA-302 - Getting Started with Windows Units: 0.5
This is a basic computer skills course designed to teach students fundamental computer skills such as using the mouse, opening and closing programs on the desktop, and saving information in electronic in electronic format in folders. Students can enroll in this course several times during the semester. The course includes an introductory class meeting, a workbook containing exercises to complete, and a competency assessment at the end of the course.
Lecture Hours: None Lab Hours: 1.5 Repeatable: No Grading: K
Open Curriculum: No prerequisite, corequisite or levels
CAN: None Advisory Level: Read: None Write: None Math: None
Transfer Status: None Degree Applicable: NAA CSU GE: None District GE: None IGETC: None

CA-303 - Getting Started with Microsoft Word Units: 0.5
This is a basic computer skills course designed to teach the student the fundamentals of word processing skills. This includes skills such as creating, saving, revising, formatting, and adding graphics to a document. The course includes an introductory class meeting, a workbook containing exercises to complete, and a competency assessment at the end of the course.
Lecture Hours: None Lab Hours: 1.5 Repeatable: No Grading: K
Open Curriculum: No prerequisite, corequisite or levels
CAN: None Advisory Level: Read: None Write: None Math: None
Transfer Status: None Degree Applicable: NAA CSU GE: None District GE: None IGETC: None

CA-304 - Getting Started with Excel Units: 0.5
This is a basic computer skills course designed to teach students how to use Excel spreadsheets to display information, calculate formulas, and replicate formulas.
Lecture Hours: None Lab Hours: 1.5 Repeatable: No Grading: K
Open Curriculum: No prerequisite, corequisite or levels
CAN: None Advisory Level: Read: None Write: None Math: None
Transfer Status: None Degree Applicable: NAA CSU GE: None District GE: None IGETC: None

CA-305 - Getting Started with PowerPoint Units: 0.5
This is a basic computer skills course designed to teach the fundamentals of making presentations. This includes skills such as utilizing PowerPoint's pull-down menus, clip art, text, images (graphics), panes, and templates. The course includes an introductory class meeting, a workbook containing exercises to complete, and a competency assessment at the end of the course. The course is offered on a mandatory credit/no credit basis. Students may enroll at any time during the semester.
Lecture Hours: None Lab Hours: 1.5 Repeatable: No Grading: K
Open Curriculum: No prerequisite, corequisite or levels
CAN: None Advisory Level: Read: None Write: None Math: None
Transfer Status: None Degree Applicable: NAA CSU GE: None District GE: None IGETC: None

CA-306 - Getting Started with the Internet Units: 0.5
This is a basic computer skills course designed to teach the fundamentals of the Internet. This includes skills such as utilizing Microsoft's Internet Explorer's (IE's) pull-down menus, searching the web, copying and saving text images (graphics), and downloading information. Students, faculty and staff will also learn how to use an internet mail tool (e.g., Yahoo mail) and save pages (bookmarks). The course includes an introductory class meeting, a workbook containing exercises to complete, and a competency assessment at the end of the course. The course is offered on a mandatory credit/no credit basis. Students may enroll at any time during the semester.
Lecture Hours: None Lab Hours: 1.5 Repeatable: No Grading: K
Open Curriculum: No prerequisite, corequisite or levels
CAN: None Advisory Level: Read: None Write: None Math: None
Transfer Status: None Degree Applicable: NAA CSU GE: None District GE: None IGETC: None

CA-307 - Getting Started with Graphics Units: 0.5
This is a basic computer skills course designed to teach students how to format and use graphics effectively in a variety of documents such as Word and Web pages.
Lecture Hours: None Lab Hours: 1.5 Repeatable: No Grading: K
Open Curriculum: No prerequisite, corequisite or levels
CAN: None Advisory Level: Read: None Write: None Math: None
Transfer Status: None Degree Applicable: NAA CSU GE: None District GE: None IGETC: None

CA-308 - Getting Started with PC Hardware Units: 0.5
This is a basic computer skills course designed to teach how to install hardware devices, identify problems, and configure peripheral devices. The course includes a discussion of motherboards, I/O Interfaces, processors, memory, floppy and hard disk drives, CD-ROM drives, keyboards, mice, video cards, monitors, printers, and communications devices.
Lecture Hours: None Lab Hours: 1.5 Repeatable: No Grading: K
Open Curriculum: No prerequisite, corequisite or levels
CAN: None Advisory Level: Read: None Write: None Math: None
Transfer Status: None Degree Applicable: NAA CSU GE: None District GE: None IGETC: None

CA-309 - Getting Started with Writing Tools Units: 0.5
This is a basic computer course designed for the student to learn how to use writing tools to create a document containing several paragraphs and a topic sentence with tables of contents, indices, headers, footers, and footnotes. Students will learn how to use word processing and writing software to format ideas about a topic, write sentences, organize the sentences into a well-designed document with several paragraphs, a topic sentence, and effective introductory and concluding paragraphs.
Lecture Hours: 0 Lab Hours: 1.5 Repeatable: No Grading: K
Open Curriculum: No prerequisite, corequisite or levels
CAN: None Advisory Level: Read: None Write: None Math: None
Transfer Status: None Degree Applicable: NAA CSU GE: None District GE: None IGETC: None
This is a basic computer skills course designed to teach students the fundamentals of creating a simple Web page, including hypertext links, design issues, evaluation criteria, copyright issues, and audience requirements. Students create web sites from the user’s perspective and needs, including ADA (Americans with Disabilities Act) guidelines. The course includes an introductory class meeting, a workbook containing exercises to complete, and a competency assessment at the end of the course.

Lecture Hours: None  Lab Hours: 1.5  Repeatable: No  Grading: K

Open Curriculum: No prerequisite, corequisite or levels

Advisory Level:
Read: None  Write: None  Math: None

Transfer Status: None  Degree Applicable: NAA

CIS GE: None  District GE: None  IGETC: None

### Computer Information Systems

**CIS-014** - Networking TCP/IP on NT 4.0  Units: 1 - 3

This course provides individuals who possess knowledge of the function and uses of local area network hardware, including network cards, cabling, bridges, and routers, as well as knowledge of the functions of the seven layers in the open system interconnect (OSI) reference model, with the knowledge and skills required to set up, configure, use and support Transmission Control Protocol/Internet Protocol (TCP/IP) on Microsoft Windows NT operating system version 4.0. This course will help the student prepare the Microsoft Certified Professional exam #70-059.

Lecture Hours: 1 - 3  Lab Hours: None  Repeatable: 2  Grading: O

Corequisite: CIS 200

CAN: None

Advisory Level:
Read: 2  Write: 2  Math: None

Transfer Status: CSU  Degree Applicable: AA/AS

CIS GE: None  District GE: None  IGETC: None

**CIS-014A** - Internet Principles and Protocols  Units: 3

This course will provide an insight into the technology behind a medium that is becoming increasingly important in today’s environment. An overview of Internet Technologies will be presented that will provide a firm understanding of the Internet, connectivity, and the methods used to move data from one location to another.

Lecture Hours: 2.5  Lab Hours: 1.5  Repeatable: No  Grading: L

Recommended: CIS 063 is strongly recommended.

CAN: None

Advisory Level:
Read: 3  Write: 3  Math: None

Transfer Status: CSU  Degree Applicable: AA/AS

CIS GE: None  District GE: None  IGETC: None

**CIS-016C** - Microsoft Windows® 2000 Professional: Exam 70-210  Units: 3

This course provides a foundation for students who want to learn how to support Microsoft Windows 2000 Professional I including the skills required to configure, customize, optimize, integrate, and troubleshoot a networked system. Windows 2000 is a network and desktop operating system that uses the New Technology File System (NTFS) and takes advantage of new hardware and Internet applications to produce enhanced performance, enforce file level security, and encryption for desktop and networked computers within medium to large computing environments. This course prepares students to take the Microsoft Windows 2000 professional exam.

Lecture Hours: 2.5  Lab Hours: 1.5  Repeatable: No  Grading: L

Prerequisite: CIS 063

Corequisite: CIS 200

CAN: None

Advisory Level:
Read: 2  Write: 2  Math: None

Transfer Status: CSU  Degree Applicable: AA/AS

CIS GE: None  District GE: None  IGETC: None

**CIS-016D** - Microsoft® Windows® 2000 Server: Exam 70-215  Units: 3

This course provides a foundation for supporting networks using Microsoft® Windows® 2000 Server Operating System including the skills to configure, customize, optimize, integrate networks, and troubleshoot a networked system. They will gain knowledge in implementing and administering network operating systems in environments that have (1) an extensive number of users and (2) interconnected networks from different physical locations. This course prepares students to take the Microsoft Windows 2000 Server exam.

Lecture Hours: 2.5  Lab Hours: 1.5  Repeatable: No  Grading: L

Prerequisite: CIS 016C

Corequisite: CIS 200

CAN: None

Advisory Level:
Read: 2  Write: 2  Math: None

Transfer Status: CSU  Degree Applicable: AA/AS

CIS GE: None  District GE: None  IGETC: None


This course provides a foundation for installing, configuring, and troubleshooting Windows 2000 Active Directory® modeled on the X.500 Directory Structure. Students will learn the different components of the Windows 2000 Active Directory (AD) components and set up AD elements such as organizational units, domains, forests, and sites. This course prepares students to take the Microsoft Windows 2000 Directory Services Infrastructure exam.

Lecture Hours: 2.5  Lab Hours: 1.5  Repeatable: No  Grading: L

Prerequisite: CIS 016D

Corequisite: CIS 200

CAN: None

Advisory Level:
Read: 2  Write: 2  Math: None

Transfer Status: CSU  Degree Applicable: AA/AS

CIS GE: None  District GE: None  IGETC: None
## CIS-016F - Microsoft® Windows® 2000 Network Infrastructure Administration: Exam 70-216
This course provides a foundation for students who want to learn how to design, plan Microsoft® Windows® 2000 on enterprise networks including the skills required to implement, support a networked system. Planning of network infrastructure around the features of Windows 2000 is emphasized. Topics such as network protocol and services are introduced and compared based on the requirements of the industries. This course includes using the network protocols such as IPX/SPX and TCP/IP. Students learn to utilize, manage and configure the TCP/IP protocol and use features such as NetBIOS, WINS, DHCP, and DNS. Students will learn to configure, manage, and troubleshoot RRAS, and setting up VPN’s.

**Lecture Hours:** 2.5  
**Lab Hours:** 1.5  
**Repeatable:** No  
**Grading:** L

**Prerequisite:** CIS 016D with C or better  
**Corequisite:** CIS 200

**CAN:** None  
**Advisory Level:**  
- **Read:** 2  
- **Write:** 2  
- **Math:** None

**Transfer Status:**  
- **CSU Degree Applicable:** AA/AS  
- **IGETC:** None

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This course prepares the students to analyze an organization's business and technical requirements and design security for a Windows 2000 network. This course includes all the aspects to design Windows 2000 network security, from authentication strategies to Demilitarized Zones (DMZ) to protecting Internet-accessible resources. This course meets the requirement of industry standards in developing strategies to provide security measures against cyber and Internet related attacks from malicious hackers. This course helps the students to prepare for the MCSE exam 70-220.

**Lecture Hours:** 2.5  
**Lab Hours:** 1.5  
**Repeatable:** No  
**Grading:** L

**Prerequisite:** CIS 016D with C or better  
**Corequisite:** CIS 200

**CAN:** None  
**Advisory Level:**  
- **Read:** 2  
- **Write:** 2  
- **Math:** None

**Transfer Status:**  
- **CSU Degree Applicable:** AA/AS  
- **IGETC:** None

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## CIS-016H - Microsoft® Windows® 2000 Network Environment: Exam 70-218
This course provides a foundation for students who want to learn how to administer and manage Microsoft® Windows® 2000 on enterprise networks, including the skills required to manage and support a networked system. Administration of Microsoft® Windows® 2000 Network Environment is emphasized. Students have at least six months of experience administering and supporting Windows 2000 server and client operating systems that use Active Directory™ directory services in the above environment, or proficiency in CIS 16D & CIS 16E. This course prepares students for MCSD exam 70-218 that measures the student’s ability to administer, support, and troubleshoot information systems that incorporate Microsoft Windows 2000.

**Lecture Hours:** 2.5  
**Lab Hours:** 1.5  
**Repeatable:** No  
**Grading:** L

**Prerequisite:** CIS 016D with C or better  
**Corequisite:** CIS 200

**CAN:** None  
**Advisory Level:**  
- **Read:** 2  
- **Write:** 2  
- **Math:** None

**Transfer Status:**  
- **CSU Degree Applicable:** AA/AS  
- **IGETC:** None

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## CIS-017A - Windows XP Professional
This course will cover various aspects of managing and maintaining Microsoft Windows XP Professional. This includes installation, resource administration, hardware devices and drivers, system performance and reliability, desktop environment, network protocols and services, and security.

**Lecture Hours:** 2.5  
**Lab Hours:** 1.5  
**Repeatable:** No  
**Grading:** L

**Recommended:** CIS 041 is strongly recommended.

**CAN:** None  
**Advisory Level:**  
- **Read:** 3  
- **Write:** 3  
- **Math:** None

**Transfer Status:**  
- **CSU Degree Applicable:** AA/AS  
- **IGETC:** None

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## CIS-017B - Windows 2003 Server
This course will cover various aspects of managing and maintaining a Microsoft Windows Server 2003 environment. This includes managing and maintaining physical and logical devices, user accounts, computers, groups, and access to resources, managing and maintaining a server environment, and implementing disaster recovery.

**Lecture Hours:** 2.5  
**Lab Hours:** 1.5  
**Repeatable:** No  
**Grading:** L

**Prerequisite:** CIS 017A with C or better

**CAN:** None  
**Advisory Level:**  
- **Read:** 3  
- **Write:** 3  
- **Math:** None

**Transfer Status:**  
- **CSU Degree Applicable:** AA/AS  
- **IGETC:** None

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## CIS-017C - Windows Server 2003 Active Directory
This course covers various aspects of planning, implementing, and maintaining a Microsoft Windows Server 2003 Active Directory Infrastructure. This includes Active Directory infrastructure strategy; user, computer, and group strategies; and group policy strategy.

**Lecture Hours:** 2.5  
**Lab Hours:** 1.5  
**Repeatable:** No  
**Grading:** L

**Prerequisite:** CIS 017B with C or better

**CAN:** None  
**Advisory Level:**  
- **Read:** 3  
- **Write:** 3  
- **Math:** None

**Transfer Status:**  
- **CSU Degree Applicable:** AA/AS  
- **IGETC:** None

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## CIS-017D - Windows Server 2003 Network Infrastructure
This course will cover various aspects of managing and maintaining a Microsoft Windows Server 2003 Network Infrastructure. This includes implementing, managing, and maintaining IP addressing, name resolution, network security, routing and remote access, and maintaining a network infrastructure.

**Lecture Hours:** 2.5  
**Lab Hours:** 1.5  
**Repeatable:** No  
**Grading:** L

**Prerequisite:** CIS 017B with C or better

**CAN:** None  
**Advisory Level:**  
- **Read:** 3  
- **Write:** 3  
- **Math:** None

**Transfer Status:**  
- **CSU Degree Applicable:** AA/AS  
- **IGETC:** None

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**CIS-017E** - Exchange Server 2003  
Units: 3

This course will cover various aspects of implementing, managing and maintaining Microsoft Exchange Server 2003. This includes installation and configuration of Exchange 2003, managing Exchange computers, managing security, and managing recipient objects and address lists.

Lecture Hours: 2.5  
Lab Hours: 1.5  
Repeatable: No  
Grading: L

Prerequisite: CIS 017C with C or better

CAN: None  
Advisory Level:  
Read: 3  
Write: 3  
Math: None

Transfer Status: CSU  
Degree Applicable: AA/AS

CSU GE: None  
District GE: None  
IGETC: None

**CIS-017F** - Windows 2003 Clustering Implementation  
Units: 3

This course provides students the skills to select the appropriate implementation of critical business solutions that require fault tolerance and high availability. The course teaches how to install, maintain, troubleshoot and support MS clustering service. It covers the tasks of how to prepare the RAID for failover clustering, configure cluster resources, configure failover and load balancing, configure cluster unaware applications using generic services, cluster maintenance and management, and troubleshooting.

Lecture Hours: 2.5  
Lab Hours: 1.5  
Repeatable: No  
Grading: L

Prerequisite: CIS 017B with C or better

CAN: None  
Advisory Level:  
Read: 3  
Write: 3  
Math: None

Transfer Status: CSU  
Degree Applicable: AA/AS

CSU GE: None  
District GE: None  
IGETC: None

**CIS-018A** - Cisco Network Essentials  
Units: 3

This course introduces students to the fundamentals of local area networks (LANs) and emphasizes preparation for the Cisco Certified Network Associate (CCNA) certification test. It includes topics such as the OSI model and industry standards, network topologies, IP addressing, subnet masks, networking components, and basic network design.

Lecture Hours: 2.5  
Lab Hours: 1.5  
Repeatable: No  
Grading: O

Prerequisite: CIS 041  
Corequisite: CIS 200

CAN: None  
Advisory Level:  
Read: 2  
Write: 2  
Math: None

Transfer Status: CSU  
Degree Applicable: AA/AS

CSU GE: None  
District GE: None  
IGETC: None

**CIS-018B** - Cisco Router and IOS Software  
Units: 3

This course covers the fundamentals of wide area networks (WANs) and prepares students for the Cisco Certified Network Associate (CCNA) certification test. It includes topics such as Cisco router configurations, the differences between routed and routing protocols, routing tables, and network packet transmission methodology. It also includes configuration of IP addresses and techniques to reduce routing problems.

Lecture Hours: 2.5  
Lab Hours: 1.5  
Repeatable: No  
Grading: O

Prerequisite: CIS 018A  
Corequisite: CIS 200

CAN: None  
Advisory Level:  
Read: 2  
Write: 2  
Math: None

Transfer Status: CSU  
Degree Applicable: AA/AS

CSU GE: None  
District GE: None  
IGETC: None

**CIS-018C** - Cisco Local Area Network Design  
Units: 3

This course covers the design of a LAN and prepares students for the Cisco Certified Network Associate (CCNA) test. Students will design and configure an actual network for a typical LAN. Topics covered include IPX addresses and access lists, advantages of LAN segmentation using bridges, routers, and switches. The course also covers features and benefits of Fast Ethernet connections and VLANs.

Lecture Hours: 2.5  
Lab Hours: 1.5  
Repeatable: No  
Grading: O

Prerequisite: CIS 018B  
Corequisite: CIS 200

CAN: None  
Advisory Level:  
Read: 2  
Write: 2  
Math: None

Transfer Status: CSU  
Degree Applicable: AA/AS

CSU GE: None  
District GE: None  
IGETC: None

**CIS-018D** - Cisco Wide Area Network Design  
Units: 3

This course covers the design of a wide area network (WAN) and prepares students for the Cisco Certified Network Associate (CCNA) test. Students will design and configure an actual WAN. The course covers topics such as WAN theory and design, Frame Relay terms and features, PPP operations, and ISDN networking and protocols.

Lecture Hours: 2.5  
Lab Hours: 1.5  
Repeatable: No  
Grading: O

Prerequisite: CIS 018C  
Corequisite: CIS 200

CAN: None  
Advisory Level:  
Read: 2  
Write: 2  
Math: None

Transfer Status: CSU  
Degree Applicable: AA/AS

CSU GE: None  
District GE: None  
IGETC: None

**CIS-018E** - CCNP Advanced Routing  
Units: 3

This course covers advanced concepts of routing, and prepares students for the Cisco Certified Networking Professional (CCNP) Routing exam, one of the four certification tests for the CCNP. It includes topics such as Managing Network Traffic, Optimizing Routing Operation, configuring major protocols (OSPF,EIGRP, BGP), and quality of Service (QoS). Target audience is students who want to analyze, plan, and evaluate computer networks.

Lecture Hours: 2.5  
Lab Hours: 1.5  
Repeatable: No  
Grading: O

Prerequisite: CIS 018D with C or better or CCNA certification  
Corequisite: CIS 200

CAN: None  
Advisory Level:  
Read: 2  
Write: 2  
Math: 2

Transfer Status: CSU  
Degree Applicable: AA/AS

CSU GE: None  
District GE: None  
IGETC: None

**CIS-018F** - CCNP Remote Access  
Units: 3

This course covers remote access to networks, and prepares students for the Cisco Certified Networking Professional (CCNP) Remote Access exam, one of the four certification tests for the CCNP. It includes topics such as Configuring PPP, PAP and CHAP, Using ISDN and DDR; setting up Frame Relay; Traffic Shaping; Backup Connections; Optimizing WAN Traffic; PAT and NAT; and Troubleshooting Remote Access Networks. Target audience is students who want to analyze, plan, and evaluate computer networks.

Lecture Hours: 2.5  
Lab Hours: 1.5  
Repeatable: No  
Grading: O

Prerequisite: CIS 018D or achievement of CCNA certification  
Corequisite: CIS 200

CAN: None  
Advisory Level:  
Read: 2  
Write: 2  
Math: 2

Transfer Status: CSU  
Degree Applicable: AA/AS

CSU GE: None  
District GE: None  
IGETC: None
**CIS-018G** - CCNP Multi-Layer Switching  
Units: 3  
This course covers advanced concepts of switching, and prepares students for the Cisco Certified Networking Professional (CCNP) Switching exam, one of the four certification tests for the CCNP. It includes topics such as Planning and Implementing Virtual LANS; Managing Switches; and Troubleshooting Switches. Target audience is students who want to analyze, plan, and evaluate computer networks.  
Lecture Hours: 2.5  
Lab Hours: 1.5  
Repeatable: No  
Grading: O  
Prerequisite: CIS 018D or achievement of CCNA certification  
Corequisite: CIS 200  
CAN: None  
Advisory Level: Read: 2  
Write: 2  
Math: 2  
Transfer Status: CSU  
Degree Applicable: AA/AS  
CSU GE: None  
District GE: None  
IGETC: None  

**CIS-018H** - CCNP Network Troubleshooting  
Units: 3  
This course covers advanced concepts of switching, and prepares students for the Cisco Certified Networking Professional (CCNP) Troubleshooting exam, one of the four certification tests for the CCNP. It includes topics such as Selecting and Applying Methods and Tools of Troubleshooting; Diagnosing and Correcting Campus TCP/IP Problems, Frame Relay Problems, and ISDN BRI Problems. Target audience is students who want to analyze, plan, and evaluate computer networks.  
Lecture Hours: 2.5  
Lab Hours: 1.5  
Repeatable: No  
Grading: O  
Prerequisite: CIS 018E and CIS 018F and CIS 018G  
Corequisite: CIS 200  
CAN: None  
Advisory Level: Read: 2  
Write: 2  
Math: 2  
Transfer Status: CSU  
Degree Applicable: AA/AS  
CSU GE: None  
District GE: None  
IGETC: None  

**CIS-019A** - Cisco Network Security Fundamentals  
Units: 3  
This course is an introduction to the fundamentals of network security. This course focuses on the general security processes based on a network specific security policy. Students will learn hands-on skills in the areas of security policy design and management, security technologies, products and solutions, firewall and secure router design, installation, configuration and maintenance, AAA implementation using routers and firewalls, and VPN implementation using routers and firewalls. This is one of the courses that prepare students for Cisco CCNP/Security Certification exam.  
Lecture Hours: 2.5  
Lab Hours: 1.5  
Repeatable: No  
Grading: L  
Prerequisite: CIS 018D with C or better or achievement of CCNA certification  
Corequisite: CIS 200  
CAN: None  
Advisory Level: Read: 3  
Write: 3  
Math: None  
Transfer Status: CSU  
Degree Applicable: AA/AS  
CSU GE: None  
District GE: None  
IGETC: None  

**CIS-019B** - Cisco Wireless Local Area Network Fundamentals  
Units: 3  
Students will learn how to use XML to create dynamic web pages, and learn why XML is gaining popularity more rapidly than any other web technology. Students will create their own XML documents, XML document type definitions and schemas to describe their structure and content. Students will also discover how to use cascading style sheets (CSS) to render XML documents using an ordinary web browser.  
Lecture Hours: 2.5  
Lab Hours: 1.5  
Repeatable: No  
Grading: L  
Prerequisite: CIS 018D with C or better or achievement of CCNA certification  
Corequisite: CIS 200  
CAN: None  
Advisory Level: Read: 3  
Write: 3  
Math: None  
Transfer Status: CSU  
Degree Applicable: AA/AS  
CSU GE: None  
District GE: None  
IGETC: None  

**CIS-020** - XML Fundamentals  
Units: 3  
Students will learn how to use XML to create dynamic web pages, and learn why XML is gaining popularity more rapidly than any other web technology. Students will create their own XML documents, XML document type definitions and schemas to describe their structure and content. Students will also discover how to use cascading style sheets (CSS) to render XML documents using an ordinary web browser.  
Lecture Hours: 2.5  
Lab Hours: 1.5  
Repeatable: No  
Grading: L  
Recommended: CIS 042 strongly recommended.  
CAN: None  
Advisory Level: Read: 3  
Write: 3  
Math: None  
Transfer Status: CSU  
Degree Applicable: AA/AS  
CSU GE: None  
District GE: None  
IGETC: None  

**CIS-021** - Java Servlets  
Units: 3  
Students will learn how to develop and use Java Servlets. Java Servlets are being used to solve many problems associated with CGI and proprietary server APIs. Students will learn the overall Servlet architecture and what is needed to develop dynamic and robust applications using Java Servlets.  
Lecture Hours: 2.5  
Lab Hours: 1.5  
Repeatable: No  
Grading: L  
Recommended: CIS 042 or equivalent strongly recommended.  
CAN: None  
Advisory Level: Read: 3  
Write: 3  
Math: None  
Transfer Status: CSU  
Degree Applicable: AA/AS  
CSU GE: None  
District GE: None  
IGETC: None  

**CIS-022** - Database Technology  
Units: 3  
Databases are the repository for the information retrieved from the Internet on a daily basis. This course will provide knowledge about the ever expanding field of Database Technology. Students will learn about database concepts, structure, access methods, and design considerations. Students will create a database implement using SQL and create access to the Internet. The class will focus on object-relational databases.  
Lecture Hours: 2.5  
Lab Hours: 1.5  
Repeatable: No  
Grading: L  
Recommended: CA 060C or equivalent strongly recommended.  
CAN: None  
Advisory Level: Read: 3  
Write: 3  
Math: None  
Transfer Status: CSU  
Degree Applicable: AA/AS  
CSU GE: None  
District GE: None  
IGETC: None  

**CIS-023** - JavaScript Programming for the Web  
Units: 2  
This is an introductory course in the use of JavaScript, a cross-platform scripting language used for creating interactive Web pages. The course covers forms, communicating with other Web tools, and customizing Web pages.  
Lecture Hours: 1  
Lab Hours: 3  
Repeatable: No  
Grading: L  
Prerequisite: CIS 042  
Corequisite: CIS 200  
CAN: None  
Advisory Level: Read: 2  
Write: 2  
Math: None  
Transfer Status: CSU  
Degree Applicable: AA/AS  
CSU GE: None  
District GE: None  
IGETC: None
## CIS-024A - Perl Programming
This course is intended for students with a basic knowledge of programming, and covers most aspects of the Perl programming language. The course includes a review of programming basics, object-oriented programming (OOP), networking, graphics and database applications. Students learn how to find additional Perl resources on the Internet and create their own networks and Web services.

- **Lecture Hours:** 2.5
- **Lab Hours:** 1.5
- **Repeatable:** No
- **Grading:** L
- **Prerequisite:** CIS 042 with C or better
- **Advisory Level:** Read: 3, Write: 3, Math: None
- **Transfer Status:** CSU Degree Applicable: AA/AS
- **CSU GE:** None
- **District GE:** None
- **IGETC:** None

## CIS-025 - VBX and ActiveX Controls
In this course, students build components that enable interactive content for the Web. Students design their own ActiveX controls, develop property sheets, and learn debugging techniques. They also incorporate ActiveX tools such as document containers and OLE automation objects into applications designed for the Web.

- **Lecture Hours:** 2.5
- **Lab Hours:** 1.5
- **Repeatable:** No
- **Grading:** L
- **Prerequisite:** CIS 042
- **Corequisite:** CIS 200
- **Advisory Level:** Read: 2, Write: 2, Math: None
- **Transfer Status:** CSU Degree Applicable: AA/AS
- **CSU GE:** None
- **District GE:** None
- **IGETC:** None

## CIS-026 - Designing Web-Based Courses and Training Materials
This course covers local vs. public Web site presentations, users' expectations from online courses, chat-rooms, evaluation of effective Web-based training materials and ways to promote interactivity on the Web. This course provides those who are involved in designing online courses hands-on experience with the basic requirements for creating a successful course. It covers various online tools devoted to this purpose. Students will learn the advantages and disadvantages of creating online applications and the special requirements of these courses. This course is designed for instructors, writers, editors, illustrators, and any individuals who need to create online, interactive tools.

- **Lecture Hours:** 2.5
- **Lab Hours:** 1.5
- **Repeatable:** No
- **Grading:** L
- **Corequisite:** CIS 200
- **Advisory Level:** Read: 2, Write: 2, Math: None
- **Transfer Status:** CSU Degree Applicable: AA/AS
- **CSU GE:** None
- **District GE:** None
- **IGETC:** None

## CIS-027 - Web Application Solutions
This is a second level course which provides an in-depth discussion of Internet file formats such as HTML, VRML, XML, DOM, RDF, and CSS used for documents, video and sound clips. It also covers data encryption procedures and the use of Java applets.

- **Lecture Hours:** 2.5
- **Lab Hours:** 1.5
- **Repeatable:** No
- **Grading:** L
- **Prerequisite:** CIS 023 and CIS 024 and CIS 025
- **Corequisite:** CIS 200
- **Advisory Level:** Read: 2, Write: 2, Math: None
- **Transfer Status:** CSU Degree Applicable: AA/AS
- **CSU GE:** None
- **District GE:** None
- **IGETC:** None

## CIS-028 - Web Site Administration I
This is a first level course that covers the basic information and tools required to establish a Web site in a business or academic environment.

- **Lecture Hours:** 2.5
- **Lab Hours:** 1.5
- **Repeatable:** No
- **Grading:** L
- **Prerequisite:** CIS 042 and CIS 060 and CIS 063 and CIS 157
- **Corequisite:** CIS 200
- **Advisory Level:** Read: 2, Write: 2, Math: None
- **Transfer Status:** CSU Degree Applicable: AA/AS
- **CSU GE:** None
- **District GE:** None
- **IGETC:** None

## CIS-029 - Web Site Administration II
This course is intended for students who are already familiar with programming and HTML. The course gives students an understanding of operating systems and site administration tools as they relate to Web site programming, design, and publishing. This course is designed to help students prepare to pass the International Web Administrators (IWA) certified Web professional exams.

- **Lecture Hours:** 2.5
- **Lab Hours:** 1.5
- **Repeatable:** No
- **Grading:** L
- **Prerequisite:** CIS 014 and CIS 028
- **Corequisite:** CIS 200
- **Advisory Level:** Read: 2, Write: 2, Math: None
- **Transfer Status:** CSU Degree Applicable: AA/AS
- **CSU GE:** None
- **District GE:** None
- **IGETC:** None

## CIS-030 - Introduction to .NET Architecture and Programming
This is the first course in a series of six courses offered in this curriculum. This course presents .NET information in a conceptual manner, independent of a programming language although programs written in C++, VB.NET, and C# demonstrate how to apply core .NET concepts. Topics covered include Web development (ASP.NET and Web services), desktop development (Windows Forms), client/server development (remote services), .NET architecture, .NET framework and common language specifications.

- **Lecture Hours:** 0.5
- **Lab Hours:** 1.5
- **Repeatable:** No
- **Grading:** L
- **Prerequisite:** CIS 042 with C or better
- **Advisory Level:** Read: 3, Write: 3, Math: None
- **Transfer Status:** CSU Degree Applicable: AA/AS
- **CSU GE:** None
- **District GE:** None
- **IGETC:** None

## CIS-031A - C# Programming I
This course introduces the students to C# development using Visual Studio .NET, and focuses on C# syntax, logic constructs and application development. The topics covered include the Object Oriented Programming (OOP) paradigm, class constructors, working with methods, using inheritance to create specialized classes and designing base classes as abstract classes.

- **Lecture Hours:** 2.5
- **Lab Hours:** 1.5
- **Repeatable:** No
- **Grading:** L
- **Prerequisite:** CIS 042 with C or better
- **Recommended:** CIS 059 or equivalent programming language strongly recommended.
- **Advisory Level:** Read: 3, Write: 3, Math: None
- **Transfer Status:** CSU Degree Applicable: AA/AS
- **CSU GE:** None
- **District GE:** None
- **IGETC:** None
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS-031B</td>
<td>C# Programming I</td>
<td>3</td>
<td>This course provides an in-depth analysis of the object-oriented features of C# and extends the language features presented in C# Programming I. Support for constructors, methods, overloaded methods and static methods, object cleanup, and field/method/property access is introduced. Inheritance, interfaces, sealed classes, singletons, collections, polymorphism, and events/delegates are reviewed in depth.</td>
</tr>
<tr>
<td>CIS-032</td>
<td>VB.NET Programming</td>
<td>3</td>
<td>This course introduces VB.NET development using Microsoft Visual Studio .NET and focuses on VB.NET syntax, logic constructs, application development, exception handling, error handling, object creation/cleanup, and basic inheritance. In addition, students are exposed to debugging VB.NET applications and exploring system programming issues within a .NET application environment.</td>
</tr>
<tr>
<td>CIS-033</td>
<td>Applications Using ASP.NET</td>
<td>3</td>
<td>The course covers basic web page design using ASP.NET, server controls, data validation, XML documents, XHTML and XSLT style sheets, and SQL concepts. Students learn how to design and manage databases using MS Access and SQL Server, and how to program using reusable server components. Students write programs that use performance optimization, minimize security risks, debug and troubleshoot web applications. Students learn how to write programs that implement server-side programming to process forms, send email from a web page, and write to files on the server, and communicate between mobile devices.</td>
</tr>
<tr>
<td>CIS-034</td>
<td>Web Development with .NET</td>
<td>3</td>
<td>This course presents a complete overview of each phase of Web development with Visual Studio .NET. During the course, the framework for a complete Web site, from server-side to client desktop will be developed. Topics include data access (including ADO.NET, SQL Server, MSDE), business tier development (COM+, serviced components, transaction managing, queuing services), Web development (ASP.NET, server-side controls), exposing information via services (remoting, Web services), and client-side development (hosted Windows Forms controls).</td>
</tr>
<tr>
<td>CIS-041</td>
<td>Introduction to Computer Information Systems</td>
<td>3</td>
<td>Students will develop an understanding of what constitutes a computer information system, acquire knowledge about hardware, software, data, computer number systems, and procedures. Recognize the impact and application of computers in business, government, and social organizations. The influence of the Internet on business is discussed, and terms relating to the Web are explained. Students will gain skills in performing fundamental functions of an operating system, be given an opportunity for hands-on practice of introductory level skills in word processing, spreadsheets, database, presentation graphics, and use of Internet. Students will be exposed to a programming language.</td>
</tr>
<tr>
<td>CIS-042</td>
<td>Program Design and Development</td>
<td>3</td>
<td>This course is an introduction to modern structured and object-oriented programming. Analysis of project definitions is performed to design and implement solutions to information systems problems. Students will use systematic problem solving techniques to develop and test program specifications and detailed logic plans. Programs will be described and designed with tools such as structure charts and pseudocode. Students will use a structured programming language to code computer instructions that implement their designs. Students will use a visual programming language to develop programs using objects. Testing and debugging will be treated as extensions of the coding task.</td>
</tr>
<tr>
<td>CIS-043</td>
<td>Assembly Language Programming for Micros</td>
<td>3</td>
<td>This course introduces the architecture of the microprocessor, its instruction set repertoire, and assembly language programming concepts and techniques. Students will learn how to use assembly language to control I/O devices, add new I/O interfaces, and perform tasks outside the scope of high level languages.</td>
</tr>
<tr>
<td>CIS-044</td>
<td>C/C++ Programming</td>
<td>3</td>
<td>C is a general-purpose programming language which features brevity of expression, modern control flow and data structures, and a rich set of operators. C++ is an object oriented programming language that is built using the C language as a base. Students will learn the importance of portability and efficiency through a variety of programming assignments. This course is for students whose needs include applications programs and/or systems software.</td>
</tr>
</tbody>
</table>

Advisory Level: Read: 3 Write: 3 Math: None
Corequisite: CIS-040 or CIS-020
Prerequisite: CIS-040 with C or better

IGETC: None CSU GE: None District GE: None
CIS-055 - Data Structures

This course provides language independent treatment of topics including computer organization, data formats, file organization, recursion, and abstract data types. Data structures to be covered include arrays, list links, stacks, queues, binary trees, heaps, balanced trees and priority queues. Applications of recursion will be discussed in some detail. Techniques for searching and sorting will also be presented.

Lecture Hours: 2.5  Lab Hours: 1.5  Repeatable: No  Grading: L
Prerequisite: CIS 042 and CIS 054
Corequisite: CIS 200
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

CIS-059 - Object Oriented Programming Using C++

This course teaches the fundamentals and techniques of Object Oriented Programming (OOP) using the C++ language. Topics covered include: the elements of OOP, classes and objects, inheritance, polymorphism, overloading, member functions, member access, virtual functions, pointers, memory, management, constructors and destructors, derived classes, dynamic objects, queues and stacks. Modern programming and debugging techniques will be stressed throughout the course.

Lecture Hours: 2.5  Lab Hours: 1.5  Repeatable: No  Grading: L
Prerequisite: CIS 042 or CIS 054 with C or better
CAN: None
Advisory Level: Read: 3  Write: 3  Math: 3
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

CIS-059C - Visual C++ using Microsoft Foundation Classes

This is an advanced programming course that introduces Windows Application Programming. The course builds on object oriented programming (OOP) techniques including inheritance, polymorphism and encapsulation. The Microsoft Foundation Class (MFC) Library for Microsoft Windows is the standard C++ application programming interface (API) for all versions of Microsoft Windows. This course covers how to use MFC (version 2.0 or higher) and the Visual C++ development environment to create portable programs for these operating systems. Topics include: Class Hierarchy, Class Wizard, Graphics Device Interface, Menus, Dialogs, Toolbars, Document View Architecture, Files and Archiving, Print and Print Preview.

Lecture Hours: 2.5  Lab Hours: 1.5  Repeatable: No  Grading: L
Prerequisite: CIS 059 with C or better
Corequisite: CIS 200
Recommended: MATH 021
CAN: None
Advisory Level: Read: 2  Write: 2  Math: 2
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

CIS-060 - Systems Analysis and Design

System Analysis and Design begins with the definition of a problem followed by the design and implementation of a new system created to correct the problem. Students will apply the concepts of the systems analysis development cycle which includes: problem definition; data collection, and analysis; analysis of systems alternatives; determination of feasibility; development of the system proposal; pilot or prototype systems development; system design; program development; systems implementation; systems review and evaluation.

Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: L
Corequisite: CIS 200
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

CIS-062A - Introduction to PC Hardware and Diagnostics

This course introduces students to the basic understanding and supporting of today's PC hardware. Students are familiarized with hardware architecture and terms including processors, motherboards, memory, storage devices, peripherals, and video. Hands-on projects are included to help students become more familiar with computer hardware basics. This class prepares students to take more advanced A+ PC Technician courses and is a prerequisite for CIS 62B or CIS 62C.

Lecture Hours: 1.5  Lab Hours: 1.5  Repeatable: No  Grading: O
Corequisite: CIS 200
CAN: None
Advisory Level: Read: 2  Write: 2  Math: 2
Transfer Status: None Degree Applicable: AS
CSU GE: None  District GE: None  IGETC: None

CIS-062B - A+ Core PC Hardware Technology

This course teaches the skills needed to be a successful computer technician and prepares students for CompTIA's A+ Core Hardware certification exam. This hands-on class teaches the techniques needed to diagnose hardware problems, configure PC components, and replace defective computer parts. Students learn how to install boards, configure multiple hard drives, add peripheral devices, work with network adapters, solve basic printer problems, and modify CMOS setups. Diagnostic software and hardware procedures are included.

Lecture Hours: 1.5  Lab Hours: 1.5  Repeatable: No  Grading: L
Prerequisite: CIS 062A with C or better
Corequisite: CIS 200
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: None Degree Applicable: AS
CSU GE: None  District GE: None  IGETC: None

CIS-062C - A+ Core PC Operating Systems Technology

This course is a fundamental class for anyone wanting to service PC's or obtain A+ certification. It introduces the concepts and skills needed to load and use OS's ranging from DOS to Windows 98/2000 and prepares students for the CompTIA Operating Systems Technologies exam. Topics include the use of the command prompt, essential utilities, boot files, file systems, OS installation procedures, Windows configuration and hard disk partitioning strategies.

Lecture Hours: 1.5  Lab Hours: 1.5  Repeatable: No  Grading: O
Prerequisite: CIS 062A with C or better
Corequisite: CIS 200
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: None Degree Applicable: AS
CSU GE: None  District GE: None  IGETC: None

CIS-063 - Network Telecommunications

This course provides a general overview regarding aspects of networking. It is designed to make the student aware of the various elements, protocols and suites within the networking environment. The course prepares the student to take the Microsoft certified Professional exam.

Lecture Hours: 2.5  Lab Hours: 1.5  Repeatable: No  Grading: O
Prerequisite: CIS 041 or CIT 010
Corequisite: CIS 200
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None
**CIS-067 - Administering Microsoft Exchange Server**
units: 3

This course teaches students how to configure and maintain an Exchange server. It covers system architecture, messaging systems, protocols used to communicate with clients, distribution lists, files, and directories. Students learn how to configure message recipients and configure server locations efficiently according to the requirements of a business environment.

Lecture Hours: 2.5  Lab Hours: 1.5  Repeatable: No  Grading: O

Corequisite: CIS 200

CAN: None

Advisory Level: Read: 2  Write: 2  Math: None

Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

**CIS-068 - Administering Microsoft SQL Server**
units: 3

This course teaches students who to install, maintain, repair, and support the MS SQL server. It covers the tasks of an SQL administrator and explains how to manage storage, import and export data, and troubleshooting. The course also provides guidelines on how to manage database activities for groups of users.

Lecture Hours: 2.5  Lab Hours: 1.5  Repeatable: No  Grading: O

Corequisite: CIS 200

CAN: None

Advisory Level: Read: 2  Write: 2  Math: None

Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

**CIS-069 - Novell System Administration I**
units: 3

This course provides basic understanding and skills necessary to manage, monitor and maintain Local Area Network(s) with NetWare Operating System. The students gain first-hand experience with the following kinds of management tasks they would perform routinely as network administrators: network configuration, file and directory configuration, network security, backup/recovery system, print server, printer, print queue, automation. Additionally, this course will enable the student to perform basic troubleshooting techniques. The course covers the content required by Novell for System Manager which can lead to CNA and/or CNE certification.

Lecture Hours: 2.5  Lab Hours: 1.5  Repeatable: No  Grading: O

Prerequisite: CIS 063

Corequisite: CIS 200

CAN: None

Advisory Level: Read: 2  Write: 2  Math: None

Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

**CIS-073 - Visual Basic Programming**
units: 3

Visual Basic is a programming language that allows rapid development of Microsoft Windows- graphical user interface applications. This course covers Visual Basic concepts, tools, and programming methodology to create user friendly Microsoft Windows applications.

Lecture Hours: 2.5  Lab Hours: 1.5  Repeatable: No  Grading: L

CAN: None

Advisory Level: Read: 3  Write: 3  Math: None

Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

**CIS-083 - J2EE Fundamentals**
units: 3

Recent advances in computer and networking technologies have resulted in accelerated proliferation of resources scattered across the world. It imposes a tremendous challenge to the IT industry to build a scalable, highly available and yet secure enterprise application. Java 2 Enterprise Edition (J2EE) is fast becoming the de facto standard for developing robust, component-based multiltier enterprise applications. This course provides students with the knowledge and skills needed to develop, assemble, and deploy applications using J2EE platform.

Lecture Hours: 2.5  Lab Hours: 1.5  Repeatable: No  Grading: L

Prerequisite: CIS 042 with C or better

CAN: None

Advisory Level: Read: 3  Write: 3  Math: None

Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

**CIS-084 - Java Programming**
units: 3

This course is intended for students with some knowledge of programming who want to develop Java stand-alone applications. Object-oriented programming, multithreads and exception handling will be covered as well as networking and developing graphical user interfaces. Applets are also discussed.

Lecture Hours: 2.5  Lab Hours: 1.5  Repeatable: No  Grading: L

Recommended: CIS 042 is strongly recommended.

CAN: None

Advisory Level: Read: 3  Write: 3  Math: None

Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

**CIS-085 - Advanced Java Programming**
units: 3

This course covers advanced Java language concepts, such as event models, networking with applets, database access, and thread groups. Students will also write programs using inner classes, collections, and exceptions. In addition, I/O routines, Java Database Connectivity (JDBC) functionality, and Servlets will be covered in detail. Students will gain experience enhancing Java programs with Swing and JavaBean components.

Lecture Hours: 2.5  Lab Hours: 1.5  Repeatable: No  Grading: L

Prerequisite: CIS 084 with C or better

Corequisite: CIS 200

CAN: None

Advisory Level: Read: 2  Write: 2  Math: None

Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

**CIS-098 - Directed Study in Computer Information Systems**
units: 0.5 - 9

Individual or small groups of students who would benefit from Independent Study under the direction of faculty members in specific or related disciplines may develop individualized learning contracts designed to enhance their individual instructional programs. The students and the faculty member in consultation with the Division Dean will determine appropriate learning objectives and activities as well as the number of units to be earned. Instructions and the Learning Contract forms are available in the Division office. Repeatable to a maximum of 9 units across all disciplines.

Lecture Hours: None  Lab Hours: 1.5 - 27  Repeatable: 17  Grading: O

CAN: None

Advisory Level: Read: 2  Write: 2  Math: None

Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None
CIS-100 - DOS for Microcomputers Units: 2

In this course students learn to use Disk Operating System (DOS). The course provides in depth coverage and understanding of the DOS commands and concepts that are necessary to use other computer applications and file handling procedures for floppy and fixed disks. Emphasis is placed on functionality rather than commands. Emphasis is placed on using the command-line, text based DOS interface to manipulate files and directories and to use troubleshooting tools to analyze and enhance system performance.

Lecture Hours: 1  Lab Hours: 3  Repeatable: No  Grading: L

Corequisite: CIS 200

CAN: None

Advisory Level:  Read: 2  Write: 2  Math: None

Transfer Status: CSU Degree Applicable: AA/AS

CSU GE: None  District GE: None  IGETC: None

CIS-119A - Network Security and Intrusion Detection Units: 3

This course is an introduction to network security architecture models, information security standards, and cryptography. Students will learn to assess network for vulnerabilities, implement prevention techniques. They will also define and implement security policies to detect and prevent intrusion and attacks on systems.

Lecture Hours: 2.5 Lab Hours: 1.5 Repeatable: No Grading: L

CAN: None

Advisory Level:  Read: 3  Write: 3  Math: None

Transfer Status: CSU Degree Applicable: AA/AS

CSU GE: None  District GE: None  IGETC: None

CIS-119B - Internet Security Protocols Units: 3

This course is an application of advanced network security protocols namely VPN and SSL to connect and conduct business securely on the Internet. The course covers the IP Security protocol and its components. Students define, implement and operate virtual private networks (VPN), and secure web transactions using SSL. This course demonstrates X.509 digital certificates as an alternative to passwords for user authentication. Students learn about digital signatures, certificate enrollment protocols, revocation methods and certificate authorities. This course prepares students to pass the CISSP certification exam and to pursue careers as Internet security professionals.

Lecture Hours: 2.5 Lab Hours: 1.5 Repeatable: No Grading: L

Recommended: CIS 063 and CIS 119A strongly recommended.

CAN: None

Advisory Level:  Read: 3  Write: 3  Math: None

Transfer Status: CSU Degree Applicable: AA/AS

CSU GE: None  District GE: None  IGETC: None

CIS-131 - Introduction to Internet Units: 1

Internet is a world wide collection of computer networks that transmit data using the Internet Protocol. This course provides the basic skills needed to use Internet services of electronic mail, file transfer, remote login, news, sharing software and accessing information.

Lecture Hours: 0.5 Lab Hours: 1.5 Repeatable: No Grading: L

Corequisite: CIS 200

CAN: None

Advisory Level:  Read: 2  Write: 2  Math: None

Transfer Status: CSU Degree Applicable: AA/AS

CSU GE: None  District GE: None  IGETC: None

CIS-132 - Web Pages with HTML Units: 3

This is an introductory course for students who want to be proficient using HTML commands. Students will discover what makes some World Wide Web pages stand out and why so many Web sites never get noticed. Students will design multiple web pages to attract their target audience and have them navigate through key information. Students will learn the code-writing commands needed to program their own home page to appear the way it is envisioned, to make a web page easily accessible to all who visit it, and to inspect page outline and make changes whenever needed.

Lecture Hours: 2.5 Lab Hours: 1.5 Repeatable: No Grading: L

Recommended: CIS 131 strongly recommended.

CAN: None

Advisory Level:  Read: 3  Write: 3  Math: None

Transfer Status: CSU Degree Applicable: AA/AS

CSU GE: None  District GE: None  IGETC: None

CIS-136 - Computer Information Systems Units: 1 - 4

Occupational Work Experience-Parallel Plan

Occupational Work Experience is designed for students who work or volunteer in a field related to their vocational major. Students are required to provide evidence that they are enrolled in a vocational program (e.g., educational plan or coursework in a vocational subject area). The Parallel Plan is designed for students who wish to take classes and work during the same semester. A maximum of 4 units of Occupational Work Experience credit may be earned during any one semester, to a maximum of 16 units total. Students must be enrolled in at least 7 units including Work Experience units. Courses taken at other accredited colleges or equivalent course work may meet this requirement. Internship/job placement is not guaranteed.

Lecture Hours: None Lab Hours: 3 - 12 Repeatable: 15 Grading: O

Corequisite: 1) Be enrolled during the regular semester in a minimum of 7 units at any accredited college, including Work Experience units or; 2) During a summer session, be enrolled in at least one other class in addition to Work Experience; and 3) Be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.

CAN: None

Advisory Level:  Read: 3  Write: 3  Math: None

Transfer Status: CSU Degree Applicable: AA/AS

CSU GE: None  District GE: None  IGETC: None

CIS-138 - CIS Occupational Work Experience-Alternate Plan

Occupational Work Experience is designed for students who work or volunteer in a field related to their vocational major. Students are required to provide evidence that they are enrolled in a vocational program (e.g., educational plan or coursework in a vocational subject area). The Alternate Plan is designed to allow students attend school one semester and work the next. A maximum of 8 units of Occupational Work Experience credit may be earned during any one semester, to a maximum of 16 units total. Students may only take one (if any) class in addition to work experience. Internship/job placement is not guaranteed.

Lecture Hours: None Lab Hours: 3 - 24 Repeatable: 15 Grading: O

Corequisite: 1) Be enrolled in at most one other class in addition to Work Experience. 2) May be enrolled in at most one other class in addition to Work Experience. 3) Must be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.

CAN: None

Advisory Level:  Read: 3  Write: 3  Math: None

Transfer Status: CSU Degree Applicable: AA/AS

CSU GE: None  District GE: None  IGETC: None
### SJCC Course Catalog

#### Computer Information Systems

**CIS-151B - UNIX Shell Programming**  
Units: 3  
This is a beginning course in UNIX Shell Programming using different shell programs available with the UNIX operating system. The course will include use of Bourne Shell and C-Shell Programming theory and concepts. These concepts include interpretation of different quote characters, shell variables, decision making commands and looping mechanisms. Students will also learn passing arguments to shell scripts, IO redirection, terminal/file IO, subshells and using special UNIX commands. Additionally, this course will include use of restricted shell "nsh" and introduction to Korn shell commands. Students are required to register in CIS 200 in order to complete supplementary exercises.  
Lecture Hours: 2.5  
Lab Hours: 1.5  
Repeatable: No  
Grading: L  
Prerequisite: CIS 157  
Corequisite: CIS 200  
CAN: None  
Advisory Level: Read: 2  
Write: 2  
Math: None  
Transfer Status: CSU  
Degree Applicable: AA/AS  
CSU GE: None  
District GE: None  
IGETC: None

**CIS-151D - Linux Network Administration**  
Units: 3  
This is a course on Transmission Control Protocol/Internet Protocol (TCP/IP) and Linux networking. It includes assembly, set-up and configuration of the Linux Ethernet networks, host and router configurations, sendmail, firewalls, remote access, and execution. An introduction to distributed programming using sockets, TLI (Transfer Level Interface), RPC (Remote Procedure Calls) and frequently used diagnostics utilities are addressed. Students are required to register in CIS 200 in order to complete supplementary course work.  
Lecture Hours: 2.5  
Lab Hours: 1.5  
Repeatable: No  
Grading: L  
Prerequisite: CIS 158  
Corequisite: CIS 200  
CAN: None  
Advisory Level: Read: 3  
Write: 3  
Math: None  
Transfer Status: CSU  
Degree Applicable: AA/AS  
CSU GE: None  
District GE: None  
IGETC: None

**CIS-157 - Introduction to UNIX**  
Units: 3  
This course provides an introduction to the UNIX operating system. Topics covered include shells, directory and file structure, file permissions, passwords, security, the vi editor, redirection, pipes, filters and shell programming. Additional topics include the use of UNIX I/O devices, system administration and Internet access. Modern techniques will be stressed throughout the course.  
Lecture Hours: 2.5  
Lab Hours: 1.5  
Repeatable: No  
Grading: L  
Corequisite: CIS 200  
CAN: None  
Advisory Level: Read: 2  
Write: 2  
Math: None  
Transfer Status: CSU  
Degree Applicable: AA/AS  
CSU GE: None  
District GE: None  
IGETC: None

**CIS-158 - Unix System Administration**  
Units: 3  
This course teaches the concepts of Unix system administration. Lab exercises reinforce lecture topics and provide practical experiences in Unix system administration. Topics include unix installation, unix file systems, managing user accounts, user shells, security, system resources, device administration, system and file backup and restore, printers and print spooling systems, network management using TCP/IP, network access using telnet and ftp, interface to Microsoft networks using SAMBA, electronic mail systems, system kernel builds, and system tuning. Shell scripts are used to demonstrate system administration.  
Lecture Hours: 2.5  
Lab Hours: 1.5  
Repeatable: No  
Grading: O  
Prerequisite: CIS 157  
Corequisite: CIS 200  
CAN: None  
Advisory Level: Read: 2  
Write: 2  
Math: None  
Transfer Status: CSU  
Degree Applicable: AA/AS  
CSU GE: None  
District GE: None  
IGETC: None

**CIS-200 - CIS Supervised Skills Laboratory**  
Units: None  
Supplemental practice and/or instruction is offered students in a specific discipline on an optional but highly recommended basis. Projects are assigned in courses of concurrent enrollment. General consultation and supervision are provided by the faculty members in charge.  
Lecture Hours: None  
Lab Hours: None  
Repeatable: 19  
Grading: N  
Corequisite: CIS 010 or CIS 014 or CIS 016C or CIS 016D or CIS 016E or CIS 016F or CIS 016G or CIS 018A or CIS 018B or CIS 018C or CIS 018D or CIS 019A or CIS 019B or CIS 023 or CIS 024 or CIS 025 or CIS 026 or CIS 027 or CIS 028 or CIS 029 or CIS 041 or CIS 042 or CIS 051 or CIS 055 or CIS 059 or CIS 059C or CIS 060 or CIS 062 or CIS 063 or CIS 067 or CIS 068 or CIS 073 or CIS 085 or CIS 100 or CIS 131 or CIS 151B or CIS 151D or CIS 157 or CIS 158 or MATH 082 or MATH 083  
CAN: None  
Advisory Level: Read: None  
Write: None  
Math: None  
Transfer Status: None  
Degree Applicable: NC  
CSU GE: None  
District GE: None  
IGETC: None

**Computer Technology**

**CT-077 - Digital Circuits**  
Units: 3  
Computer Technology 77 is the basic digital logic and logic troubleshooting course which provides the student with a background in Boolean algebra, logic simplification, families, flip-flops, registers, counters, multiplexers, implementation of logic expressions, and construction and troubleshooting of logic circuits. Major emphasis is placed on laboratory performance in this course. Students are required to develop and demonstrate their understanding of digital circuit implementation and troubleshooting through the construction of numerous digital logic circuits. This course is required for all majors in Electronics, Computer and Laser Technology.  
Lecture Hours: 2  
Lab Hours: 4  
Repeatable: No  
Grading: L  
Credit by Exam: Yes  
Prerequisite: ELECT 320 or ELECT 121 or MATH (011A or 011R or 011S or 012) all with C or better  
Corequisite: Or concurrent enrollment in ELECT 121  
Recommended: Concurrent enrollment in ELECT 062  
CAN: None  
Advisory Level: Read: 2  
Write: 2  
Math: None  
Transfer Status: CSU  
Degree Applicable: AA/AS  
CSU GE: None  
District GE: None  
IGETC: None

**CT-079 - Microprocessor Fundamentals**  
Units: 3  
CT 79 is the second course in the Computer Technology program, and is a required course for the Electronics, Computer, Laser and Microwave Technology programs. Students build and test a 8086 microprocessor system and analyze the data, address, and control bus timing signals in lecture and lab. Emphasis is placed on topics common to all microprocessors, such as programming, architecture, and interfacing. Topics also included are serial and parallel data transfer, input/output, interrupts, programming of EPROMS, and the use of development systems and logic analyzers.  
Lecture Hours: 2  
Lab Hours: 4  
Repeatable: No  
Grading: L  
Prerequisite: CT 077 and ELECT 062, all with C or better  
CAN: None  
Advisory Level: Read: 2  
Write: 2  
Math: None  
Transfer Status: CSU  
Degree Applicable: AA/AS  
CSU GE: None  
District GE: None  
IGETC: None
### Computer Technology

#### CT-120 - Using Computers for Applied Sciences

Students will be introduced to a variety of computer applications used in the Applied Sciences, such as: electronics, CAD/CAM drafting, air conditioning, construction technology, laser technology, machine technology, SMT, engineering, and manufacturing. A general overview of what a computer is and how a computer system operates will be explored. No prior computer skills are required. The hands-on computer lab sessions of this course will introduce applications using operating systems, file management, word processing, spreadsheets, presentations and illustrations as they relate to the Applied Sciences. Discussions will include specific Applied Science applications and multiple use consideration.

<table>
<thead>
<tr>
<th>Lecture Hours:</th>
<th>1</th>
<th>Lab Hours:</th>
<th>3</th>
<th>Repeatable:</th>
<th>No</th>
<th>Grading:</th>
<th>L</th>
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<tbody>
<tr>
<td>Credit by Exam:</td>
<td>Yes</td>
<td></td>
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</tr>
</tbody>
</table>

- **CAN**: None
- **Advisory Level**: Read: 2 Write: 2 Math: 1
- **Transfer Status**: CSU Degree Applicable: AA/AS
- **CSU GE**: None
- **District GE**: None
- **IGETC**: None

#### CT-136 - Computer Technology - Occupational Work Experience - Parallel Plan

Occupational Work Experience is designed for students who work or volunteer in a field related to their vocational major. Students are required to provide evidence that they are enrolled in a vocational program (e.g., educational plan or coursework in a vocational subject area). The Parallel Plan is designed for students who wish to take classes and work during the same semester. A Maximum of 4 units of Occupational Work Experience credit may be earned during any one semester, to a maximum of 16 units total. Students must be enrolled in at least 7 units including Work Experience units. Courses taken at other accredited colleges or equivalent course work may meet this requirement. Internship/job placement is not guaranteed.

<table>
<thead>
<tr>
<th>Lecture Hours:</th>
<th>None</th>
<th>Lab Hours:</th>
<th>3 - 12</th>
<th>Repeatable:</th>
<th>15</th>
<th>Grading:</th>
<th>O</th>
</tr>
</thead>
</table>

- **Corequisite**: 1) Be enrolled during the regular semester in a minimum of 7 units at any accredited college, including Work Experience units or; 2) During a summer session, be enrolled in at least one other class in addition to Work Experience; and 3) Be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.

- **CAN**: None
- **Advisory Level**: Read: 3 Write: 3 Math: None
- **Transfer Status**: CSU Degree Applicable: AA/AS
- **CSU GE**: None
- **District GE**: None
- **IGETC**: None

#### Construction Technology

#### CNSTR-098 - Directed Study in Construction

Individual or small groups of students who would benefit from Independent Study under the direction of faculty members in specific or related disciplines may develop individualized learning contracts designed to enhance their individual instructional programs. The students and the faculty member in consultation with the Division Dean will determine appropriate learning objectives and activities as well as the number of units to be earned. Instructions and the Learning Contract forms are available in the Division office. Repeatable to a maximum of 9 units across all disciplines.

<table>
<thead>
<tr>
<th>Lecture Hours: None</th>
<th>Lab Hours: 1.5 - 27</th>
<th>Repeatable: 17</th>
<th>Grading: O</th>
</tr>
</thead>
</table>

- **CAN**: None
- **Advisory Level**: Read: 3 Write: 3 Math: None
- **Transfer Status**: CSU Degree Applicable: AA/AS
- **CSU GE**: None
- **District GE**: None
- **IGETC**: None

#### CNSTR-101A - Construction Tools, Materials and Processes

This course introduces the student to the residential construction industry. Hand/power tools and machines common to the building construction trades will be used. Construction materials, fasteners, and construction techniques will be utilized.

<table>
<thead>
<tr>
<th>Lecture Hours: 3</th>
<th>Lab Hours: 3</th>
<th>Repeatable: No</th>
<th>Grading: L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit by Exam: Yes</td>
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</tbody>
</table>

- **Recommended**: Review of general math skills and basic geometry is helpful.
- **CAN**: None
- **Advisory Level**: Read: 2 Write: 2 Math: None
- **Transfer Status**: CSU Degree Applicable: AA/AS
- **CSU GE**: None
- **District GE**: None
- **IGETC**: None

#### CNSTR-101B - Residential Construction Framing

Practical and theoretical study of foundations, floor frame systems, subflooring, and wall and ceiling framing methods.

<table>
<thead>
<tr>
<th>Lecture Hours: 2</th>
<th>Lab Hours: 4</th>
<th>Repeatable: No</th>
<th>Grading: L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit by Exam: Yes</td>
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</tbody>
</table>

- **Prerequisite**: CNSTR 101A or CNSTR 101 with C or better
- **Corequisite**: Or concurrent enrollment in CNSTR 101A
- **CAN**: None
- **Advisory Level**: Read: 2 Write: 2 Math: None
- **Transfer Status**: CSU Degree Applicable: AA/AS
- **CSU GE**: None
- **District GE**: None
- **IGETC**: None

#### CNSTR-102A - Residential Construction - Plumbing

Theoretical and practical instruction and hands-on experiences in construction plumbing. Sanitary waste and water systems will be designed, installed and tested.

<table>
<thead>
<tr>
<th>Lecture Hours: 2</th>
<th>Lab Hours: 4</th>
<th>Repeatable: No</th>
<th>Grading: L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit by Exam: Yes</td>
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</tbody>
</table>

- **Prerequisite**: CNSTR 101A or CNSTR 101 with C or better
- **Corequisite**: Or concurrent enrollment in CNSTR 101A
- **CAN**: None
- **Advisory Level**: Read: 2 Write: 2 Math: None
- **Transfer Status**: CSU Degree Applicable: AA/AS
- **CSU GE**: None
- **District GE**: None
- **IGETC**: None

#### CNSTR-102B - Residential/Commercial Wiring

This course covers the fundamentals of residential and commercial electrical wiring. Successful completion of this course requires a working knowledge of sizing an electrical service and distribution panel and sizing of breakers and conductors. Students will also have knowledge of various residential and commercial circuits, GFCI protection, and grounding requirements. The course stresses the importance of print reading. The commercial wiring portion informs the student of the systems peculiar to commercial applications.

<table>
<thead>
<tr>
<th>Lecture Hours: 3</th>
<th>Lab Hours: 3</th>
<th>Repeatable: No</th>
<th>Grading: L</th>
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</thead>
<tbody>
<tr>
<td>Credit by Exam: Yes</td>
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</table>

- **Recommended**: General math skills are needed for calculations.
- **CAN**: None
- **Advisory Level**: Read: 3 Write: 3 Math: None
- **Transfer Status**: CSU Degree Applicable: AA/AS
- **CSU GE**: None
- **District GE**: None
- **IGETC**: None
CNSTR-103 - Roof Framing Systems  
Units: 4

The theory and practice of roof framing for residential dwellings. Hands-on experience is provided. Topics included are techniques for cutting, installing, bracing and sheathing of rafters and application roof coverings.

Lecture Hours: 3  Lab Hours: 3  Repeatable: No  Grading: L
Prerequisite: CNSTR 101A or CNSTR 101 with C or better

CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

CNSTR-104 - Interior/Exterior Finish  
Units: 4

The related theory and the practical hands-on experience with the finishing of residential housing floor, wall, and ceiling frames. The installation of both exterior and interior finishing materials will be covered.

Lecture Hours: 3  Lab Hours: 3  Repeatable: No  Grading: L
Credit by Exam: Yes
Prerequisite: CNSTR 101A or CNSTR 101 with C or better

CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

CNSTR-105 - Concrete Construction  
Units: 3

Concrete Construction is required for the AS Degree or Certification in Construction Technology. This beginning course introduces students to the many applications of concrete in the world of construction. Students will become familiar with industrial practices of forming, reinforcing, placing and finishing concrete. Each student is required to construct concrete forms, bend reinforcing steel, and correctly mix, place, and finish concrete. Students will also learn to read blueprints and complete concrete material estimates.

Lecture Hours: 3  Lab Hours: 3  Repeatable: No  Grading: L
Prerequisite: CNSTR 101A or CNSTR 101 with C or better

CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

CNSTR-106 - Construction Blueprint Reading, Estimating, Codes and Specifications  
Units: 3

Construction Technology 106 is a beginning course that introduces students to the world of construction estimating. Students will apply blueprints, codes, and specifications to estimating problems. Students will estimate the quantity of materials necessary to construct a small home. This course is required for the AS degree in Construction Technology.

Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: L
Prerequisite: CNSTR 101A or CNSTR 101 with C or better

CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

CNSTR-107 - Seminar in Principles of Contracting  
Units: 3

This course is designed for theoretical and practical instruction of the experiences and principles and applications of contracting. Students learn the requirements of being a licensed contractor and an overview of principles of running a contracting business. Job scheduling and estimating are covered.

Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: L

CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

CNSTR-109A - Basic Cabinet/Furniture Making  
Units: 3

This beginning course in cabinet and furniture making is designed for anyone who is interested in learning the basics of woodworking. Hand and power tool safety and use, project planning, and the materials and processes of furniture and cabinet making are included.

Lecture Hours: 2  Lab Hours: 4  Repeatable: No  Grading: L

CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: None  Degree Applicable: AS
CSU GE: None  District GE: None  IGETC: None

CNSTR-109B - Advanced Cabinet/Furniture Making  
Units: 3

This course is a continuation of Construction Technology 109A. It is designed for anyone who is interested in learning and developing more advanced manipulative skills used within the cabinet/furniture making industry today. Tool/machine safety, use, and maintenance, frame and panel construction, cabinet doors, drawers, drawer guides, shelves, and cabinet interiors will be covered.

Lecture Hours: 2  Lab Hours: 4  Repeatable: No  Grading: L
Prerequisite: CNSTR 109A with C or better

CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

CNSTR-110 - Architectural Drawing and Home Planning  
Units: 3

Architectural Drawing and Home Planning is a required introductory course for the AS Degree or Certificate in the Construction Technology program. The student, through lecture, example, and practice becomes familiar with the problems involved in planning a home, choosing the site, area, and the most important factors involved in regional planning. Two preliminary home plans are developed, and from one of these, the student will prepare working drawings from which a home could be built. The working drawings consist of a plot, floor, and foundation plans - structural section, interior and exterior elevations. Lectures in planning, design, codes, building methods, conventions, drawing, and illustration techniques are delivered.

Lecture Hours: 2  Lab Hours: 4  Repeatable: No  Grading: L
Prerequisite: CADD 010 or DRAFT 010

Recommended: Complete CNSTR 101A and CNSTR 101B and CNSTR 102A and CNSTR and CNSTR 102B and CNSTR 103 and CNSTR 106 and CNSTR 107 and CNSTR 109B prior to this course.

CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None
**Construction Technology**  

**CNSTR-111 - Basic Woodworking: Clockmaking**  
Units: 1.5

Students will learn the fundamentals of woodworking through an application (clockmaking). The course includes clock design, basic print reading, shop math, measurement, and construction techniques. Safety procedures and demonstrations of hand/power tools and machines used in clock making will be presented. Types of hardwoods, fasteners, and clock mechanisms will be discussed. Assembly and finishing procedures will also be covered, so that the student finishes the class with a completed, functioning clock.

<table>
<thead>
<tr>
<th>Lecture Hours</th>
<th>Lab Hours</th>
<th>Repeatable</th>
<th>Grading</th>
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<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>2</td>
<td>0</td>
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</tbody>
</table>

CAN: None  
Advisory Level: Read: 3 Write: 3 Math: None  
Transfer Status: None  
CSU GE: None  
District GE: None  
IGETC: None

**CNSTR-112 - Supervision of Construction**  
Units: 1

This course covers the basics of directing people at work and is a comprehensive supervision blueprint for anyone who is responsible for the actions of others in the workplace. This course will help supervisors increase productivity and make life as a supervisor less stressful and more rewarding.

<table>
<thead>
<tr>
<th>Lecture Hours</th>
<th>Lab Hours</th>
<th>Repeatable</th>
<th>Grading</th>
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</table>

CAN: None  
Advisory Level: Read: 3 Write: 3 Math: None  
Transfer Status: CSU  
Degree Applicable: AA/AS  
CSU GE: None  
District GE: None  
IGETC: None

**CNSTR-113 - Insurance for Construction**  
Units: 1

This course covers the fundamentals of procuring and managing insurance with special emphasis on cost control. This course will teach you how to understand and manage your worker’s compensation, liability and other coverages and how to save money on both the procurement and ongoing relationship with your insurer. It will help contractors make sense out of the maze of coverages and show how to save money and control the process of insuring your company with skill and confidence.

<table>
<thead>
<tr>
<th>Lecture Hours</th>
<th>Lab Hours</th>
<th>Repeatable</th>
<th>Grading</th>
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<tbody>
<tr>
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</table>

CAN: None  
Advisory Level: Read: 3 Write: 3 Math: None  
Transfer Status: CSU  
Degree Applicable: AA/AS  
CSU GE: None  
District GE: None  
IGETC: None

**CNSTR-114 - Finance for Construction**  
Units: 1

This course shows students how to build banking and finance relations. Coursework covers lines of credit, profit and loss statements, bonding requirements and qualification requirements for owners and general contractors. Your company cannot grow without these important, yet easy to build relationships.

<table>
<thead>
<tr>
<th>Lecture Hours</th>
<th>Lab Hours</th>
<th>Repeatable</th>
<th>Grading</th>
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<tbody>
<tr>
<td>1</td>
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</tbody>
</table>

CAN: None  
Advisory Level: Read: 3 Write: 3 Math: None  
Transfer Status: CSU  
Degree Applicable: AA/AS  
CSU GE: None  
District GE: None  
IGETC: None

**CNSTR-115 - Blueprint Reading**  
Units: 1

Construction drawings incorporate a specially defined nomenclature that accurately converts large-scale three-dimensional objects into a two-dimensional format. Construction drawings are the language of the building industry. This beginning course gives you the basic skills you need to read, and understand construction drawings and specifications.

<table>
<thead>
<tr>
<th>Lecture Hours</th>
<th>Lab Hours</th>
<th>Repeatable</th>
<th>Grading</th>
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<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>No</td>
<td>L</td>
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</tbody>
</table>

CAN: None  
Advisory Level: Read: 3 Write: 3 Math: None  
Transfer Status: CSU  
Degree Applicable: AA/AS  
CSU GE: None  
District GE: None  
IGETC: None

**CNSTR-116 - Estimating**  
Units: 1

This beginning course provides the basic concepts of construction cost estimating and shows how to estimate the quantity of labor and materials needed to complete a construction project. You will work from actual plans to predict the cost of trades and subcontract work for residential and commercial projects. Students will also become familiar with the CSI system of indexing all construction work in the specifications.

<table>
<thead>
<tr>
<th>Lecture Hours</th>
<th>Lab Hours</th>
<th>Repeatable</th>
<th>Grading</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>No</td>
<td>L</td>
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</tbody>
</table>

CAN: None  
Advisory Level: Read: 3 Write: 3 Math: None  
Transfer Status: CSU  
Degree Applicable: AA/AS  
CSU GE: None  
District GE: None  
IGETC: None

**CNSTR-117 - Fed-OSHA 10 HOUR Safety**  
Units: 1

This is the Federal Government’s modular construction safety certification course for construction workers taught by a Federally certified instructor. You will receive BOTH a Federal completion card AND college credit. Understand your rights and responsibilities under the OSH Act and how to implement them in the workplace. Gain knowledge that could save you and your company the cost of heavy fines or criminal prosecution. Upon successful completion of the course, participants will receive a Fed-OSHA Construction Safety and Health 10-hour course completion card.

<table>
<thead>
<tr>
<th>Lecture Hours</th>
<th>Lab Hours</th>
<th>Repeatable</th>
<th>Grading</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>No</td>
<td>L</td>
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</tbody>
</table>

CAN: None  
Advisory Level: Read: 3 Write: 3 Math: None  
Transfer Status: CSU  
Degree Applicable: AA/AS  
CSU GE: None  
District GE: None  
IGETC: None

**CNSTR-118 - Project Management for Construction**  
Units: 1

This course provides the basic concepts in construction project management and an understanding of tools to control the sequence of work on larger projects. Students will get practical experience using real or hypothetical situations in project management.

<table>
<thead>
<tr>
<th>Lecture Hours</th>
<th>Lab Hours</th>
<th>Repeatable</th>
<th>Grading</th>
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<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>No</td>
<td>L</td>
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</tbody>
</table>

CAN: None  
Advisory Level: Read: 3 Write: 3 Math: None  
Transfer Status: CSU  
Degree Applicable: AA/AS  
CSU GE: None  
District GE: None  
IGETC: None
CNSTR-119  -  Construction Contracting with the Federal Government  Units: 1
This course provides knowledge of how to get into the lucrative Federal Construction market and successfully locate, bid and build a Federal project.
Lecture Hours: 1  Lab Hours: 0  Repeatable: No  Grading: L
CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

CNSTR-136  -  Construction Technology  Units: 1 - 4
Occupational Work Experience- Parallel Plan
Occupational Work Experience is designed for students who work or volunteer in a field related to their vocational major. Students are required to provide evidence that they are enrolled in a vocational program (e.g., educational plan or coursework in a vocational subject area). The Parallel Plan is designed for students who wish to take classes and work during the same semester. A maximum of 4 units of Occupational Work Experience credit may be earned during any one semester, to a maximum of 16 units total. Students must be enrolled in at least 7 units including Work Experience units. Courses taken at other accredited colleges or equivalent course work may meet this requirement. Internship/job placement is not guaranteed.
Lecture Hours: None  Lab Hours: 3 - 12  Repeatable: 15  Grading: O
Corequisite: 1) Be enrolled during the regular semester in a minimum of 7 units at any accredited college, including Work Experience units or; 2) During a summer session, be enrolled in at least one other class in addition to Work Experience; and 3) Be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.
CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

CNSTR-138  -  Construction Technology  Units: 1 - 8
Occupational Work Experience- Alternate Plan
Occupational Work Experience is designed for students who work or volunteer in a field related to their vocational major. Students are required to provide evidence that they are enrolled in a vocational program (e.g., educational plan or coursework in a vocational subject area). The Alternate Plan is designed to allow students to attend school one semester and work the next. A maximum of 8 units of Occupational Work Experience credit may be earned during any one semester, to a maximum of 16 units total. Students may only take one (if any) class in addition to work experience. Internship/job placement is not guaranteed.
Lecture Hours: None  Lab Hours: 3 - 24  Repeatable: 15  Grading: O
Corequisite: 1. Need not be enrolled in any other class during the semester besides Work Experience. 2. May be enrolled in at most one other class in addition to Work Experience. 3. Must be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.
CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

CORS-103  -  Juvenile Counselor Core Course  Units: 4
The Juvenile Counselor Core Course is designed to meet the California Board of Corrections requirements, entry level.
Lecture Hours: 6.8  Lab Hours: 2.3  Repeatable: No  Grading: L
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

CORS-109  -  Laws of Arrest, Search and Seizure  Units: 1
This 40 hour course curriculum covers professional orientation, laws of arrest, search, seizure, evidence, preliminary investigations, communications and arrest techniques. This course satisfies PC 832 requirements for entry level but does NOT include firearms and does NOT satisfy LE 165B prerequisite. This course may be offered as a component of Corrections 101, Correctional Officer Core Course.
Lecture Hours: 0.6  Lab Hours: 1.7  Repeatable: No  Grading: L
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: None  Degree Applicable: NAA
CSU GE: None  District GE: None  IGETC: None

CORCT-103  -  Probation Officer Core Course  Units: 5
This course provides the trainee with the basic concepts, tools, skills, etc. necessary to perform the job of probation officer within the state of California and prepare the graduate for the job. Certified by the State Board of Corrections. Training, and Standards for corrections (STC). Testing on various topics covered will be both written and practical in nature. This course includes 208 hours of training.
Lecture Hours: 8.2  Lab Hours: 3.1  Repeatable: No  Grading: L
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

COS-010A  -  Cosmetology Freshman Theory  Units: 5
Cosmetology 010A is the first course in sequence required of majors in Cosmetology. This class gives a general introduction to Cosmetology, including chemical compounds commonly found in soaps, shampoos, bleaches, hair colors, permanent waving, chemical straightening, and disinfectants. Bacteriology and sanitation processes are stressed as well as the political, social and economic aspects of the role of Cosmetology in today's society. All students are required to keep an information notebook and create projects demonstrating deductive reasoning and critical thinking. This course, with its corequisite, COS 105A, meets the District lab science requirement.
Lecture Hours: 5  Lab Hours: None  Repeatable: No  Grading: L
Corequisite: COS 105A
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: BL  IGETC: None
COS-010B - Cosmetology Senior Theory  Units: 5

This course is designed for continuing students who must meet the California Bureau of Barbering and Cosmetology requirement of 1600 hours. The lecture portion will include the Health and Safety Module. The following advanced topics are covered in lab: hair design, hair sculpting (cutting), haircoloring, perm design, shampooing, manicuring, make-up, facials, scalp massage, hair removal by wax and tweezers, hair relaxing, thermal styling, braiding / hair extensions, and spa pedicures. Both concepts and manipulative skills related to each area are emphasized.

Lecture Hours: 5  Lab Hours: 19.5  Repeatable: 1  Grading: L
Prerequisite: COS 010A and COS 105A, both with C or better
Corequisite: COS 105B

COS-098 - Directed Study in Cosmetology  Units: 0.5 - 9

Individual or small groups of students who would benefit from Independent Study under the direction of faculty members in specific or related disciplines may develop individualized learning contracts designed to enhance their individual instructional programs. The students and the faculty member in consultation with the Division Dean will determine appropriate learning objectives and activities as well as the number of units to be earned. Instructions and the Learning Contract forms are available in the Division office. Division office. Repeatable to a maximum of 9 units across all disciplines.

Lecture Hours: None  Lab Hours: 1.5 - 27  Repeatable: 17  Grading: O

COS-105 - Cosmetology Professional Skills  Units: 11.5

This course is designed for continuing students who must meet the California Bureau of Barbering and Cosmetology requirement of 1600 hours. The lecture portion will include the Health and Safety Module. The following advanced topics are covered in lab: hair design, hair sculpting (cutting), haircoloring, perm design, shampooing, manicuring, make-up, facials, scalp massage, hair removal by wax and tweezers, hair relaxing, thermal styling, braiding / hair extensions, and spa pedicures. Both concepts and manipulative skills related to each area are emphasized.

Lecture Hours: 5  Lab Hours: 19.5  Repeatable: 1  Grading: L
Prerequisite: COS 010A and COS 105A, both with C or better

COS-105A - Cosmetology Freshman Laboratory  Units: 16

The laboratory section for first semester cosmetology students includes beginning instruction in the following subject areas: hairstyling, hairshaping, permanent waving, chemical relaxing, thermal styling, haircoloring, hairlightening, scalp and hair treatments, manicures, pedicures, facials, makeup, eyebrow arching, sanitation, shampoos/rinses and understanding of pH. Client safety and sanitary precautions for each practical area are emphasized. Students must be concurrently enrolled in 010A. This course, with its corequisite, COS 10A, meets the District lab science requirement.

Lecture Hours: 5  Lab Hours: 32.5  Repeatable: 1  Grading: L
Corequisite: COS 010A

COS-105B - Cosmetology Senior Laboratory  Units: 16

This second semester lab course gives in depth information about Cosmetology including advanced manipulative skills in hairstyling, haircutting, haircoloring, permanent waving, manicuring, makeup, facials, scalp massage, hair removal, shampooing, chemical relaxing, thermal styling, pedicures, artificial nails and other procedures required by the State Bureau of Barbering and Cosmetology. Social, cultural, psychological, political and economical aspects of cosmetological vocation and entrepreneurship are discussed. Student must be concurrently enrolled in 010B. This course, with its corequisite, COS 10B, meets the District lab science requirement.

Lecture Hours: 5  Lab Hours: 32.5  Repeatable: 1  Grading: L
Prerequisite: COS 105A with C or better
Corequisite: COS 101B

COS-116A - Cosmetology Teacher Training I  Units: 10.5

This course is offered for the experienced / licensed Cosmetologist to become a qualified Cosmetology Instructor. Training for the course will consist of practical and theoretical principals of effective teaching methods, which includes lesson planning, oral presentations, evaluations, test construction, and procedures to ensure environmental health and safety. Preparation for State Cosmetology Instructor's License is emphasized.

Lecture Hours: 5  Lab Hours: 16.5  Repeatable: No  Grading: L
Prerequisite: Valid California Bureau and Cosmetology license and one year, full salon industry experience.

COS-116B - Cosmetology Teacher Training II  Units: 10.5

Phase II of the Cosmetology Teacher Trainees program will provide the Trainee with an opportunity to acquire additional Cosmetology skills, expand career options, work place skill competencies, subject mastery skills, and California Bureau of Barbering and Cosmetology Examination strategies necessary for acquiring their State Cosmetology Instructors License. A total of 300 hours of lecture / demonstration and laboratory training to include technical and practical aspects of Cosmetology Science.

Lecture Hours: 5  Lab Hours: 16.5  Repeatable: No  Grading: L
Prerequisite: Valid California Bureau and Cosmetology license and one year, full salon industry experience.

COS-120 - Manicuring Theory  Units: 4

This course provided instruction in the following areas: introduction to manicuring, career opportunities, professional ethics, salon conduct, bacteriology, sterilization and sanitation, structure of the nail, diseases and disorders of the nail, theory of massage, anatomy and physiology, diseases and disorders of the skin, chemistry, electricity, first aid, and salon management.

Lecture Hours: 4  Lab Hours: None  Repeatable: No  Grading: O
Prerequisite: File application with Cosmetology Dept.
Corequisite: COS 121
COS-121 - Manicuring Laboratory Units: 5
This course presents the concepts and develops the manipulative skills involved in manicuring, pedicuring, applying nail wraps using paper, silk, linen and fiberglass; the application of nail extensions using tips, acrylic, fiberglass, linen, gels, and nail art techniques.
Lecture Hours: None Lab Hours: 17 Repeatable: No Grading: O
Prerequisite: File application with Cosmetology Dept. Corequisite: COS 120
CAN: None
Advisory Level: Read: 1 Write: None Math: None
Transfer Status: None Degree Applicable: NAA
CSU GE: None District GE: None IGETC: None

COS-130A - Esthetician I Units: 8.5
This course in a sequence of two, will begin to provide students with the skills required to render professional services and to pass State Board Examinations. It gives students a thorough understanding of the theory of all pertinent subjects dealing with skin care and provides emphasis on the application of cosmetics.
Lecture Hours: 4.29 Lab Hours: 12.9 Repeatable: No Grading: L
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: None Degree Applicable: AS
CSU GE: None District GE: None IGETC: None

COS-130B - Esthetician II Units: 8.5
This second course is designed for continuing students who must meet the State Board requirements of 600 hours. It will provide students with the skills required to render professional services and to pass State Board Examinations and it gives students a thorough understanding of the theory of all pertinent subjects dealing with skin care and provides emphasis on the application of products including chemical peels, waxing, and essential oils.
Lecture Hours: 4.29 Lab Hours: 12.9 Repeatable: No Grading: L
Prerequisite: COS 130A with C or better
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: None Degree Applicable: AS
CSU GE: None District GE: None IGETC: None

COS-136 - Cosmetology Occupational Work Experience-Parallel Plan Units: 1 - 4
Occupational Work Experience is designed for students who work or volunteer in a field related to their vocational major. Students are required to provide evidence that they are enrolled in a vocational program (e.g., educational plan or coursework in a vocational subject area). The Parallel Plan is designed for students who wish to take classes and work during the same semester. A maximum of 4 units of Occupational Work Experience credit may be earned during any one semester, to a maximum of 16 units total. Students must be enrolled in at least 7 units including Work Experience units. Courses taken at other accredited colleges or equivalent course work may meet this requirement. Internship/job placement is not guaranteed.
Lecture Hours: None Lab Hours: 3 - 12 Repeatable: 15 Grading: O
Corequisite: 1) Be enrolled during the regular semester in a minimum of 7 units at any accredited college, including Work Experience units or; 2) During a summer session, be enrolled in at least one other class in addition to Work Experience; and 3) Be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.
CAN: None
Advisory Level: Read: 3 Write: 3 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

COS-X109 - Senior Laboratory Special Problems Units: 0.5 - 13
This course is designed for continuing students who must meet the California Cosmetology State Program requirements of 1600 hours. The following topics are covered: hairstyling, haircutting, haircoloring, permanent waving, manicuring, makeup, facials, scalp massage, eyebrow arching, shampooing, chemical straightening, thermal styling, and pedicures. Both concepts and manipulative skills related to each area are emphasized. Repeatable to a maximum of 13 units.
Lecture Hours: 5 Lab Hours: 35 Repeatable: 19 Grading: L
Prerequisite: COS 010B and COS 105B, both with C or better
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

DANCE-010 - Ballet, Beginning Units: 1
This course introduces the student to elementary ballet theory and technique including bars and centre work. The student will learn basic positions, poses, steps, jumps and turns, utilizing traditional French terminology. The student will gain an understanding and appreciation of his/her own unique body in relation to ballet as a classical art form. Repeatable to a maximum of 4 units.
Lecture Hours: None Lab Hours: 3 Repeatable: 3 Grading: O
Open Curriculum: No prerequisite, corequisite or levels
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: E2 District GE: E2 IGETC: None

DANCE-011 - Ballet, Intermediate Units: 0.5 - 1
This course furthers the student's artistry and skill in classical ballet. The student will apply fundamentals of theory and technique with attention to musicality and style in the execution of intermediate level barre and centre combinations. The student will gain fluency in the use of traditional French terminology. Repeatable to a maximum of 4 units.
Lecture Hours: None Lab Hours: 2 - 3 Repeatable: 7 Grading: L
Prerequisite: DANCE 010
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

DANCE-014 - Dancers' Workshop Units: 0.5 - 2
This is a course in dance rehearsal process which culminates in public performance. Students participate as dancers, rehearsing and performing repertory reconstruction’s, folkloric arrangements and original student and faculty choreography. Repeatable to a maximum of 8 units.
Lecture Hours: None Lab Hours: 2 - 6 Repeatable: 15 Grading: L
Open Curriculum: No prerequisite, corequisite or levels
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None
**DANCE-020 - Jazz Dance, Beginning**  
**Units: 0.5 - 1**

This course introduces the student to the elementary skills of jazz dance technique. The class begins with a warm-up that addresses strength, flexibility, alignment and coordination. The student will learn basic positions, locomotor movements, and full body actions. Exploration of movement qualities will be included as well as basic rhythms and phrasing in listening and moving to music. The student will gain an understanding and appreciation of his/her own unique body in relation to jazz dance as a dynamic art form. Repeatable to a maximum of 4 units.

Lecture Hours: None  
Lab Hours: 2 - 3  
Repeatable: 7  
Grading: O

Open Curriculum: No prerequisite, corequisite or levels

Advisory Level: Read: None  
Write: None  
Math: None

Transfer Status: CSU/UC  
Degree Applicable: AA/AS

CSU GE: E2  
District GE: E2  
IGETC: None

**DANCE-021 - Jazz Dance, Intermediate**  
**Units: 0.5 - 1**

This course is a continuation of all the elements introduced in Jazz Dance, Beginning. All activities increase in difficulty based on solid technical foundation of strength, flexibility, alignment, and coordination. The pace of the class becomes faster, and combinations increase in complexity and artistry. Repeatable to a maximum of 4 units.

Lecture Hours: None  
Lab Hours: 2 - 3  
Repeatable: 7  
Grading: O

Prerequisite: DANCE 020

CAN: None

Advisory Level: Read: None  
Write: None  
Math: None

Transfer Status: CSU/UC  
Degree Applicable: AA/AS

CSU GE: E2  
District GE: E2  
IGETC: None

**DANCE-024 - Dance Production Workshop**  
**Units: 0.5**

This is a course in dance production culminating in the public presentation of a dance performance. Students gain an overview of the scope and relationship of the technical and peripheral elements necessary to dance production, and participate in the application of one or more of these elements in the process of producing performance. Repeatable to a maximum of 2 units.

Lecture Hours: None  
Lab Hours: 2  
Repeatable: 3  
Grading: O

Open Curriculum: No prerequisite, corequisite or levels

Advisory Level: Read: None  
Write: None  
Math: None

Transfer Status: CSU/UC  
Degree Applicable: AA/AS

CSU GE: None  
District GE: None  
IGETC: None

**DANCE-040 - Tap Dance**  
**Units: 0.5 - 1**

This course introduces the student to elementary tap dance technique and application. The student will learn basic steps and rhythms. The student will gain understanding and appreciation of his/her own physical coordination and rhythmic sense in relation to tap dance as a traditional and contemporary performing art. Repeatable to a maximum of 4 units.

Lecture Hours: None  
Lab Hours: 2 - 3  
Repeatable: 7  
Grading: O

Open Curriculum: No prerequisite, corequisite or levels

Advisory Level: Read: None  
Write: None  
Math: None

Transfer Status: CSU/UC  
Degree Applicable: AA/AS

CSU GE: E2  
District GE: E2  
IGETC: None

**DANCE-050 - Modern Dance, Beginning**  
**Units: 1**

This course introduces the student to the elementary skills of modern dance technique. The student will learn basic positions, gestures, traveling and jumping steps, turns and level changes. The student will learn the fundamentals of spatial orientation and will gain an understanding and appreciation of his/her own unique body in relation to dance as an expressive art form. Repeatable to a maximum of 4 units.

Lecture Hours: None  
Lab Hours: 2 - 3  
Repeatable: 3  
Grading: O

Open Curriculum: No prerequisite, corequisite or levels

Advisory Level: Read: None  
Write: None  
Math: None

Transfer Status: CSU/UC  
Degree Applicable: AA/AS

CSU GE: E2  
District GE: E2  
IGETC: None

**DANCE-051 - Modern Dance, Intermediate**  
**Units: 0.5 - 1**

This course futhers the student's artistry and skill in modern dance. The student will apply fundamentals of motion and space through technical exercises and dance combinations of varying dynamic and expressive content. Repeatable to maximum of 4 units.

Lecture Hours: None  
Lab Hours: 2 - 3  
Repeatable: 7  
Grading: L

Prerequisite: DANCE 050 or (DANCE 025A and 025B)

CAN: None

Advisory Level: Read: None  
Write: None  
Math: None

Transfer Status: CSU/UC  
Degree Applicable: AA/AS

CSU GE: E2  
District GE: E2  
IGETC: None

**DANCE-062 - Mexican Folkloric Dance**  
**Units: 0.5**

This class introduces the student to dances of various Mexican Folkloric origin within their cultural contexts. Students will learn dances from at least three different regions, along with basic steps, formations and rhythms, as well as cultural traditions including musical and costume style and origins of the dances.

Lecture Hours: None  
Lab Hours: 2  
Repeatable: 3  
Grading: O

Open Curriculum: No prerequisite, corequisite or levels

Advisory Level: Read: None  
Write: None  
Math: None

Transfer Status: CSU/UC  
Degree Applicable: AA/AS

CSU GE: E2  
District GE: E2  
IGETC: None

**DANCE-063 - Mexican Folkloric Dance, Intermediate**  
**Units: 0.5**

This class provides in depth instruction in steps, rhythms, formations and patterns of indigenous dances from particular selected Mexican areas in relation to their cultural and historical contexts. Various sections will emphasize two to three of the following geographical regions: Yucatan, Oaxaca, Vera Cruz, Huasteca, Michoacan, Jalisco and Northern Mexico. Repeatable to a maximum of 2 units.

Lecture Hours: None  
Lab Hours: 2  
Repeatable: 3  
Grading: O

Prerequisite: DANCE 062

CAN: None

Advisory Level: Read: 2  
Write: 2  
Math: None

Transfer Status: CSU/UC  
Degree Applicable: AA/AS

CSU GE: None  
District GE: None  
IGETC: None
DANCE-064 - Ballroom Dance  Units: 0.5
This class introduces the student to ballroom dances of European and Latin American origin. Students will learn basic steps, rhythms and partnering techniques for Waltz, Fox Trot, Tango, Rhumba, Cha-cha and Swing Dances as well as their stylistic origins and modern transformations in social and historical contexts.
Lecture Hours: None Lab Hours: 2 Repeatable: 3 Grading: O
Open Curriculum: No prerequisite, corequisite or levels
Advisory Level: Read: 2 Write: None Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
Credits: None District GE: None IGETC: None

DANCE-065 - Ballroom Dance, Intermediate  Units: 0.5
This class provides in-depth instruction in steps, rhythms and partnering techniques of particular selected forms of Ballroom Dance sharing common dynamics of improvisation, sequencing and style. Various sections will emphasize different forms: A. Smooth (Tango and Viennese Waltz) B. Latin (Mambo, Rumba, Salsa, Jitterbug/Lindy and West Coast). Stylistic origins and modern transformations will be studied in their social and historical contexts. Repeatable to a maximum of 2 units.
Lecture Hours: None Lab Hours: 2 Repeatable: 3 Grading: O
Prerequisite: DANCE 064
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
Credits: None District GE: None IGETC: None

DENT-098 - Directed Study in Dental Assisting  Units: 0.5 - 9
Individual or small groups of students who would benefit from Independent Study under the direction of faculty members in specific or related disciplines may develop individualized learning contracts designed to enhance their individual instructional programs. The students and the faculty member in consultation with the Division Dean will determine appropriate learning objectives and activities as well as the number of units to be earned. Instructions and the Learning Contract forms are available in the Division office. Repeatable to a maximum of 9 units across all disciplines.
Lecture Hours: None Lab Hours: 1.5 - 27 Repeatable: 17 Grading: O
Advisory Level: Read: 3 Write: 3 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
Credits: None District GE: None IGETC: None

DENT-151 - Beginning Dental Assisting  Units: 3
This introductory course covers the general principles and basic concepts of anatomy and physiology of the human body, head, neck, face and especially the oral cavity and dentition. The interrelationship of body systems, vital signs, general health and dental health are emphasized. Students will perform a general assessment, take vital signs and perform a preliminary oral exam noting deviations from normal and charting existing conditions of teeth. The cultural, psychological, political and socio-economic aspects of health and providing health care are integrated into this course for non-science majors.
Lecture Hours: 2 Lab Hours: 3 Repeatable: No Grading: L
Credit by Exam: Yes
Prerequisite: DENT 152 and DENT 153 both with C or better
Corequisite: or (DENT 152 with C or better and conc in DENT 153) or (DENT 153 with C or better and conc in DENT 152) or (conc in DENT 152 and DENT 153)
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: None Degree Applicable: AS
Credits: None District GE: BL IGETC: None

DENT-152 - Beginning Dental Assisting  Units: 3
This introductory course covers the basic principles and concepts of disease transmission and control in dental environments, with emphasis on safety and preventive measures. An introduction to microbiology and concepts of the scientific process are presented. Principles and techniques of sterilization and disinfection of instruments and equipment are covered in depth. Use and basic maintenance of major operatory equipment is covered and practiced with emphasis on positioning, instrument transfer, and intraoral techniques of maintaining a clear operating field. Properties of gypsum dental materials are presented and models of human dentition constructed using gypsum materials.
Lecture Hours: 2 Lab Hours: 3 Repeatable: No Grading: L
Credit by Exam: Yes
Prerequisite: DENT 151 and DENT 153 both with C or better
Corequisite: or (DENT 151 with C or better and conc in DENT 153) or (DENT 153 with C or better and conc in DENT 151) or (conc in DENT 151 and DENT 153)
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: None Degree Applicable: AS
Credits: None District GE: None IGETC: None

DENT-153 - Beginning Dental Assisting  Units: 1.5
This introductory course covers policies of the Dental Assisting Program with safe work practices emphasized. Major events in the history of dentistry and current concepts of dental care are presented. The functions, educational and licensure requirements of members of the dental health team are explored with legal and ethical aspects introduced. Communication skills and concepts of psychology are presented and practiced. Students become active participants in collaborative learning groups and assertive partners in their learning experiences. Fundamental concepts of preventive dentistry are covered, culminating with students presenting oral hygiene instruction to outside patients.
Lecture Hours: 1 Lab Hours: 1.5 Repeatable: No Grading: L
Credit by Exam: Yes
Prerequisite: DENT 151 AND DENT 152 both with C or better
Corequisite: or (DENT 151 with C or better and conc in DENT 152) or (DENT 152 with C or better and conc in DENT 151) or (conc in DENT 151 and DENT 152)
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: None Degree Applicable: AS
Credits: None District GE: None IGETC: None

DENT-154 - Fundamental Dental Assisting  Units: 3
This highly technical course prepares the student Registered Dental Assistant to take diagnostically effective dental x-rays without exceeding a safe number of re-exposures. Principles of radiographic techniques and X-radiation hygiene are covered, as well as technique performance and application of the fundamentals of radiation safety and infection control, students are responsible for appointment scheduling, patient management and record keeping for their x-ray patients. Two field trips are required. Successful completion of this course and Dental Assisting 161 fulfills the requirements for the California Radiation Safety Certificate.
Lecture Hours: 2 Lab Hours: 3 Repeatable: No Grading: L
Credit by Exam: Yes
Prerequisite: DENT 151 and DENT 152 and DENT 153; all with C or better
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: None Degree Applicable: AS
Credits: None District GE: None IGETC: None
DENT-155 - Fundamental Dental Assisting 2  Units: 3
This course builds on dental anatomy and chairside assisting skills learned in previous courses. Content focuses on: principles and procedures of local anesthesia, rubber dam application, hand and rotary cutting instrumentation for cavity preparation, cavity liners, varnish and base materials, and amalgam and cosmetic restorations. Emphasis is on delivery and retrieval of instruments, materials and associated armamentarium according to concepts of four handed dentistry. Students will take alginate impressions and practice techniques of patient management.
Lecture Hours: 2  Lab Hours: 3  Repeatable: No  Grading: L
Credit by Exam: Yes
Prerequisite: DENT 151 and DENT 152 and DENT 153; all with C or better
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: None  Degree Applicable: AS
CSU GE: None  District GE: None  IGETC: None

DENT-156 - Fundamental Dental Assisting 3  Units: 1.5
This course builds on chairside assisting and manipulation of materials skills learned in previous courses. Content focuses on the prosthodontic area of dentistry which includes fixed and removable dental appliances such as dentures, partial dentures and crowns and bridges. Emphasis is on properties, uses and manipulation of dental materials and practicing the chairside assisting skills associated with prosthodontic procedures. Students will pour alginate impressions and construct temporary crowns and bridges and practice patient management techniques.
Lecture Hours: 1  Lab Hours: 1.5  Repeatable: No  Grading: L
Credit by Exam: Yes
Prerequisite: DENT 151 and DENT 152 and DENT 153; all with C or better
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: None  Degree Applicable: AS
CSU GE: None  District GE: None  IGETC: None

DENT-161 - Intermediate Dental Assisting 1  Units: 3
This highly technical course builds on the knowledge and skills of Radiography acquired in Dental Assisting 154. More advanced techniques are presented including: Modifications of Paralleling Technique, the Edentulous Patient, Occlusal, Panoramic Radiography and Radiography for children. The student produces full mouth surveys of dental x-ray film with a minimum of errors. Successful completion of this course and Dental Assisting 154 fulfills requirements for the California Radiation Safety Certificate. Additionally, Concepts of Oral Pathology, Pharmacology and Nutrition are presented and an in-depth coverage of Medical Emergencies in the Dental Office.
Lecture Hours: 2  Lab Hours: 3  Repeatable: No  Grading: L
Credit by Exam: Yes
Prerequisite: DENT 154 and DENT 155 and DENT 156; all with C or better and current CPR Certification (Adult/Infant/Child)
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: None  Degree Applicable: AS
CSU GE: None  District GE: None  IGETC: None

DENT-162 - Intermediate Dental Assisting 2  Units: 1.5
This highly technical course builds on the fundamental skills acquired in Dental Assisting 155. Nine duties associated with operative dentistry and delegated to the Registered Dental Assistant in the California Dental Practice Act are taught to a level of proficiency. Pediatric dentistry, including developmental disturbances, use of fluoride and child management techniques are covered in depth. The use of nitrous oxide inhalation sedation is presented including the legal, health and safety protocol.
Lecture Hours: 1  Lab Hours: 1.5  Repeatable: No  Grading: L
Credit by Exam: Yes
Prerequisite: DENT 154 and DENT 155 and DENT 156; all with C or better
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: None  Degree Applicable: AS
CSU GE: None  District GE: None  IGETC: None

DENT-163 - Expanded Dental Assisting 1  Units: 3
A study of the dental specialties; Orthodontics, Peritonitis, Oral and Maxillofacial Surgery, endodontics and the associated assisting functions. Seventeen duties associated with specialty dentistry and delegated to the Registered Dental Assistant in the California Dental Practice Act are taught to a level of competence. Completion of this course fulfills the State Board requirement for certification in Coronal Polishing. The importance of patient management and legal/ethical issues are incorporated throughout the course.
Lecture Hours: 2  Lab Hours: 3  Repeatable: No  Grading: L
Credit by Exam: Yes
Prerequisite: DENT 161 and DENT 162 and DENT 171; all with C or better
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: None  Degree Applicable: AS
CSU GE: None  District GE: None  IGETC: None

DENT-164 - Expanded Dental Assisting 2  Units: 1.5
This course provides the student with instruction in and application of the skills necessary to manage a business office of a dental practice. Dental oriented bookkeeping, billing and insurance procedures are covered in depth as is appointment control. Both manual and computerized office systems are presented. Records management is covered as it related to patient records, filing and recall systems and writing a business letter. Additionally, the basic concepts of marketing dental practices are covered.
Lecture Hours: 1  Lab Hours: 1.5  Repeatable: No  Grading: L
Credit by Exam: Yes
Prerequisite: DENT 161 and DENT 162 and DENT 171; all with C or better
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: None  Degree Applicable: AS
CSU GE: None  District GE: None  IGETC: None

DENT-171 - Clinical Dental Assisting 1  Units: 2.5
In this course the student practices Registered Dental Assistant skills in a dental office with a team of Dental Health Professionals under the guidance of Supervising Instructor. The outcome of this internship is to transform laboratory level skills to clinical level skills. The theory portion provides in-depth coverage of legal and ethical responsibilities associated with RDA licensure, dentistry and malpractice prevention. Communication techniques are expanded to include communicating in a professional environment, intercultural communication and concepts of conflict management.
Lecture Hours: 0.5  Lab Hours: 6  Repeatable: No  Grading: L
Credit by Exam: Yes
Prerequisite: DENT 154 and DENT 155 and DENT 156; all with C or better
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: None  Degree Applicable: AS
CSU GE: None  District GE: None  IGETC: None
### DENT-172 - Clinical Dental Assisting 2

<table>
<thead>
<tr>
<th>Units: 2.5</th>
</tr>
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<tbody>
<tr>
<td>In this course the student practices Registered Dental Assistant skills in a dental office with a team of Dental Health Professionals under the guidance of a supervising instructor. The outcome of this internship is to transform laboratory level skills to clinical level skills. The theory portion provides in-depth coverage on securing and maintaining employment, laws governing employment and expanded coverage of OSHA hazards Management Requirements for employee safety.</td>
</tr>
<tr>
<td>Lecture Hours: 0.5</td>
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<tr>
<td>Credit by Exam: Yes</td>
</tr>
<tr>
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<tr>
<td>CAN: None</td>
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<td>Advisory Level: Read: 2 Write: 2 Math: None</td>
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<tr>
<td>Transfer Status: None Degree Applicable: AS</td>
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<td>CSU GE: None District GE: None IGETC: None</td>
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### DENT-173 - Clinical Dental Assisting 3

<table>
<thead>
<tr>
<th>Units: 2.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>In this course the student practices Registered Dental Assistant skills in a dental office with a team of Dental Health Professionals under the guidance of a Supervising Instructor. The outcome of this internship is to transform laboratory level skills to clinical level skills. The theory portion includes creating a career action plan, concepts of lifetime learning and degree options. The problem of chemical dependency is presented with recognition and intervention for dental office personnel emphasized. Additionally, issues and aspects of intolerance and violence are covered with emphasis on recognizing and reporting child abuse.</td>
</tr>
<tr>
<td>Lecture Hours: 0.5</td>
</tr>
<tr>
<td>Credit by Exam: Yes</td>
</tr>
<tr>
<td>Prerequisite: DENT 161 and DENT 162 and DENT 172; all with C or better</td>
</tr>
<tr>
<td>CAN: None</td>
</tr>
<tr>
<td>Advisory Level: Read: 2 Write: 2 Math: None</td>
</tr>
<tr>
<td>Transfer Status: None Degree Applicable: AS</td>
</tr>
<tr>
<td>CSU GE: None District GE: None IGETC: None</td>
</tr>
</tbody>
</table>

### Early Childhood Education

#### ECE-016 - Storytelling for Children

<table>
<thead>
<tr>
<th>Units: 2</th>
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</thead>
<tbody>
<tr>
<td>Students will be introduced to storytelling as an art form and to its benefits for children at the preschool through elementary levels. The techniques of effective storytelling will be studied and practiced. A knowledge of children and their development will be used in the selection, creation, delivery, and evaluation of storytelling and related activities. This course is an elective in the Early Childhood Education Certificate program or AS degree in this area.</td>
</tr>
<tr>
<td>Lecture Hours: 2</td>
</tr>
<tr>
<td>CAN: None</td>
</tr>
<tr>
<td>Advisory Level: Read: 2 Write: 2 Math: None</td>
</tr>
<tr>
<td>Transfer Status: CU Degree Applicable: AA/AS</td>
</tr>
<tr>
<td>CSU GE: None District GE: None IGETC: None</td>
</tr>
</tbody>
</table>

#### ECE-098 - Directed Studies in Early Childhood Education

<table>
<thead>
<tr>
<th>Units: 0.5 - 9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directed Studies is an independent study course that allows students to earn college credit by working on projects that they design and complete. Projects selected should improve vocational skill and/or increase knowledge of the theory and practice of Early Childhood Education. Specific objectives must be written in conjunction with the college instructor, and the student's progress is assessed in terms of meeting the stated objectives. This course is an elective in Early Childhood Education and applies to the AS degree. Repeatable to a maximum of 9 units across all disciplines.</td>
</tr>
<tr>
<td>Lecture Hours: None</td>
</tr>
<tr>
<td>CAN: None</td>
</tr>
<tr>
<td>Advisory Level: Read: 2 Write: 2 Math: None</td>
</tr>
<tr>
<td>Transfer Status: CU Degree Applicable: AA/AS</td>
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<tr>
<td>CSU GE: None District GE: None IGETC: None</td>
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</tbody>
</table>

#### ECE-101 - Practicum in Curriculum

<table>
<thead>
<tr>
<th>Units: 3</th>
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</thead>
<tbody>
<tr>
<td>This course introduces students to the principles and practices of teaching pre-school through school age children. Students apply teaching strategies in laboratory exercises concentrating on professional techniques in early childhood settings, extended day, infant-toddler centers, campus care, and planning, presentations, and child evaluations. This course is required for both the certificate and AS Degree.</td>
</tr>
<tr>
<td>Lecture Hours: 1</td>
</tr>
<tr>
<td>Prerequisite: ECE 102</td>
</tr>
<tr>
<td>Corequisite: Or concurrent enrollment in ECE 102</td>
</tr>
<tr>
<td>CAN: None Advisory Level: Read: 2 Write: 2 Math: None</td>
</tr>
<tr>
<td>Transfer Status: CSU Degree Applicable: AA/AS</td>
</tr>
<tr>
<td>CSU GE: None District GE: None IGETC: None</td>
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</tbody>
</table>

#### ECE-102 - Introduction to Early Childhood Programs

<table>
<thead>
<tr>
<th>Units: 3</th>
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</thead>
<tbody>
<tr>
<td>A general introduction and survey of the field of early childhood education. Demonstrations and lesson presentations are used to give students curriculum background and teaching skills. This is a good course to take if you're deciding whether working with young children is the field for you. A grade of &quot;C&quot; is required in order to continue in the Early Childhood Program. This course is required for both the certificate and AS Degree.</td>
</tr>
<tr>
<td>Lecture Hours: 2</td>
</tr>
<tr>
<td>Prerequisite: FCS 070</td>
</tr>
<tr>
<td>Corequisite: Or concurrent enrollment in FCS 070</td>
</tr>
<tr>
<td>CAN: None Advisory Level: Read: 2 Write: 2 Math: None</td>
</tr>
<tr>
<td>Transfer Status: CSU Degree Applicable: AA/AS</td>
</tr>
<tr>
<td>CSU GE: None District GE: None IGETC: None</td>
</tr>
</tbody>
</table>

#### ECE-103 - Child Studies Student Teaching

<table>
<thead>
<tr>
<th>Units: 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>This final course in the Child Studies program consists of field teaching experience with children. Students plan and conduct activities in the on-campus Child Development Centers and at their job sites. College instructors critique, video tape, and help students apply mastery teaching techniques. The theory hours on campus in the evening are designed to help students diagnose, prescribe for individual learner needs, and develop teaching skills. Additional topics include job responsibilities and interaction among parents, public, child, and the total school staff. This course is required for both the certificate and AS degree.</td>
</tr>
<tr>
<td>Lecture Hours: 3</td>
</tr>
<tr>
<td>Prerequisite: ECE 104 and ECE 105</td>
</tr>
<tr>
<td>CAN: None Advisory Level: Read: 2 Write: 2 Math: None</td>
</tr>
<tr>
<td>Transfer Status: CSU Degree Applicable: AA/AS</td>
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<tr>
<td>CSU GE: None District GE: None IGETC: None</td>
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</tbody>
</table>

#### ECE-104 - Art, Crafts, Creative Activities

<table>
<thead>
<tr>
<th>Units: 2</th>
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<tbody>
<tr>
<td>This course introduces students to working with children in arts, crafts and creative activities. The value of play and creative expression will be discussed. The developmental levels of children will be examined in selecting appropriate creative outlets. Students will explore a wide variety of media as they gain skills in planning and presenting activities to children. The course is required for a certificate or AS degree in Early Childhood Education.</td>
</tr>
<tr>
<td>Lecture Hours: 1</td>
</tr>
<tr>
<td>CAN: None Advisory Level: Read: 2 Write: 2 Math: None</td>
</tr>
<tr>
<td>Transfer Status: CSU Degree Applicable: AA/AS</td>
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<tr>
<td>CSU GE: None District GE: None IGETC: None</td>
</tr>
</tbody>
</table>
ECE-105 - Language Experiences for Children
Units: 3
This course introduces students to language related activities in the early childhood curriculum. Stages of language development, theories of language acquisition and the role of educators in promoting language related skills will be explored. Students will learn to plan, prepare and present a variety of stimulating activities. Children's books, poetry, films, puppets, charts, flannel boards and computer use will be introduced. This course is required for the certificate and AS degree in Early Childhood Education.
Lecture Hours: 2 Lab Hours: 3 Repeatable: No Grading: O
Prerequisite: ECE 102
Corequisite: Or concurrent enrollment in ECE 102
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

ECE-106 - Administration and Supervision of Early Childhood Programs
Units: 3
The course introduces the principles and practices of administration and supervision of children's programs. Topics covered include the roles and responsibilities of a program director, regulations and licensing requirements, program organization and planning, working with parents and the community, and budget preparation. This course fulfills the State of California licensing requirement for directors in administration and supervision.
Lecture Hours: 3 Lab Hours: 1 Repeatable: No Grading: O
Recommended: Completion of 12 units in Early Childhood Education including core courses in Child Development, Child Family and Community and Programs/Curriculum.
CAN: None
Advisory Level: Read: 3 Write: 3 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

ECE-107 - Child, Family and Community
Units: 3
This class will focus on the interrelationship among children, families and the community. Variations in family structure, cultural patterns and the significance of family interactions on the child's development will be examined. The influence of school, peers and the media will also be explored. A variety of community agencies and resources which offer services and provide support to families will be introduced. This course is required for the certificate and AS degrees in Early Childhood Education.
Lecture Hours: 3 Lab Hours: 1 Repeatable: No Grading: O
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

ECE-108 - Health and Safety in Child Care
Units: 2
This Health and Safety course is intended for students working in an education setting, for child care providers, and for adults and parents who desire information about current concepts in the field of health and safety and their relationship to the young child. Students will learn how to improve the health and safety procedures at their site. The course includes a background on germs and illness, daily inspection skills, health procedures, and first aid and emergency techniques. The student will earn a first aid certificate specifically designed for those working with children. This course is required for a certificate and an AS degree in Early Childhood Education.
Lecture Hours: 2 Lab Hours: None Repeatable: No Grading: L
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

ECE-109 - Rhythm, Music, Movement Activities for Children
Units: 2
This course provides a comprehensive introduction to working with children in rhythm, music, and movement activities. The predominant theories of movement education, rhythm and music will be discussed and experienced. The developmental levels of children will be examined in selecting appropriate student lessons. Students will examine and critique a wide variety of rhythm, music and movement lessons as they gain skills in planning and presenting these activities to children. This course satisfies one of the course requirements for the Certificate or AS degree in Early Childhood Education.
Lecture Hours: 1 Lab Hours: 3 Repeatable: No Grading: O
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

ECE-110 - Management and Supervision of Programs for School Age Children
Units: 3
This course is an in-depth study of effective applications of management and supervision procedures in school age programs. Topics covered include the unique roles and responsibilities of school age program directors, regulations and licensing requirements, program assessment, design and implementation, effective parent, staff, and community communication, and budget preparation. This course fulfills the State of California licensing requirement for directors in administration and supervision.
Lecture Hours: 3 Lab Hours: 1 Repeatable: No Grading: O
Prerequisite: Completion of 12 units of ECE
Corequisite: Concurrent as a program director
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

ECE-120 - Family Day Care As A Business
Units: 1
This course will provide ideas and information to family day care providers to assist them in the successful operation of a family day care home. Information on licensing regulations, developing policies and contracts, maintaining financial and other records, marketing strategies and community resources will be provided. The integration of family day care and home life will also be explored.
Lecture Hours: 1 Lab Hours: None Repeatable: No Grading: O
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: None Degree Applicable: AS
CSU GE: None District GE: None IGETC: None

ECE-121 - Family Day Care Activities
Units: 1
This course will provide an introduction to curriculum/activity ideas appropriate for use in family day care-- in home programs for children. The significance of daily schedules and routines in activity planning will be discussed. A curriculum framework including language and literary based activities, music and movement, nature studies, and art and creative activities will be utilized as students learn a variety of appropriate activities for the children in their care. Various community resources and field trip sites will also be explored.
Lecture Hours: 1 Lab Hours: None Repeatable: No Grading: O
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None
ECE-136  Early Childhood Education  Units: 1 - 4  
Occupational Work Experience-Parallel Plan

This course offers occupational oriented work experience and further develops and extends occupational skills in the area of early childhood education. Employers and students identify relevant work site objectives. This course is an elective in Early Childhood Education and enables those students who are employed to earn additional college credits. Repeatable to a maximum of 16 units.

Lecture Hours: None  Lab Hours: 3 - 12  Repeatable: 15  Grading: O

Corequisite: 1) Be enrolled during the regular semester in a minimum of 7 units at any accredited college, including Work Experience units or; 2) During a summer session, be enrolled in at least one other class in addition to Work Experience; and 3) Be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.

CAN: None  
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

ECE-138  Early Childhood Education  Units: 1 - 8  
Occupational Work Experience-AIternate Plan

Occupational Work Experience is designed for students who work or volunteer in a field related to their vocational major. Students are required to provide evidence that they are enrolled in a vocational program (e.g., educational plan or coursework in a vocational subject area). The Alternate Plan is designed to allow students to attend school one semester and work the next. A maximum of 8 units of Occupational Work Experience credit may be earned during any one semester, to a maximum of 16 units total. Students may only take one (if any) class in addition to work experience. Internship/job placement is not guaranteed.

Lecture Hours: None  Lab Hours: 3 - 24  Repeatable: 15  Grading: O

Corequisite: 1. Need not be enrolled in any other class during the semester besides Work Experience. 2. May be enrolled in at most one other class in addition to Work Experience. 3. Must be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.

CAN: None  
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

ECE-140  Child Advocacy  Units: 1

This course introduces students to the role of the child advocate in American society today. Students will participate in a child advocacy institute with members of the community. Course sessions will focus on the purpose of advocacy, important issues for families and children, the legislative process at the state and national level, gathering information about issues and tracking legislation, and the ways for citizens to participate in shaping policy at the local, state and national level. Students will attend the legislative symposium in Sacramento and develop an individual plan for continued participation in government.

Lecture Hours: 1  Lab Hours: None  Repeatable: No  Grading: O

CAN: None  
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

ECE-141  Careers In Teaching I  Units: 2

This course will provide a broad overview of our community educational system. The historical and psychological foundations of the American educational system will be briefly explored. Educational methods, curriculum and current issues and educational innovations will be discussed. Students will focus on their own career choices and explore options available in the field of education. Students will have opportunities to observe in educational settings.

Lecture Hours: 2  Lab Hours: None  Repeatable: No  Grading: O

CAN: None  
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

ECE-142  Supervision of Adults-The Mentor Teacher  Units: 2

This course is a study of the methods and principles of supervising student teachers in early childhood classrooms. Emphasis is on the role of experienced classroom teachers who function as mentors to new teachers while simultaneously addressing the needs of children, parents and other staff.

Lecture Hours: 2  Lab Hours: None  Repeatable: No  Grading: O

CAN: None  
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

ECE-143  Introduction to the High Scope Curriculum  Units: 1

The student will experience key features of the High/Scope Curriculum used as a framework for developmentally appropriate practice. The introductory course includes: how developmental theory explains children’s learning and the crucial role of active learning. Also included are the basic steps in implementing key experience into the daily routine and the role of the teacher in a child-centered approach. Videos and hands-on activities will enable teachers and directors to practice plan-do-review skills and answer questions about implementing the High/Scope Curriculum.

Lecture Hours: 1  Lab Hours: None  Repeatable: No  Grading: O

CAN: None  
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

ECE-144  Careers In Teaching II  Units: 2

This course will provide students an opportunity to explore teaching as a career choice. Students will actively participate in a public school and meet in a weekly seminar format to hear speakers, review course content and participate in class discussions. Educational standards, classroom curriculum, methods of instruction, classroom management techniques and educational innovations will be discussed. As students experience the day-to-day operation of elementary and middle school classrooms, students will focus on their own career choices and explore options available in the field of education.

Lecture Hours: 2  Lab Hours: None  Repeatable: No  Grading: O

Prerequisite: ECE 141

CAN: None  
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None
### ECE-145 - Integrating Children With Special Needs

Units: 1

This course will provide an introduction to factors that promote the successful integration of children with special needs into childcare settings. Students will be exposed to new ways of thinking about disabilities. Changes in the physical environment and adaptation of health practices, schedules, routines, and activities that might be necessary will be discussed. Various community agencies and resources serving children and families with special needs will be introduced.

- **Lecture Hours:** 1
- **Lab Hours:** None
- **Repeatable:** No
- **Grading:** O
- **Transfer Status:** CSU
- **Degree Applicable:** AA/AS
- **IGETC:** None
- **CSU GE:** None
- **District GE:** None

### ECE-146 - Child Guidance and Discipline

Units: 2

This course prepares students to understand and manage the behavior of children using a variety of communication, guidance and discipline strategies. Students will learn to distinguish between normal, developmentally appropriate and testing behaviors and those behaviors that jeopardize the health, safety, and welfare of self and others. Students will learn strategies to help children manage stress, anger and aggression in constructive ways.

- **Lecture Hours:** 2
- **Lab Hours:** None
- **Repeatable:** No
- **Grading:** O
- **Transfer Status:** CSU
- **Degree Applicable:** AA/AS
- **IGETC:** None
- **CSU GE:** None
- **District GE:** None

### ECE-147 - Multicultural/Anti-bias Curriculum for Children

Units: 2

This course will provide students with an understanding of principles and practices of implementing a curriculum for children that addresses cultural diversity. Expectations for caregiving/child-rearing practices, teacher-child interaction guidelines, conflicts and issues in multicultural education and, setting culturally responsive environments and experiences for all children will be examined.

- **Lecture Hours:** 2
- **Lab Hours:** None
- **Repeatable:** No
- **Grading:** O
- **Transfer Status:** CSU
- **Degree Applicable:** AA/AS
- **IGETC:** None
- **CSU GE:** None
- **District GE:** None

### ECE-148 - Ready to Learn/Literacy

Units: 1

The Ready to Learn Service is designed for early childhood care and education professionals who work with preschool children ages two to five and school age children through third grade. The initiative uses educational television programs, reading and related hands-on activities to help promote effective learning in childcare and early education settings. This course will focus on the stages of language acquisition, the process of learning to read, language activities that promote literacy, children’s literature and the importance of family involvement in the learning process. A variety of educational television programs will be viewed and critiqued.

- **Lecture Hours:** 1
- **Lab Hours:** None
- **Repeatable:** No
- **Grading:** O
- **Transfer Status:** None
- **Degree Applicable:** NAA
- **IGETC:** None
- **CSU GE:** None
- **District GE:** None

### ECE-175 - Studying Children

Units: 1.5

This course is designed to increase the student's understanding and appreciation of children and their development. Time will be spent observing, recording, and analyzing the behavior of children in the Child Development Center as they interact with teachers, and peers.

- **Lecture Hours:** 1
- **Lab Hours:** 2
- **Repeatable:** No
- **Grading:** O
- **Transfer Status:** CSU
- **Degree Applicable:** AA/AS
- **IGETC:** None
- **CSU GE:** None
- **District GE:** None

### ECE-176 - Student-Parent Issues in Guidance and Discipline Techniques

Units: 1.5

This course is designed to help the student understand, explore, and apply various theories of child management, positive discipline strategies, and guidance techniques in the home and/or school settings.

- **Lecture Hours:** 1
- **Lab Hours:** 2
- **Repeatable:** No
- **Grading:** O
- **Transfer Status:** CSU
- **Degree Applicable:** AA/AS
- **IGETC:** None
- **CSU GE:** None
- **District GE:** None

### ECE-177 - Student-Parent Topics, Goals and Values

Units: 1.5

This course introduces students to the principles and practices of responsive child rearing which produce responsible children. Emphasis is placed on the strategies for building a child's positive self concept and ways to foster family cohesiveness.

- **Lecture Hours:** 1
- **Lab Hours:** 2
- **Repeatable:** No
- **Grading:** O
- **Transfer Status:** CSU
- **Degree Applicable:** AA/AS
- **IGETC:** None
- **CSU GE:** None
- **District GE:** None

### ECE-178 - Parent Involvement Issues for Student Parent

Units: 1.5

This course focuses on the critical issues facing the contemporary family, society, and life in the 21st century. Participants explore the effects of divorce, single parenting, remarriage, step-parenting, birth order, working mothers, family violence, and stress upon the developing family. Strategies to enhance home-school relations are identified.

- **Lecture Hours:** 1
- **Lab Hours:** 2
- **Repeatable:** No
- **Grading:** O
- **Transfer Status:** CSU
- **Degree Applicable:** AA/AS
- **IGETC:** None
- **CSU GE:** None
- **District GE:** None
ECE-191 - Infant Toddler Development  Units: 3
Developmentally-appropriate programs for children from birth to age 3 require special knowledge, skill, and program design. This course provides an overview of the child’s development during the first three years and examines the components of quality care of infants and toddlers. Family/caregiver interactions, the physical environment, health and safety policies and staff concerns are addressed. Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: O
Prerequisite: FCS 070
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

ECE-195 - The School Age Child: Development, Behavior, Curriculum Activities  Units: 3
A comprehensive study of children five through twelve years of age. Emphasis is placed on the physical, social, intellectual and self needs of school-age children and how they relate to curriculum development for extended care programs. Behavior characteristics and related techniques to modify conflicts are reviewed. Community resources are identified for program use and parent referral. Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: O
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

ECON-098 - Directed Study  Units: 0.5 - 9
Individual or small groups of students who would benefit from Independent Study under the direction of faculty members in specific or related disciplines may develop individualized learning contracts designed to enhance their individual instructional programs. The students and the faculty member in consultation with the Division Dean will determine appropriate learning objectives and activities as well as the number of units to be earned. Instructions and the Learning Contract forms are available in the Division office. Repeatable to a maximum of 9 units across all disciplines. Lecture Hours: None Lab Hours: 1.5 - 27 Repeatable: 17 Grading: O
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

EDUC-010 - Education in a Multicultural Society  Units: 3
This course introduces the role and function of the educational system in American society. The promise and problems associated with education in the United States will be explored. The experience of different cultural, socioeconomic and linguistic groups, and the implications of the changing American population for the future of the American educational system will be explored. Contemporary issues, historical perspectives and the challenges today’s teachers face will be examined. Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

EDUC-012 - Field Experience in Reading  Units: 3
The course is designed to provide students interested in pursuing a career in elementary school teaching with theory and hands-on experience working with children in early literacy at a local elementary school. The course includes work with reading and writing materials, assessment, methodology, and the school environment. A current TB test is required. The course includes 50 hours of on-site field experience in a local elementary school. Lecture Hours: 2 Lab Hours: 3 Repeatable: No Grading: L
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None
**Education**

**EDUC-136 - Education Occupational Work Experience - Parallel Plan**

Units: 1 - 4

Occupational Work Experience is designed for students who work or volunteer in a field related to their vocational major. Students are required to provide evidence that they are enrolled in a vocational program (e.g., educational plan or coursework in a vocational subject area). The Parallel Plan is designed for students who wish to take classes and work during the same semester. A maximum of 4 units of Occupational Work Experience credit may be earned during any one semester, to a maximum of 16 units total. Students must be enrolled in at least 7 units including Work Experience units. Courses taken at other accredited colleges or equivalent course work may be accepted. Internship/job placement is not guaranteed.

Lecture Hours: None  Lab Hours: 3 - 12  Repeatable: 15  Grading: O

Corequisite: 1. Need not be enrolled in any other class during the semester besides Work Experience. 2. May be enrolled in at most one other class in addition to Work Experience; and
3. Be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.

CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

**EDUC-138 - Education Occupational Work Experience - Alternate Plan**

Units: 1 - 8

Occupational Work Experience is designed for students who work or volunteer in a field related to their vocational major. Students are required to provide evidence that they are enrolled in a vocational program (e.g., educational plan or coursework in a vocational subject area). The Alternate Plan is designed to allow students to attend school one semester and work the next. A maximum of 8 units of Occupational Work Experience credit may be earned during any one semester to a maximum of 16 units total. Students may only take one (if any) class in addition to work experience. Internship/job placement is not guaranteed.

Lecture Hours: None  Lab Hours: 3 - 24  Repeatable: 15  Grading: O

Corequisite: 1. Need not be enrolled in any other class during the semester besides Work Experience. 2. May be enrolled in at most one other class in addition to Work Experience. 3. Must be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.

CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

**EDTEC-002 - Developing Curriculum for Online Teaching**

Units: 3

This course is designed to assist future instructors in adapting, transforming, and/or creating new curricula for online delivery. The course includes identifying the requirements of developing effective curriculum for online teaching and exploring the technical environment that would best deliver a course online. The focus is on determining the elements of a successful online course. This course will allow participants the opportunity to explore current issues and theories in online teaching and learning, the role of the instructor and the learner in an online environment, how to facilitate discussions and how to select the appropriate type of online assessments.

Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: O

CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU  Degree Applicable: AS
CSU GE: None  District GE: None  IGETC: None

**EDTEC-003 - Tools for Online Teaching**

Units: 3

Participants will work individually and in groups under the direction of the instructor to develop and implement use of available tools in this online course environment. This course provides an extensive introduction and evaluation of available educational tools for online course delivery. The course requires the integration of acquired knowledge and skills into developing and/or using online course platforms. It is designed to help future educators in a variety of fields develop one complete course online.

Lecture Hours: 3  Lab Hours: 0  Repeatable: No  Grading: L

Recommended: EDTEC 001 and EDTEC 002

CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

**EDTEC-004 - Online Teaching Practicum**

Units: 3

Practicum participants will work with a small group of peers and one instructor to develop or improve the online components of an existing course. This course provides a review of previous course material and requires the practical application of it. It is designed to help future educators in a variety of fields develop one complete course online.

Lecture Hours: 3  Lab Hours: 0  Repeatable: No  Grading: L

Prerequisite: EDTEC 001, EDTEC 002, and EDTEC 003; all with C or better

CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

**EDTEC-010 - Integrating Technology into Curriculum**

Units: 3

This course assumes no prior experience with computers and is designed to meet the needs of students who desire to become teachers or instructional aides in a classroom. The course will provide an up-to-date, practical introduction to computers.

Lecture Hours: 2  Lab Hours: 3  Repeatable: No  Grading: L

CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None
ELECT-013 - Advanced Telecommunications Technology

This advanced course in telecommunications offers a continuation of subject matter supporting the latest trends in the communications industry. Various standards organizations are studied, including the ISO/OSI 7-Layer Model. Primary subjects include LAN systems with emphasis on the IEEE 802.3 Ethernet standard; LAN topology with access control techniques; synchronous protocols; BISYNC, HDLC, SDLC, DDCMP; Error detection and correction; Hamming codes; Cyclic codes; the UART interface; Programming the UART for serial communications; Fiber optic theory and technology; Time domain reflectometry; and Data compression.

Lecture Hours: 2
Lab Hours: 6
Repeatable: No
Grading: L

Prerequisite: ELECT 011 and (ELECT 122 or MATH 013, or intermediate algebra skills based on assessment); all with C or better.

CAN: None
Advisory Level: Read: 2 Write: 2
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

ELECT-030 - Introduction to Biomedical Field

This course introduces the fundamental concepts of the health care delivery system. Topics include hospital organization and structure, BMET (Biomedical Electronic Technician) duties and responsibilities, and the professional and social interrelationships between services. Upon completion the student should be able to describe how BMET duties fit into a hospital organization.

Lecture Hours: 1
Lab Hours: 0
Repeatable: No
Grading: L

CAN: None
Advisory Level: Read: 3 Write: 3
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

ELECT-050 - Introduction to Electronics

This course provides an orientation to the field of electronics. An overview of the basic principles of electronics is presented. Introductory topics covered include solid state devices, integrated circuits, microprocessors, microwave communication system and lasers. In the laboratory, students will learn to measure various electrical quantities using electronic measuring equipment such as the volt-ohm-meter (vom) and the oscilloscope. Each student will build and troubleshoot an electronics project.

Lecture Hours: 2
Lab Hours: 2
Repeatable: No
Grading: L

CAN: None
Advisory Level: Read: 1 Write: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

ELECT-062 - General Electronics I

Electronics 62 is the first course in a sequence of majors in Electronics, Computer, and Laser Technologies, and gives a general introduction to electronics, including application of laws of physics to electronic components and circuits. DC and AC concepts of power, work, energy, capacitance, inductance, magnetism. Political, social and economic aspects of the role of technology in today's society are stressed. Laboratory experiments are performed with emphasis on the use of measurement and analytical instrumentation. All students are required to keep lab notebooks and to write reports which include deductive and inductive reasoning and critical thinking.

Lecture Hours: 2.5
Lab Hours: 4.5
Repeatable: No
Grading: L

Credit by Exam: Yes
Corequisite: ELECT 121 or MATH 013, both with C or better
CAN: None
Advisory Level: Read: 3 Write: 3
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: BL IGETC: None

ELECT-063 - General Electronics II

Electronics 63 is the second in a sequence of analog core classes required for majors in Electronics, Computer, and Laser, and Microwave Technologies. This four-unit class presents instruction in the concepts and principles of alternating current (AC) circuits. Topics include time-varying voltages and currents, frequency, phase, reactance and sustenance, and impedance and admittance. Circuit level topics include gain, bandwidth, phase, circuits are introduced including semiconductor theory, PN junction theory, and basic transistor operation. Circuit level topics include direct current (DC) quiescent points, voltage gain, bandwidth and input and output resistance.

Lecture Hours: 2.5
Lab Hours: 4.5
Repeatable: No
Grading: L

Credit by Exam: Yes
Prerequisite: ELECT 062 and ELECT 121 or MATH 013, all with C or better
Corequisite: ELECT 122 or (MATH 022 or MATH 025)
CAN: None
Advisory Level: Read: 3 Write: 3
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None
Electronics

ELECT-064 - Analog Circuits  Units: 4
Analog circuits is a third semester course in the sequence of courses designed for the Electronics Technology degree or certificate program, and is a required course for Electronics and Microwave majors. This four unit course provides a review of semiconductor theory, transistor biasing, fundamental oscillator, and fundamental amplifier concepts. This is followed by feedback concepts which are then applied to the analysis and design of small signal amplifiers, oscillators, power supplies and regulators, and power amplifiers. Test procedures and troubleshooting are emphasized. A survey of electronic devices is also provided.
Lecture Hours: 2.5  Lab Hours: 4.5  Repeatable: No  Grading: L
Credit by Exam: Yes
Prerequisite:  ELECT 063 and (ELECT 122 or MATH 022 or MATH 025), all with C or better
CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

ELECT-065 - Operational Amplifiers  Units: 4
Electronics 065 is the fourth in the sequence of basic electronics courses required for majors in Electronics Technology. This course emphasizes the analysis, application and basic design of operational amplifier and passive and active filter circuits and systems. Advanced topics in amplifiers, active filter circuits, and analog-digital techniques are presented.
Lecture Hours: 2.5  Lab Hours: 4.5  Repeatable: No  Grading: L
Prerequisite: ELECT 064 with C or better
CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

ELECT-066 - RF Circuits  Units: 4
Electronics 066 is the last course in the sequence of basic electronics courses required for majors in Electronics Technology. This course emphasizes the analysis, application and basic design of analog LF (low-frequency), HF (high-frequency), and VHF (very-high-frequency) circuits and systems, both discrete and integrated. Advanced topics in amplifiers, oscillators, filters, and RF (radio-frequency) circuits are presented. The student is prepared for employment by means of field trips, preparation of resumes, and interviews.
Lecture Hours: 2.5  Lab Hours: 4.5  Repeatable: No  Grading: L
Prerequisite: ELECT 064 with C or better
CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

ELECT-071 - Personal Computer Repair  Units: 3
This course emphasizes how to troubleshoot and repair personal computers to board level and is designed for IBM platforms. Topics include: PC operation and the interrelationship of each block of a PC system, the basic rules of maintenance, starting and testing the PC, system processor and memory, data storage (disk drives), keyboard operation, monitor, interfaces and cabling, software, operating systems, and documentation of diagnosis and repairs completed.
Lecture Hours: 1  Lab Hours: 6  Repeatable: No  Grading: L
Prerequisite: ELECT 050 or ELECT 062 or CT 077, all with C or better
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

ELECT-081 - Semiconductor Manufacturing  Units: 4
Students study processes used in semiconductor manufacturing, structures, facilities, materials and equipment, and operating conditions. Course topics include semiconductor materials, chemicals, microcontaminants, process areas (diffusion, implant, planar, lithography, etch and thin films), process flow, and tool/wafer excursions. Lab experiments will introduce students to working in a cleanroom environment, fabrication process and wafer handling.
Lecture Hours: 3  Lab Hours: 3  Repeatable: No  Grading: L
Credit by Exam: Yes
Recommended: Concurrent enrollment in (ELECT 062 and ELECT 121) or MATH 013
CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

ELECT-082 - Semiconductor Manufacturing Tool Sets  Units: 4
Manufacturing process, theory, and constraints. An in-depth study of tool and equipment used across the semiconductor industry. A detailed study of tool operations, periodic, preventative and predictive maintenance. Troubleshooting and maintenance management skills.
Lecture Hours: 3  Lab Hours: 3  Repeatable: No  Grading: L
Prerequisite: ELECT 081 and CHEM 030A and (ELECT 122 or MATH 025 or MATH 022), all with C or better
Corequisite: Or ELECT 081 with C or better and concurrent enrollment in CHEM 030A and ELECT 122 or MATH 025 or MATH 022 or ELECT 081 and CHEM 030A, both with C or better and concurrent enrollment in ELECT 122 or MATH 022 or MATH 025 or ELECT 081 and ELECT 122 or MATH 025 or MATH 025, all with C or better and concurrent enrollment in CHEM 030A
Recommended: Concurrent enrollment in ELECT 44 or CT 077
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

ELECT-098 - Directed Study  Units: 0.5 - 9
Individual or small groups of students who would benefit from Independent Study under the direction of faculty members in specific or related disciplines may develop individualized learning contracts designed to enhance their individual instructional programs. The students and the faculty member in consultation with the Division Dean will determine appropriate learning objectives and activities as well as the number of units to be earned. Instructions and the Learning Contract forms are available in the Division office. Repeatable to a maximum of 9 units across all disciplines.
Lecture Hours: None  Lab Hours: 1.5 - 27  Repeatable: 17  Grading: O
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

ELECT-105 - CMOS Mask Design 1  Units: 4
This course covers the basic skills for integrated circuit (IC) layout design using complementary metal oxide semiconductor (CMOS) technology. Its primary focus is on layout of digital circuits such as the ones found on microprocessor chips used in personal computers. The course begins with a detailed overview of engineering topics such as the IC design flow, digital logic (Boolean functions; truth tables), electronic circuits (circuits with resistors, capacitors and transistors; CMOS logic gates) and semiconductor manufacturing (CMOS cross-sections; processing steps, parasitic circuit elements). Subsequent layout design topics include stick diagrams, layout design rules, and layout cell structure.
Lecture Hours: 4  Lab Hours: None  Repeatable: No  Grading: L
Prerequisite: ELECT 062
CAN: None
Advisory Level: Read: 2  Write: 2  Math: 2
Transfer Status: None  Degree Applicable: AS
CSU GE: None  District GE: None  IGETC: None
ELECT-107 - CMOS Mask Design 2 Units: 2
This course introduces a more complex set of layout design rules and adds another layer of metal for wiring to the process technology. To facilitate layout design in this more complex environment, students draw layout using computer-aided design (CAD) software. The course begins with instructions on how to draw layout using layout editing software, manage layout cells in an on-line database and run on-line design rule checks (DRC). Newly presented layout concepts include layout size and schedule estimation, standard cell structure, design hierarchy as well as layout assembly issues and methods. Students are expected to complete layout exercises that increase in complexity.
Lecture Hours: 1 Lab Hours: 3 Repeatable: No Grading: L
Prerequisite: ELECT 105 with C or better
Recommended: ELECT 063, CHEM 030A, PHYS 003 and CIS 157
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None
ELECT-112 - Troubleshooting Units: 2
Electronics Troubleshooting, a third semester course in the sequence of courses for the ELECT degree or certificate program, is a required course for majors in Electronics, Microwave, and Laser Technologies. This two unit course couples block diagram analysis and schematic diagram interpretation, signal tracing, signal substitution and bias measurement techniques to develop the skills of trouble-shooting and repair of systems such as Power Supplies - AM/FM Receivers - TV Receivers - Tape Recorders - VCR's and Transceivers. Key circuits of these systems are studied in detail. Adjustment and calibration procedures are demonstrated. Instrumentation techniques and safe laboratory procedures are emphasized.
Lecture Hours: 1 Lab Hours: 3 Repeatable: No Grading: L
Prerequisite: ELECT 063 with C or better
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None
ELECT-113 - Fabrication and Assembly I Units: 2
This course, required for majors in Electronics, Laser, and Microwave Technology, is designed to be taken concurrently with Electronics 62 or 50. It provides instruction in the various fabrication and assembly techniques used in the electronics industry. Topics covered include soldering, wire handling and cabling, drafting and measuring techniques, machine tool operations, printed circuit artwork and layout. Sheetmetal layout and fabrication techniques are presented.
Lecture Hours: 1 Lab Hours: 3 Repeatable: No Grading: L
Credit by Exam: Yes
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None
ELECT-114 - Fabrication and Assembly II Units: 2
This second year course, required for majors in Electronics and Laser, provides instruction in advanced fabrication and assembly operations. Students will build an electronic instrument in its entirety and are responsible for design of the PC Board, chassis fabrication and assembly, wire harnessing, and debugging. Students are introduced to advanced hand and machine tool operations used in the electronics industry, project development, and report writing.
Lecture Hours: 1 Lab Hours: 3 Repeatable: No Grading: L
Prerequisite: ELECT 113 and ELECT 063, both with C or better
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None
ELECT-115 - Surface Mount Technology Soldering, Assembly, and Rework Techniques Units: 2
This course is designed to teach surface mount soldering, assembly, and rework. It may be taken concurrently with other electronics classes.
Lecture Hours: 1 Lab Hours: 3 Repeatable: No Grading: L
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: None Degree Applicable: AS
CSU GE: None District GE: None IGETC: None
ELECT-121 - Electronics Math I Units: 3
Many math skills are required of a technician. Electronics Math I and II are designed to give a solid foundation in the basic algebraic and trigonometric skills needed by a technician with practical examples used throughout. Topics include number line, signed numbers, powers of ten, unit prefixes, scientific notation, arithmetic and algebraic operations with polynomials, algebraic fractions, linear and second degree equations, factoring, fractional equations, systems of equations, graphing linear equations, beginning complex numbers, basic trigonometric functions, RLC circuits, binary and octal and hex number systems, and use of a full function scientific calculator.
Lecture Hours: 2.5 Lab Hours: 1.5 Repeatable: No Grading: L
Credit by Exam: Yes
Prerequisite: Qualifying score on Arithmetic Placement Test, or completion of MATH 011A or MATH 011R or higher Math class, or completion of ELECT 320, or concurrent enrollment in ELECT 320.
CAN: None
Advisory Level: Read: None Write: None Math: 1
Transfer Status: None Degree Applicable: AS
CSU GE: None District GE: M IGETC: None
ELECT-122 - Electronics Math II Units: 3
Electronics Math II continues the development of the math concepts needed by technicians with immediate applications in the electronics courses taken by the student. Emphasis is placed on the analytic skills needed to anticipate what is expected in the hardware/equipment encountered by the student in hands-on experience in the lab and in industry. Practical examples are used throughout both Electronics Math I and II. Topics include a continuation of those of Electronics Math I and also analysis of RCL and GLC circuits using j numbers and polar numbers, basic trigonometric functions, beginning phasor algebra, logarithms and their applications to electronics, Bode plots, network theorems, transient circuit analysis, numerical approximations, Boolean algebra, and basic statistical concepts.
Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L
Credit by Exam: Yes
Prerequisite: ELECT 121 or MATH 013 or any Math class having MATH 013 as a prerequisite with a grade of C or better
CAN: None
Advisory Level: Read: None Write: None Math: 3
Transfer Status: CSU Degree Applicable: AS
CSU GE: None District GE: None IGETC: None
# Electronics

## ELECT-131 - Personal Computer Hardware: Introduction to Computer Repair

This course introduces the basic concepts of the personal computer, its components and its history. The focus of this course is on the IBM compatible personal computer. Students will learn how to accurately recognize the different parts of a computer, its installation, and connection of the different expansion cards and cables. Students will acquire the skills and lab experience needed to assemble, upgrade and repair a custom computer system. Students will be provided with lab experience in preparing and installing software.

- **Lecture Hours:** 2
- **Lab Hours:** 4
- **Repeatable:** No
- **Grading:** L

**Prerequisite:** ELECT 142 with C or better

**Corequisite:** CIS 041 and ELECT 121 (previous or concurrent)

**Advisory Level:**
- **Read:** 2
- **Write:** 2
- **Math:** 2

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## ELECT-133 - Advanced Personal Computer Troubleshooting

This course introduces the concept of computer troubleshooting. Both hardware and software troubleshooting are addressed. The student will learn how to use diagnostics software to find hardware problems. Software troubleshooting is addressed for the most common software in the market. The student will learn how to resolve hardware conflicts and determine solutions for software problems.

- **Lecture Hours:** 2
- **Lab Hours:** 4
- **Repeatable:** No
- **Grading:** L

**Prerequisite:** ELECT 131 with C or better

**Corequisite:** ELECT 144 concurrent or equivalent

**Advisory Level:**
- **Read:** 2
- **Write:** 2
- **Math:** 2

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## ELECT-136 - Electronics Technology - Occupational Work Experience - Alternate Plan

Occupational Work Experience is designed for students who work or volunteer in a field related to their vocational major. Students are required to provide evidence that they are enrolled in a vocational program (e.g., educational plan or coursework in a vocational subject area). The Alternate Plan is designed to allow students attend school one semester and work the next. A maximum of 8 units of Occupational Work Experience credit may be earned during any one semester, to a maximum of 16 units total. Students may only take one (if any) class in addition to work experience. Internship/job placement is not guaranteed.

- **Lecture Hours:** 0
- **Lab Hours:** 3 - 24
- **Repeatable:** 15
- **Grading:** O

**Corequisite:**
- 1. Need not be enrolled in any other class during the semester besides Work Experience.
- 2. May be enrolled in at most one other class in addition to Work Experience.
- 3. Must be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.

**Advisory Level:**
- **Read:** 3
- **Write:** 3
- **Math:** None

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## ELECT-138 - Electronics Occupational Work Experience - Alternate Plan

Occupational Work Experience is designed for students who work or volunteer in a field related to their vocational major. Students are required to provide evidence that they are enrolled in a vocational program (e.g., educational plan or coursework in a vocational subject area). The Alternate Plan is designed to allow students attend school one semester and work the next. A maximum of 8 units of Occupational Work Experience credit may be earned during any one semester, to a maximum of 16 units total. Students may only take one (if any) class in addition to work experience. Internship/job placement is not guaranteed.

- **Lecture Hours:** 0
- **Lab Hours:** 3 - 24
- **Repeatable:** 15
- **Grading:** O

**Corequisite:**
- 1. Need not be enrolled in any other class during the semester besides Work Experience.
- 2. May be enrolled in at most one other class in addition to Work Experience.
- 3. Must be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.

**Advisory Level:**
- **Read:** 3
- **Write:** 3
- **Math:** None

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## ELECT-152 - TV Circuits

Electronics 152 is a third semester course for Electronic Technology or Laser Technology majors. This course offers instruction in analog circuit analysis and troubleshooting techniques. All circuits of television receivers are studied. The laboratory portion utilizes a television receiver as a vehicle to develop those analytical and diagnostic troubleshooting skills required of technicians in industry. Various lab instruments are demonstrated and used in troubleshooting systems. Additional topics include communication principles, AM (amplitude modulation) and FM (frequency modulation) theory and documentation.

- **Lecture Hours:** 3
- **Lab Hours:** 3
- **Repeatable:** No
- **Grading:** L

**Prerequisite:** ELECT 063 with C or better

**Recommended:** Concurrent enrollment in ELECT 064

**Advisory Level:**
- **Read:** 2
- **Write:** 2
- **Math:** None

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## ELECT-163 - Microwave Measurements

Microwave Measurements provides an introduction to the measurement and application of high-frequency electromagnetic waves. Write the course includes measurement fundamentals, microwave circuit analysis, and microwave applications. This is a required course for all students seeking Technical Associate Certificates or AS Degrees in Electronics Technology or Microwave Technology.

- **Lecture Hours:** 3
- **Lab Hours:** 3
- **Repeatable:** No
- **Grading:** L

**Prerequisite:** ELECT 063 with C or better

**Recommended:** Concurrent enrollment in ELECT 064

**Advisory Level:**
- **Read:** 2
- **Write:** 2
- **Math:** None

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ELECT-168 - Microwave and Satellite Communication Systems
Units: 4
Microwave and Satellite Communication Systems prepares microwave technicians for electronics careers in space and telecommunications research, explorations, and commercialization. Microwave communications and satellite systems are stressed both in theory and in the laboratory. Lectures, films, and field trips survey aerospace and telecommunications applications of microwave technology. Laboratory projects include satellite tracking and communication experiments which apply to the telecommunications, telecommand, and telemetry industry.
Lecture Hours: 3 Lab Hours: 3 Repeatable: No Grading: L
Prerequisite: ELECT 063 with C or better
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

ELECT-210 - Supervised Tutoring
Units: None
Students will receive tutoring assistance in areas of identified academic need. With the assistance of appropriate faculty, tutors will be assigned who have demonstrated competency in a particular subject, skill and/or discipline and who have successfully completed a tutor training course.
Lecture Hours: None Lab Hours: None Repeatable: 19 Grading: N
Open Curriculum: No prerequisite, corequisite or levels
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: None Degree Applicable: NONC
CSU GE: None District GE: None IGETC: None

ELECT-320 - Introduction to Electronics Math
Units: 2
Introduction to Electronics Math is designed for students who need review and a slower pace before enrolling in Electronics Math I, Electronics 121. Emphasis is placed on basic math understanding with many hands on exercises, and students are provided with sufficient practice to reinforce basic skills. Topics include signed numbers, the number line, order of operations, prefixes, units and vocabulary used in electronics, review of fractions and decimals, metrics, graphing, area and volume, and calculator usage.
Lecture Hours: 1 Lab Hours: 3 Repeatable: No Grading: L
Prerequisite: 3 units of MATH 310 with CR or placement based on assessment
CAN: None
Advisory Level: Read: None Write: None Math: 1
Transfer Status: None Degree Applicable: AS
CSU GE: None District GE: None IGETC: None

ENGL-001B - English Composition
Units: 3
Introduction to literature: the short story, poetry, drama and the novel; continuation of expository writing supplemented by critical reading and analysis of literature.
Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L
Prerequisite: ENGL 001A with C or better
CAN: ENGL 4; ENGL SEQ A = ENGL 1B+1A
Advisory Level: Read: None Write: None Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: C2 District GE: C2 IGETC: 3B

ENGL-001C - Critical Thinking/Composition
Units: 3
This course presents the techniques of critical reasoning and advanced composition. Students will learn to identify the basic structures of arguments and the ways people use language to fortify or to falsify arguments. Students will analyze and demonstrate these techniques by writing and critiquing essays and using research strategies. This course is specifically designed to meet the IGETC critical thinking requirement.
Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L
Prerequisite: ENGL 001A with C or better
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: A3 District GE: A3 IGETC: 1B

ENGL-028 - Introduction to World Mythology
Units: 3
This course investigates cross-cultural patterns of myths: gods and goddesses of earth and sky, hunt and harvest; the cycle of the hero; the trickster; the creation, destruction, and renewal of the world; myths as potent forces today in literature and the arts as well as in everyday life.
Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L
Prerequisite: ENGL (104 or 092 or 3 units of 092S) and ENGL 102 or READ (101 or 4 units of 101S) or ENGL (091A and 091B) or ESL 091 or ESL 093; all with C or better or placement based on assessment.
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: C2 District GE: C2 IGETC: 3B

ENGL-033 - Women in Literature
Units: 3
This introductory survey of literature focuses on the stereotyped and individualized characterizations of women as depicted in drama, short stories, poetry, essays and novels.
Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: O
Prerequisite: ENGL (104 or 092 or 3 units of 092S) and ENGL 102 or READ (101 or 4 units of 101S) or ENGL (091A and 091B) or ESL 091 or ESL 093; all with C or better or placement based on assessment.
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: C2,D4 District GE: C2,ES IGETC: 3B
English

ENGL-061 - Lesbian/ Gay/ Bisexual/ Transgender Literature

Reading, discussing, and writing about significant literature by or about lesbian/gay/bisexual/transgender writers of the past and present. Lectures and discussion will focus on fundamental critical thinking questions about the representation of alternative sexuality in literature and related forms of art.

Lecture Hours: 3 Lab Hours: 0 Repeatable: No Grading: L
Prerequisite: ENGL (104 or 092) and (ENGL 102 or READ 101 or READ 101S), all with C or better

CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: C2 District GE: C2 IGETC: 3B

ENGL-065 - The Short Story

This course is an analysis and interpretation of the short story encompassing short fictional writing. Elements of fiction, critical literary approaches, historical context, author-biographical information, and techniques for writing about literature will be covered.

Lecture Hours: 3 Lab Hours: 0 Repeatable: No Grading: L
Prerequisite: ENGL (104 or 092 or 3 units of 092S) and ENGL 102 or READ (101 or 4 units of 101S) or ENGL (091A and 091B) or ESL 091; all with C or better or placement based on assessment.

CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: C2 District GE: C2 IGETC: 3B

ENGL-071A - Fundamentals of Creative Writing/ Poetry

This course introduces students to a variety of poetic forms of poetry, such as the sonnet, blank verse, ballad, haiku, villanelle, and free verse.

Lecture Hours: 3 Lab Hours: 0 Repeatable: No Grading: O
Prerequisite: (ENGL 104 or ENGL 092) and (ENGL 102 or READ 101) all with C or better or placement based on assessment

CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

ENGL-071B - Fundamentals of Creative Writing/ Fiction

This course introduces students to the principles and forms of fiction, such as description, mood, tone, theme, character development, narration, short story, novella and the novel.

Lecture Hours: 3 Lab Hours: 0 Repeatable: No Grading: O
Prerequisite: (ENGL 104 or ENGL 092) and (ENGL 102 or READ 101) all with C or better or placement based on assessment

CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

ENGL-071C - Fundamentals of Creative Writing/ Drama

This course introduces students to the principles and forms of drama such as setting, timing, pace, dialogue, dramatic sketches, radio or television plays, one-act and full-length plays for the theatre.

Lecture Hours: 3 Lab Hours: 0 Repeatable: No Grading: O
Prerequisite: ENGL 104 or ENGL 092) and (ENGL 102 or READ 101) all with C or better or placement based on assessment

CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

ENGL-073 - Introduction to Shakespeare

This course is designed to heighten awareness of Shakespeare's literature to society and the relationship of the student to his work.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: O
Prerequisite: (ENGL (104 or 092 or 3 units of 092S) and ENGL 102 or READ (101 or 4 units of 101S) or ENGL (091A and 091B) or ESL 091 or ESL 093; all with C or better or placement based on assessment.

CAN: None
Advisory Level: Read: 3 Write: 3 Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: C2 District GE: C2 IGETC: 3B

ENGL-078 - Introduction to Biblical Literature

A study of the Bible as an anthology of literary masterpieces; its history, development, and cultural influences.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: O
Prerequisite: ENGL (104 or 092 or 3 units of 092S) and ENGL 102 or READ (101 or 4 units of 101S) or ENGL (091A and 091B) or ESL 091; all with C or better or placement based on assessment.

CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: C2 District GE: C2 IGETC: 3B

ENGL-079 - Writing Life Stories

This course in autobiographical literature is intended for students to analyze the choices and styles made by authors in conveying their diverse histories in diverse autobiographical works; and for students to implement this knowledge in their own written autobiographical exercises.

Lecture Hours: 3 Lab Hours: 0 Repeatable: No Grading: O
Prerequisite: ENGL (104 or 092 or 3 units of 092S) and ENGL 102 or READ (101 or 4 units of 101S) or ENGL (091A and 091B) or ESL 091; all with C or better or placement based on assessment.

CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: C2 District GE: C2 IGETC: None
## ENGL-080 - Mexican American Literature

A comprehensive survey of literary contributions from both Mexican and Mexican American writers. The purpose is to reveal the Mexican American as depicted in all literature. The student is to use this literature class as a form of self-examination, awareness, and identification.

**Lecture Hours:** 3  
**Lab Hours:** None  
**Repeatable:** No  
**Grading:** O

**Prerequisite:** ENGL (104 or 092 or 3 units of 092S) and ENGL 102 or READ (101 or 4 units of 101S) or ENGL (091A and 091B) or ESL 091 or ESL 093; all with C or better or placement based on assessment.

**CAN:** None  
**Advisory Level:** Read: None  
**Write:** None  
**Math:** None  
**Transfer Status:** CSU/UC  
**Degree Applicable:** AA/AS  
**CSU GE:** C2,D3  
**District GE:** C2,ES  
**IGETC:** None

## ENGL-082A - African American Literature

English 82A is a detailed study of the African-American experience in America as viewed through the literary works of African-American authors from slavery to 1930. The course is designed to analyze the various and unique social scientific approaches—namely the historical, the psychological, the sociological, and the philosophical—that African-American authors employ in exposing, exploring and, in general, informing an oftentimes unreceptive reading audience. English 82A is not a prerequisite to English 82B. This course satisfies the General Education Cultural Pluralism requirement.

**Lecture Hours:** 3  
**Lab Hours:** None  
**Repeatable:** No  
**Grading:** O

**Prerequisite:** ENGL (104 or 092 or 3 units of 092S) and ENGL 102 or READ (101 or 4 units of 101S) or ENGL (091A and 091B) or ESL 091 or ESL 093; all with C or better or placement based on assessment.

**CAN:** None  
**Advisory Level:** Read: None  
**Write:** None  
**Math:** None  
**Transfer Status:** CSU/UC  
**Degree Applicable:** AA/AS  
**CSU GE:** C2,D3  
**District GE:** C2,ES  
**IGETC:** 3B

## ENGL-082B - African American Literature

English 82B is a detailed study of the African-American experience in America as viewed through the literary works of African-American authors from 1930 to present. The course is designed to analyze the various and unique social scientific approaches—namely the historical, the psychological, the sociological, and the philosophical—that African-American authors employ in exposing, exploring and, in general, informing an oftentimes unreceptive reading audience. English 82A is not a prerequisite to English 82B. This course satisfies the General Education Cultural Pluralism requirement.

**Lecture Hours:** 3  
**Lab Hours:** None  
**Repeatable:** No  
**Grading:** O

**Prerequisite:** ENGL (104 or 092 or 3 units of 092S) and ENGL 102 or READ (101 or 4 units of 101S) or ENGL (091A and 091B) or ESL 091 or ESL 093; all with C or better or placement based on assessment.

**CAN:** None  
**Advisory Level:** Read: None  
**Write:** None  
**Math:** None  
**Transfer Status:** CSU/UC  
**Degree Applicable:** AA/AS  
**CSU GE:** C2,D3  
**District GE:** C2,ES  
**IGETC:** None

## ENGL-083 - Literature and Film

Students will explore literary classics of all times and places on screen and study the film as an art form, comparing the narrative dynamics of various genres of cinema and literature, by seeing the movie, by reading the text (original and/or screenplay), by comparing the text with the film, and by analyzing both in writing. The comparative study of cinematic and literary practices will lead students to an understanding of the specific expressive powers of each and will illustrate each medium's unique potentialities and deficiencies. The course is designed to heighten critical awareness of film and literature as two dynamically interwoven art forms.

**Lecture Hours:** 4  
**Lab Hours:** None  
**Repeatable:** No  
**Grading:** L

**Prerequisite:** ENGL (104 or 092 or 3 units of 092S) and ENGL 102 or READ (101 or 4 units of 101S) or ENGL (091A and 091B) or ESL 091; all with C or better or placement based on assessment.

**CAN:** None  
**Advisory Level:** Read: None  
**Write:** None  
**Math:** None  
**Transfer Status:** CSU/UC  
**Degree Applicable:** AA/AS  
**CSU GE:** C2  
**District GE:** C2  
**IGETC:** 3B

## ENGL-084A - Survey of American Literature

Representative American literature from its beginning to the present with some emphasis on social and cultural backgrounds. Includes works of writers of the Colonial, Revolutionary, and Romantic periods.

**Lecture Hours:** 3  
**Lab Hours:** None  
**Repeatable:** No  
**Grading:** O

**Prerequisite:** ENGL (104 or 092 or 3 units of 092S) and ENGL 102 or READ (101 or 4 units of 101S) or ENGL (091A and 091B) or ESL 091 or ESL 093; all with C or better or placement based on assessment.

**CAN:** ENGL 14; ENGL SEQ C = ENGL 84A+84B  
**Advisory Level:** Read: None  
**Write:** None  
**Math:** None  
**Transfer Status:** CSU/UC  
**Degree Applicable:** AA/AS  
**CSU GE:** C2  
**District GE:** C2  
**IGETC:** 3B

## ENGL-084B - Survey of American Literature

Representative American literature from its beginning to the present with some emphasis on social and cultural backgrounds. Includes works of writers from the late nineteenth century to the present. English 84A is not prerequisite to English 84B.

**Lecture Hours:** 3  
**Lab Hours:** None  
**Repeatable:** No  
**Grading:** O

**Prerequisite:** ENGL (104 or 092 or 3 units of 092S) and ENGL 102 or READ (101 or 4 units of 101S) or ENGL (091A and 091B) or ESL 091 or ESL 093; all with C or better or placement based on assessment.

**CAN:** ENGL 16; ENGL SEQ C = ENGL 84B+84A  
**Advisory Level:** Read: None  
**Write:** None  
**Math:** None  
**Transfer Status:** CSU/UC  
**Degree Applicable:** AA/AS  
**CSU GE:** C2  
**District GE:** C2  
**IGETC:** 3B

## ENGL-086A - Survey of English Literature I

The first part of a two part series surveying the development of English (Anglophone) Literature from its beginnings in the 8th Century AD through the 18th Century. Students will read and discuss significant examples of epic, lyric, drama, and prose writings of the finest authors writing in English (exclusive of American English). The course will contain Lectures, discussions, group work, and other student centered learning activities. Evaluations will be based on in and out of class analytical essays, examinations, research reports, class work. This course is required for the English Major at EVC and the CSU system.

**Lecture Hours:** 3  
**Lab Hours:** None  
**Repeatable:** No  
**Grading:** L

**Prerequisite:** ENGL (104 or 092 or 3 units of 092S) and ENGL 102 or READ (101 or 4 units of 101S) or ENGL (091A and 091B) or ESL 091 or ESL 093; all with C or better or placement based on assessment.

**CAN:** ENGL SEQ B = ENGL 86A+86B  
**Advisory Level:** Read: None  
**Write:** None  
**Math:** None  
**Transfer Status:** CSU/UC  
**Degree Applicable:** AA/AS  
**CSU GE:** C2  
**District GE:** C2  
**IGETC:** 3B
ENGL-086B - Survey of English Literature II Units: 3
The second part of a two part series surveying the development of English (Anglophone) Literature from the 18th Century to the present. Students will read and discuss significant examples of epic, lyric, drama, and prose writings of the finest authors writing in England and the British Empire from the Romantic, Victorian, Edwardian, Modern, and Post-modern Periods. The course will contain lectures, discussions, group work, and other student centered learning activities. Evaluations will be based on in and out of class analytical essays, examinations, research reports, class work. This course is required for the English Major at EVC and the CSU system.
Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L
Prerequisite: ENGL (104 or 092 or 3 units of 092S) and ENGL 102 or READ (101 or 4 units of 101S) or ENGL 091A and 091B) or ESL 091 or ESL 093; all with C or better or placement based on assessment.

ENGL-087 - Grammar Review Error Units: 3
Identification & Timed Writing: Preparation for the WST
This three unit course offers transfer bound or upper division bound students an opportunity to strengthen their grammar and language awareness, focusing specifically on the writing competencies required by the Writing Standards Test and related Tests of the California State University System. The course offers an overview of English sentence structure, emphasizing clear predication, conventional syntax, correct punctuation, and appropriate choice of words or idioms. It also offers practice in identifying and correcting errors in writing. Finally, it offers practice in timed reading and writing.
Lecture Hours: 3 Lab Hours: 0 Repeatable: No Grading: O
Prerequisite: ENGL 001A

ENGL-092 - Essay Development Units: 4
English 092 focuses on the writing of short compositions in response to readings and on preparing students for English 1A, the General Education transfer English composition course.
Lecture Hours: 4 Lab Hours: None Repeatable: No Grading: L
Prerequisite: ESL 302 or ENGL 322 and (ENGL 330 or ENGL 335) or READ 301 or READ 301S or (ENGL 330 or ENGL 335); all with C or placement based on assessment.

ENGL-098 - Directed Study Units: 0.5 - 9
Individual or small groups of students who would benefit from Independent Study under the direction of faculty members in specific or related disciplines may develop individualized learning contracts designed to enhance their individual instructional programs. The students and the faculty member in consultation with the Division Dean will determine appropriate learning objectives and activities as well as the number of units to be earned. Instructions and the Learning Contract forms are available in the Division office. Repeatable to a maximum of 9 units across all disciplines.
Lecture Hours: None Lab Hours: 1.5 - 27 Repeatable: 17 Grading: O
Prerequisite: ESL 302 or ENGL 322 and (ENGL 330 or ENGL 335) or READ 301 or READ 301S and (ENGL 330 or 335); all with C or placement based on assessment.

ENGL-200 - Supervised Skills Laboratory Units: None
Supplemental practice and/or instruction is offered to students enrolled in associated English courses. Students receive feedback on their writing from peer writers and instructors other than those in their classroom and receive individualized guidance in improving specified skills.
Lecture Hours: None Lab Hours: None Repeatable: 19 Grading: N
Corequisite: ENGL 335

ENGL-210 - Supervised Tutoring Units: None
Students will receive tutoring assistance in areas of identified academic need. With the assistance of appropriate faculty, tutors will be assigned who have demonstrated competency in a particular subject, skill and/or discipline and who have successfully completed a tutor training course.
Lecture Hours: 0 Lab Hours: 0 Repeatable: 19 Grading: N

ENGL-335 - Basic Writing Skills Units: 4.5
This course is designed to develop competence in basic writing skills 2 levels below English 001A. Topics covered include the steps of the writing process, the development of paragraphs and short multi-paragraph compositions, the writing of summaries, and the basic rules of standard English usage. The lab component provides individualized writing help for each student.
Lecture Hours: 4 Lab Hours: 2 Repeatable: No Grading: K
Prerequisite: (3 units of ENGL 321 and ENGL 341) or 6 units of READ 350 or 6 units of ENGL 340S or (ESL 312 and 313); all with a CR or placement based on assessment.
Corequisite: ENGL 200

English as a Second Language
ESL-001R - Critical Reading ESL Units: 3
Designed for non-native speakers of English to increase their understanding of American cultural assumptions and values through the reading of selected literature and prose. The course also prepares students to participate in other college courses requiring extensive reading. Areas of study include critical analysis of readings and in-depth expansion of the necessary background to acquire an increased understanding of English vocabulary and usage. Students also increase their knowledge of standard written English and the features of different types of reading materials.
Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: O
Corequisite: ENGL 001A
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units:</th>
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<tbody>
<tr>
<td>ESL-091</td>
<td>College Reading and Writing 2</td>
<td>6</td>
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<tr>
<td>ESL-091L</td>
<td>ESL Skills Development Lab</td>
<td>0.5</td>
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<td>ESL-100L</td>
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<tr>
<td>ESL-104</td>
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<td>ESL-106</td>
<td>Grammar for Writers 2</td>
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<tr>
<td>ESL-302</td>
<td>Introduction to College Reading and Writing</td>
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<tr>
<td>ESL-302L</td>
<td>ESL Skills Development Lab 0.5</td>
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</tr>
<tr>
<td>ESL-310L</td>
<td>ESL Skills Development Lab 0.5 - 2</td>
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</tbody>
</table>

**ESL-091**: This course is designed for non-native speakers of English. The reading component emphasizes patterns of essay organization, relationships of paragraphs within essays, and understanding of the author's purpose, audience, tone, and mood. Reading and research materials highlight cultural content and contemporary issues in American society and serve as models and prompts for compositions. Essays will focus on research and the development and organization of ideas using complex sentences in coherent, well-developed paragraphs. Concurrent enrollment in ESL 91L is required for computer-assisted, instructor guided practice.

- Lecture Hours: 6
- Lab Hours: None
- Repeatable: No
- Grading: O
- Prerequisite: ESL 302 or (ENGL 322 and (ENGL 330 or ENGL 335)) or ((READ 301 or READ 301S) and (ENGL 330 or ENGL 335)); all with CR or placement based on assessment.
- Corequisite: ESL 091L

**ESL-091L**: The content of this lab will facilitate skills development for ESL 091. It is designed to supplement classroom instruction by providing students the opportunity to work on an individualized basis with software, web-based materials, and essays previously assigned by the ESL instructor and to receive individual critique of their written work. Students must enroll concurrently in ESL 091.

- Lecture Hours: 0
- Lab Hours: 1.5
- Repeatable: No
- Grading: K
- Corequisite: ESL 091

**ESL-100L**: The content of this lab will facilitate skills development for the ESL 091, 104, 106 and 302 courses. It is designed to supplement classroom instruction by providing learning materials via video and software that will allow students to work on an individual basis to enhance their skills in listening comprehension, oral communication, reading, writing, pronunciation, and vocabulary development, as well as their understanding of American culture. Students must be enrolled concurrently in ESL 091, 104 or 106 or 302. Twenty-four hours of lab work are required for each 1/2 unit of credit. Repeatable for a maximum of two units.

- Lecture Hours: None
- Lab Hours: 1.5 - 6
- Repeatable: 3
- Grading: K
- Corequisite: ESL 104 or ESL 106 or ESL 302

**ESL-104**: This class is designed to help non-native speakers of English gain the academic listening and speaking skills required to be successful in the mainstream college level classroom. This course focuses on note-taking, class participation, expression of personal ideas, presentation skills, and gathering information from various audio and visual media. Concurrent enrollment in ESL 91 is highly recommended.

- Lecture Hours: 3
- Lab Hours: None
- Repeatable: No
- Grading: K
- Prerequisite: ESL 314 or 315 or (ESL 312 and 313); all with CR or placement based on assessment.

**ESL-302**: This course is designed to help ESL students improve their writing skills and grammar usage for success in ESL 091. The course focuses on persistent structural problems and offers in depth analysis of English grammar and syntax for advanced ESL college students preparing to pursue academic or vocational studies.

- Lecture Hours: 6
- Lab Hours: 0
- Repeatable: No
- Grading: K
- Prerequisite: ESL 312 with CR or placement based on assessment

**ESL-302L**: The content of this lab will facilitate skills development for ESL 302. It is designed to supplement classroom instruction by providing students the opportunity to work on an individualized basis with materials previously assigned by the ESL instructor to write essays for individual critique by an ESL instructor.

- Lecture Hours: None
- Lab Hours: 1.5
- Repeatable: No
- Grading: K
- Corequisite: ESL 302

**ESL-310L**: The content of this lab will facilitate skills development for the ESL 310 series. It is designed to supplement classroom instruction by providing learning materials via video and software that will allow students to work on an individual basis to enhance their skills in listening comprehension, oral communication, reading, writing, pronunciation, and vocabulary development, as well as their understanding of American culture. Students must be enrolled concurrently in ESL 312, 313, 314, 316, or 317. Twenty-four hours of lab work are required for each 1/2 unit of credit. Repeatable for a maximum of two units.

- Lecture Hours: None
- Lab Hours: 1.5 - 6
- Repeatable: 3
- Grading: K
- Corequisite: ESL 313 or ESL 314 or ESL 316 or ESL 317

**ESL-316**: This course is designed to help ESL students improve their writing skills and grammar usage for success in ESL 091. The course focuses on persistent structural problems and offers in depth analysis of English grammar and syntax for advanced ESL college students preparing to pursue academic or vocational studies.

- Lecture Hours: 6
- Lab Hours: 0
- Repeatable: No
- Grading: K
- Prerequisite: ESL 312 with CR or placement based on assessment

**ESL-317**: The content of this lab will facilitate skills development for ESL 317. It is designed to supplement classroom instruction by providing learning materials via video and software that will allow students to work on an individual basis to enhance their skills in listening comprehension, oral communication, reading, writing, pronunciation, and vocabulary development, as well as their understanding of American culture. Students must be enrolled concurrently in ESL 312, 313, 314, 316, or 317. Twenty-four hours of lab work are required for each 1/2 unit of credit. Repeatable for a maximum of two units.

- Lecture Hours: None
- Lab Hours: 1.5 - 6
- Repeatable: 3
- Grading: K
- Corequisite: ESL 313 or ESL 314 or ESL 316 or ESL 317
### ESL-312 - Introduction to the Essay Units: 5
ESL 312 is a high-intermediate writing course for non-native speakers of English. Students read and write paragraphs and short essays on academic topics and acquire grammar, writing, and vocabulary skills for college-level academic work. Concurrent enrollment in ESL 312L is required for technology-based grammar and writing practice with lab assistance.

- **Lecture Hours:** 5
- **Lab Hours:** None
- **Repeatable:** No
- **Grading:** K
- **Prerequisite:** ESL 322 and ESL 330 and ESL 334; all with CR or placement based on assessment.
- **Corequisite:** ESL 312L C

**Advisory Level:**
- **Read:** None
- **Write:** None
- **Math:** None
- **Degree Applicable:** NAA
- **Transfer Status:** None
- **CSU GE:** None
- **District GE:** None
- **IGETC:** None

### ESL-312L - ESL Skills Development Lab Units: 0.5
This content of this lab will facilitate skills development for the ESL 312 course. It is designed to supplement classroom instruction by providing students the opportunity to work on an individualized basis with software and web-based materials previously assigned by the ESL instructor, to attend workshops on grammar and composition, and to receive individual critique by an ESL instructor on assignments written for ESL 312.

- **Lecture Hours:** None
- **Lab Hours:** 1.5
- **Repeatable:** No
- **Grading:** K
- **Corequisite:** ESL 312 CAN

**Advisory Level:**
- **Read:** None
- **Write:** None
- **Math:** None
- **Degree Applicable:** NAA
- **Transfer Status:** None
- **CSU GE:** None
- **District GE:** None
- **IGETC:** None

### ESL-313 - Introduction to College Reading Units: 3
This course is designed for non-native speakers at a high-intermediate level of English proficiency. Course content prepares students to read and respond to college-level texts, demonstrating literal and critical comprehension, and to expand vocabulary for academic purposes. Concurrent enrollment in ESL 312, ESL 314, and ESL 310L is recommended.

- **Lecture Hours:** 3
- **Lab Hours:** 0
- **Repeatable:** No
- **Grading:** K
- **Prerequisite:** (ESL 322 and 323 and 324) all with a CR or placement based on assessment.

**CAN:** None

**Advisory Level:**
- **Read:** None
- **Write:** None
- **Math:** None
- **Degree Applicable:** NC
- **Transfer Status:** None
- **CSU GE:** None
- **District GE:** None
- **IGETC:** None

### ESL-314 - Advanced Listening and Speaking Skills Units: 3
Refines listening comprehension and speaking skills in academic, vocational, and social contexts at the high intermediate level.

- **Lecture Hours:** 3
- **Lab Hours:** None
- **Repeatable:** No
- **Grading:** K
- **Prerequisite:** ESL 324 with CR or placement based on assessment.

**CAN:** None

**Advisory Level:**
- **Read:** None
- **Write:** None
- **Math:** None
- **Degree Applicable:** NAA
- **Transfer Status:** None
- **CSU GE:** None
- **District GE:** None
- **IGETC:** None

### ESL-316 - Grammar for Writers Units: 3
ESL 316 is an intensive grammar course for ESL writers at a high-intermediate level of language proficiency. Course content focuses on a wide range of grammatical and syntactical structures in meaningful contexts and builds accuracy and fluency in oral and written discourse.

- **Lecture Hours:** 3
- **Lab Hours:** None
- **Repeatable:** No
- **Grading:** K
- **Prerequisite:** ESL 322 with CR CAN

**Advisory Level:**
- **Read:** None
- **Write:** None
- **Math:** None
- **Transfer Status:** None
- **Degree Applicable:** NAA
- **CSU GE:** None
- **District GE:** None
- **IGETC:** None

### ESL-317 - American Accent Acquisition Units: 4
This course is designed to enable adult learners of English to acquire more native-like speech. Emphasis is placed on global aspects of speech such as stress, intonation and pitch, rhythm, linking, blending, and assimilation of sounds in connected discourse as well as proper articulation of vowels, consonants, and consonant blends and pronunciation of grammatical word endings. Multimedia and online resources supplement the course.

- **Lecture Hours:** 4
- **Lab Hours:** None
- **Repeatable:** No
- **Grading:** K
- **Prerequisite:** ESL 324 with CR or placement based on assessment into the ESL 310 series or above CAN

**Corequisite:** 0.5 unit in ESL 310L

**CAN:** None

**Advisory Level:**
- **Read:** None
- **Write:** None
- **Math:** None
- **Degree Applicable:** NAA
- **Transfer Status:** None
- **CSU GE:** None
- **District GE:** None
- **IGETC:** None

### ESL-320L - ESL Skills Development Lab Units: 0.5 - 2
The content of this lab will facilitate skills development for the ESL 320 series. It is designed to supplement classroom instruction by providing learning materials via video and software that will allow students to work on an individual basis to enhance their skills in listening comprehension, oral communication, reading, writing, pronunciation, and vocabulary development, as well as their understanding of American culture. Students must be enrolled concurrently in ESL 322, 323, 324, or 327. Twenty-four hours of lab work are required for each 1/2 unit of credit. Repeatable for a maximum of two units.

- **Lecture Hours:** None
- **Lab Hours:** 1.5 - 6
- **Repeatable:** 3
- **Grading:** K
- **Corequisite:** ESL 322 or ESL 323 or ESL 324 or ESL 327

**CAN:** None

**Advisory Level:**
- **Read:** None
- **Write:** None
- **Math:** None
- **Degree Applicable:** NAA
- **Transfer Status:** None
- **CSU GE:** None
- **District GE:** None
- **IGETC:** None

### ESL-322 - Paragraph Development Units: 5
ESL 322 is an intermediate writing course for non-native speakers of English. Students write, using a variety of compositional formats that require increasing organizational, grammatical, syntactical, and lexical complexity. Concurrent enrollment in .5 unit of ESL 320L is strongly recommended for technology-based grammar and writing practice with lab assistance.

- **Lecture Hours:** 5
- **Lab Hours:** None
- **Repeatable:** No
- **Grading:** K
- **Prerequisite:** ESL 332 with CR CAN

**Advisory Level:**
- **Read:** None
- **Write:** None
- **Math:** None
- **Degree Applicable:** NAA
- **Transfer Status:** None
- **CSU GE:** None
- **District GE:** None
- **IGETC:** None
ESL-323 - Reading and Vocabulary Development Units: 3
This course is designed for non-native speakers at an intermediate level of proficiency in English. Course content and materials focus mainly on reading comprehension and vocabulary development. Integration of discussion and writing activities is also emphasized. Concurrent enrollment in ESL 322, ESL 324, and ESL 320L is recommended.
Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: K
Prerequisite: ESL 333 with CR or placement based on assessment
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: None Degree Applicable: NAA
CSU GE: None District GE: None IGETC: None

ESL-324 - Listening and Speaking Skills Development Units: 4
This course focuses on developing academic listening and speaking skills at an intermediate level of language proficiency. Emphasis is also placed on acquiring idiomatic language and cultural awareness through the use of multimedia materials.
Lecture Hours: 4 Lab Hours: None Repeatable: No Grading: K
Prerequisite: ESL 334 with CR or placement based on assessment
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: None Degree Applicable: NAA
CSU GE: None District GE: None IGETC: None

ESL-327 - Pronunciation Improvement 2 Units: 2
Designed for non-native speakers of English who require further intensive practice and instruction in the oral production and control of the English language.
Lecture Hours: 2 Lab Hours: None Repeatable: No Grading: K
Prerequisite: Placement based on assessment
Corequisite: Or concurrent enrollment in ESL 322 or ESL 323 or ESL 324
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: None Degree Applicable: NAA
CSU GE: None District GE: None IGETC: None

ESL-330L - ESL Skills Development Lab Units: 0.5 - 2
The content of this lab will facilitate skills development for the ESL 330 series. It is designed to supplement classroom instruction by providing learning materials via video and software that will allow students to work on an individual basis to enhance their skills in listening comprehension, oral communication, reading, writing, pronunciation, grammar, and vocabulary development, as well as their understanding of American culture. Students must be enrolled concurrently in ESL 332, 333, 334, or 337. Twenty-four hours of lab work are required for each 1/2 unit of credit. Repeatable for a maximum of two units.
Lecture Hours: None Lab Hours: 1.5 - 6 Repeatable: 3 Grading: K
Corequisite: ESL 332 or ESL 333 or ESL 334 or ESL 337
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: None Degree Applicable: NAA
CSU GE: None District GE: None IGETC: None

ESL-332 - Basic Writing Skills 2 Units: 4
ESL 332 is a low-intermediate grammar/writing course for non-native speakers of English. The grammar and sentence structure of written discourse is recognized and identified in sentences and short passages, practiced in exercises and oral activities and used and edited in a variety of written formats. Concurrent enrollment in .5 unit of ESL 330L may be required by the instructor for technology-based grammar and writing practice with lab assistance.
Lecture Hours: 4 Lab Hours: None Repeatable: No Grading: K
Prerequisite: ESL 342 with CR or placement based on assessment
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: None Degree Applicable: NAA
CSU GE: None District GE: None IGETC: None

ESL-333 - Basic Reading Skills 2 Units: 3
This course is designed for non-native speakers who are at a low-intermediate level of proficiency in English. Course content and materials expand reading and vocabulary skills by focusing on literal and critical comprehension of text. Development of speaking and writing skills through interactive class activities is also emphasized. Concurrent enrollment in ESL 332, ESL 334, and ESL 330L is recommended.
Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: K
Prerequisite: ESL 343 with CR or placement based on assessment
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: None Degree Applicable: NAA
CSU GE: None District GE: None IGETC: None

ESL-334 - Basic Listening and Speaking 2 Units: 5
This course is designed for non-native speakers at a low-intermediate level of English proficiency. Class activities and multimedia materials focus on aural comprehension, oral communication and clear pronunciation in a variety of contexts. Concurrent enrollment in ESL 332, and ESL 333 are recommended.
Lecture Hours: 5 Lab Hours: None Repeatable: No Grading: K
Prerequisite: ESL 344 with CR or placement based on assessment
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: None Degree Applicable: NAA
CSU GE: None District GE: None IGETC: None

ESL-337 - Pronunciation Improvement 1 Units: 2
Designed for non-native speakers of English who require basic, intensive practice and instruction in the oral production and control of the English language.
Lecture Hours: 2 Lab Hours: None Repeatable: No Grading: K
Prerequisite: Placement based on assessment
Corequisite: Or concurrent enrollment in any ESL 330 series
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: None Degree Applicable: NAA
CSU GE: None District GE: None IGETC: None
ESL-340L - ESL Skills Development Lab  Units: 0.5 - 2
The content of this lab will facilitate language skills development for the ESL 340 series. It is designed to supplement classroom instruction by providing learning materials via video and software that will allow students to work on an individual basis to enhance their skills in listening comprehension, oral communication, reading, writing, pronunciation, grammar and vocabulary development, as well as their understanding of American culture. Students must be enrolled concurrently in ESL 342, 343, or 344. Twenty-four hours of lab work are required for each 1/2 unit of credit. Repeatable for a maximum of two units.
Lecture Hours: None  Lab Hours: 1.5 - 6  Repeatable: 3  Grading: K
Corequisite: ESL 342 or ESL 343 or ESL 344
CAN: None
Advisory Level: Read: None  Write: None  Math: None
Transfer Status: None  Degree Applicable: NAA
CSU GE: None  District GE: None  IGETC: None

ESL-342 - Basic Writing Skills 1  Units: 4
ESL 342 is a basic grammar/writing course for non-native speakers of English. The grammar and syntax of written discourse is recognized and identified in sentences and short passages, practiced in oral and written activities, and used and edited in a variety of written formats. Concurrent enrollment in .5 unit of ESL 342L is required for technology-based grammar and writing practice with lab assistance.
Lecture Hours: 4  Lab Hours: None  Repeatable: No  Grading: K
Corequisite: .5 unit ESL 342L
Open Curriculum: An assessment test is required prior to first day of class
CAN: None
Advisory Level: Read: None  Write: None  Math: None
Transfer Status: None  Degree Applicable: NAA
CSU GE: None  District GE: None  IGETC: None

ESL-342L - ESL Skills Development Lab  Units: 0.5
The content of this lab will facilitate skills development for the ESL 342 course. It is designed to supplement classroom instruction by providing the opportunity to work on an individualized basis with software and web-based materials previously assigned by the ESL instructor, to attend workshops on grammar and composition, and to get instructional assistance on assignments written for ESL 342.
Lecture Hours: 0  Lab Hours: 1.5  Repeatable: No  Grading: K
Corequisite: ESL 342
Recommended: Some basic knowledge of or exposure to English.
CAN: None
Advisory Level: Read: None  Write: None  Math: None
Transfer Status: None  Degree Applicable: NAA
CSU GE: None  District GE: None  IGETC: None

ESL-343 - Basic Reading Skills 1  Units: 3
This course is designed for non-native speakers at a high-beginning level of proficiency in English. Course materials develop reading and vocabulary skills by focusing on strategies for literal and critical comprehension of a variety of reading materials. Emphasis is also placed on discussion, writing, pronunciation, and spelling. Concurrent enrollment in ESL 342, ESL 344, and ESL 340L are recommended.
Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: K
Open Curriculum: An assessment test is required prior to first day of class
CAN: None
Advisory Level: Read: None  Write: None  Math: None
Transfer Status: None  Degree Applicable: NAA
CSU GE: None  District GE: None  IGETC: None

ESL-344 - Basic Listening and Speaking 1  Units: 5
This course develops basic listening comprehension and speaking skills and furthers understanding of American culture at a high beginning level.
Lecture Hours: 5  Lab Hours: None  Repeatable: No  Grading: K
Corequisite: ESL 344L
Open Curriculum: An assessment test is required prior to first day of class
CAN: None
Advisory Level: Read: None  Write: None  Math: None
Transfer Status: None  Degree Applicable: NAA
CSU GE: None  District GE: None  IGETC: None

ESL-344L - ESL Skills Development Lab  Units: 0.5
The content of this lab facilitates acquisition of listening and speaking skills for successful completion of ESL 344. It is designed to supplement classroom instruction by providing learning materials, interactive software, conversation and pronunciation workshops.
Lecture Hours: 0  Lab Hours: 1.5  Repeatable: No  Grading: K
Corequisite: ESL 344
Recommended: Some basic knowledge of or exposure to English.
CAN: None
Advisory Level: Read: None  Write: None  Math: None
Transfer Status: None  Degree Applicable: NAA
CSU GE: None  District GE: None  IGETC: None

ENVIR-010 - Environmental Science  Units: 4
This is an interdisciplinary course that examines the future prospects of human civilization and the environment. Emphasis is placed on understanding the foundations for a sustainable future. Environmental issues facing humankind are discussed: population, resources, and pollution. Field trips are required.
Lecture Hours: 3  Lab Hours: 3  Repeatable: No  Grading: L
CAN: None
Advisory Level: Read: 3  Write: 3  Math: 2
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: B1,B2,B3  District GE: B1, B2  IGETC: 5A,5B

ETH-026 - Vietnamese Women in the U.S.  Units: 3
This interdisciplinary course critically explores the phenomena of gender, race and ethnicity in the history of the United States, specifically focusing upon the Vietnamese American experience. Beginning with historical origins of Vietnamese identity, the course moves forward to consider those social, political, and economic systems, processes, and key events which have yielded important consequences for gender stratification among Vietnamese American women.
Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: L
CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: D3, D4  District GE: D,ES  IGETC: 4C, 4D
**Facilities Maintenance Technology**

**FMT-100 - Introduction to Facilities Operations**
Units: 2

This course introduces the student to industrial maintenance and operations, and OSHA approved industrial safety procedures and practices. Lab is used to show and demonstrate the use of basic tools and specialized equipment for use in lubrication and maintenance of facilities equipment. Examines the interdependency of related systems.

- **Lecture Hours**: 2
- **Lab Hours**: 1
- **Repeatable**: No
- **Grading**: L

**Advisory Level**: Read: 2 Write: 2 Math: None

**Transfer Status**: CSU/UC Degree Applicable: AS

**CSU GE**: None

**IGETC**: None

**FMT-104 - Electrical Concepts for Facilities Maintenance Technicians**
Units: 2

This course is an introduction to the fundamentals of electricity as commonly used in large buildings; single phase and three phase generation, electrical distribution, single phase motors, three phase motors, three phase motor starters, electrical efficiency, and power factor correction. Overview of electrical usage including air conditioning and ventilation equipment are also covered.

- **Lecture Hours**: 2
- **Lab Hours**: 1
- **Repeatable**: No
- **Grading**: L

**Prerequisite**: AIRC 121 or AIRC 122 or AIRC 121 and FMT 100 with C or better

**CAN**: None

**Advisory Level**: Read: 3 Write: 3 Math: None

**Transfer Status**: CSU Degree Applicable: AA/AS

**CSU GE**: None

**IGETC**: None

**FMT-105 - Introduction to Industrial Electronics and Controls**
Units: 2.5

This course examines the most common electronic control devices used in industry. The course is intended for students in the Facilities Maintenance Technician and Air Conditioning Programs.

- **Lecture Hours**: 2
- **Lab Hours**: 2
- **Repeatable**: No
- **Grading**: L

**Prerequisite**: ELECT 050

**CAN**: None

**Advisory Level**: Read: 3 Write: 3 Math: None

**Transfer Status**: CSU Degree Applicable: AA/AS

**CSU GE**: None

**IGETC**: None

**FMT-120 - Low and High Pressure Boilers**
Units: 3

The student will learn to design, install, and maintain large heating systems used in commercial, institutional and industrial applications. Types of equipment include hot water, low-pressure and high-pressure steam boilers, auxiliary, safety and flame safeguard controls, steam traps, condensate return, and water treatment systems. Emphasis will be on safe and efficient operation of boilers and related central plant machinery and equipment.

- **Lecture Hours**: 3
- **Lab Hours**: 1
- **Repeatable**: No
- **Grading**: L

**Credit by Exam**: Yes

**CAN**: None

**Advisory Level**: Read: 3 Write: 3 Math: 1

**Transfer Status**: CSU Degree Applicable: AA/AS

**CSU GE**: None

**IGETC**: None

**FMT-122 - Introduction to Programmable Logic Controllers**
Units: 4

This introductory course includes principles of operation for programmable logic controllers (PLCs). Control applications will be applied using PLCs in a systematic approach involving problem analysis, ladder diagrams, selection of PLC input and output modules, programming logic functions, and testing. Laboratory will focus on implementation of simple applications.

- **Lecture Hours**: 3
- **Lab Hours**: 3
- **Repeatable**: No
- **Grading**: L

**Credit by Exam**: Yes

**Prerequisite**: AIRC 142 or ELECT 065 or (FMT 100, 104 and 105); all with C or better

**Recommended**: It is helpful to have experience using a PC and taken CIS 41 or CT 77.

**CAN**: None

**Advisory Level**: Read: 3 Write: 3 Math: None

**Transfer Status**: CSU Degree Applicable: AA/AS

**CSU GE**: None

**IGETC**: None

**FCS-019 - Nutrition**
Units: 3

This is a course in the basic principles of nutrition including recommended nutrient intake, optimum dietary health across the life span, the relationship of disease and diet and how the body uses nutrients. Food fads and diet fallacies will be examined.

- **Lecture Hours**: 3
- **Lab Hours**: None
- **Repeatable**: No
- **Grading**: O

**CAN**: FCS 2

**Advisory Level**: Read: 2 Write: 2 Math: None

**Transfer Status**: CSU/UC Degree Applicable: AA/AS

**CSU GE**: E1

**District GE**: E1

**IGETC**: None

**FCS-070 - Child Development**
Units: 3

Child Development is the study of the child from prenatal life through adolescence. The physical, social, intellectual, and emotional aspects of development are explored. This course is required for ECE majors and recommended for nursing and psychology majors, and anyone wanting to understand the development of children. Transferable: Equivalent to C.D. 60 at SJSU.

- **Lecture Hours**: 3
- **Lab Hours**: None
- **Repeatable**: No
- **Grading**: O

**CAN**: FCS 14

**Advisory Level**: Read: 2 Write: 2 Math: None

**Transfer Status**: CSU Degree Applicable: AA/AS

**CSU GE**: D9, E1

**District GE**: D,E1

**IGETC**: None
**Family and Consumer Studies**

**FCS-072 - Parent Child Relationships**

Units: 3

This course examines the way in which the changing roles of males and females, changing family structures, and complexities of modern living are examined as to how these influence parenting. Parenting concerns for various stages of childhood, discipline, building self esteem, talking and listening skills, and dealing with problem situations are included in this course recommended for ECE, psychology and other students wanting to know more about parenting.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: O

CAN: None

Advisory Level: Read: 2 Write: 2 Math: None

Transfer Status: CSU Degree Applicable: AA/AS

CSU GE: None District GE: None

**FREN-001A - Elementary French-First Semester**

Units: 5

This is an introductory course in speaking, reading, writing and comprehending French. Topics for conversation are everyday life situations and issues in the French-speaking world. Students will learn the fundamentals of French pronunciation and structure. Students will also study aspects of the diverse cultures of France and other French-speaking countries. Not recommended for native speakers of French. Concurrent enrollment in French 001L or French 200 is required. This course satisfies both foreign language requirements and GE requirements. See your counselor for limitations.

Lecture Hours: 5 Lab Hours: None Repeatable: No Grading: O

Corequisite: FREN 200 or FREN 001L

CAN: FREN SEQ A = FREN 1A + 1B

Advisory Level: Read: 2 Write: 2 Math: None

Transfer Status: CSU/UC Degree Applicable: AA/AS

CSU GE: C2 District GE: C2 IGETC: 6A

**FREN-001B - Elementary French-Second Semester**

Units: 5

This is the second semester introductory course in speaking, reading, writing and comprehending French. Topics for conversation are everyday life situations and issues in the French-speaking world. Students will learn the fundamentals of French pronunciation and structure. Students will also study aspects of the diverse cultures of France and other French-speaking countries. Not recommended for native speakers of French. Concurrent enrollment in French 1L or French 200 is required. This course satisfies both foreign language requirements and GE requirements. See your counselor for limitations.

Lecture Hours: 5 Lab Hours: None Repeatable: No Grading: O

Prerequisite: FREN 001A or FREN 016

Corequisite: FREN 200 or FREN 001L

CAN: FREN 4; FREN SEQ A = FREN 1B + 1A

Advisory Level: Read: 2 Write: 2 Math: None

Transfer Status: CSU/UC Degree Applicable: AA/AS

CSU GE: C2 District GE: C2 IGETC: None

**FREN-001L - Foreign Language Lab**

Units: 0.5

The Foreign Language Laboratory supplements classroom instruction for French 001A and French 001B. The students will use audio cassette tapes, video tapes, and computer programs in conjunction with in-class assignments. This course must be taken concurrently with French 001A or French 001B. Repeatable to a maximum of 1 unit.

Lecture Hours: None Lab Hours: 1.5 Repeatable: 1 Grading: K

Corequisite: FREN 200

CAN: None

Advisory Level: Read: 2 Write: 2 Math: None

Transfer Status: CSU/UC Degree Applicable: AA/AS

CSU GE: C2 District GE: C2 IGETC: 6A

**FREN-002A - Intermediate French**

Units: 5

An intermediate course that reviews basic grammar structures and an introduction to literature and culture with numerous readings of progressive difficulty and representative of French and Francophone literature with respect to periods, genres, authors, and geographical origins, allowing for both discussions and the writing of essays about related topics. Emphasis is placed on extending vocabulary, sharpening understanding of texts and acquiring tools for writing compositions in French.

Lecture Hours: 5 Lab Hours: None Repeatable: No Grading: O

Prerequisite: FREN 001B

CAN: FREN 8; FREN SEQ B = FREN 2A + 2B

Advisory Level: Read: 2 Write: 2 Math: None

Transfer Status: CSU/UC Degree Applicable: AA/AS

CSU GE: C2 District GE: C2 IGETC: 3B

**FREN-002B - Intermediate French**

Units: 5

This is the fourth and final semester of a two year sequence. Students who have successfully completed French 2A may continue in French 2B in order to develop further their knowledge and skills in conversation, composition, structure of the French language, French and Francophone literature, and cultural understanding.

Lecture Hours: 5 Lab Hours: None Repeatable: No Grading: O

Prerequisite: FREN 002A

CAN: FREN 10; FREN SEQ B = FREN 2A + 2B

Advisory Level: Read: 2 Write: 2 Math: None

Transfer Status: CSU/UC Degree Applicable: AA/AS

CSU GE: C2 District GE: C2 IGETC: 3B

**FREN-002L - Foreign Language Lab**

Units: 0.5

The Foreign Language Laboratory supplements classroom instruction for French 002A and French 002B. The students will use audio cassette tapes, video tapes, and computer programs in conjunction with in-class assignments. This course must be taken concurrently with French 002A or French 002B. Repeatable to a maximum of 1 unit.

Lecture Hours: None Lab Hours: 1.5 Repeatable: 1 Grading: K

Corequisite: FREN 200 or FREN 002B

CAN: None

Advisory Level: Read: 2 Write: 2 Math: None

Transfer Status: CSU/UC Degree Applicable: AA/AS

CSU GE: None District GE: None IGETC: None

**FREN-015 - Elementary French-First Semester-First Half**

Units: 3

Equivalent to the first half of FREN 001A. This is the first semester introductory course in speaking, reading, writing and comprehending French. Topics for conversation are everyday life situations and issues in the French-speaking world. Students will learn the fundamentals of French pronunciation and structure. Students will also study aspects of the diverse cultures of France and other French-speaking countries. Not recommended for native speakers of French. Concurrent enrollment in French 200 is required.

Lecture Hours: 3 Lab Hours: 0 Repeatable: No Grading: O

Corequisite: FREN 200

CAN: None

Advisory Level: Read: 2 Write: 2 Math: None

Transfer Status: CSU/UC Degree Applicable: AA/AS

CSU GE: C2 District GE: C2 IGETC: 6A
FREN-016 - Elementary French-First Semester-Second Half
This is an introductory course in speaking, reading, writing and comprehending French. Topics for conversation are everyday life situations and issues in the French-speaking world. Students will learn the fundamentals of French pronunciation and structure. Students will also study aspects of the diverse cultures of France and other French-speaking countries. Not recommended for native speakers of French. Concurrent enrollment in French 200 is required.
Lecture Hours: 2  Lab Hours: None  Repeatable: No  Grading: O
Prerequisite: FREN 015 with C or better
Corequisite: FREN 200
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: C2  District GE: C2  IGETC: 6A

FREN-0017 - Elementary French-Second Semester-First Half
This course is designed to develop a basic ability to understand, speak, read, write and comprehend French. Equivalent to the first half of French 001B. Second semester introductory course in speaking, reading, writing and comprehending French. Topics for conversation are everyday life situations and issues in the French-speaking world. Students will learn the fundamentals of French pronunciation and structure. Students will also study aspects of the diverse cultures of France and other French-speaking countries. Not recommended for native speakers of French. Concurrent enrollment in French 200 is required.
Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: O
Prerequisite: FREN 001A or FREN 016, both with C or better
Corequisite: FREN 200
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: C2  District GE: C2  IGETC: 3B

FREN-018 - Elementary French-Second Semester-Second Half
Equivalent to the second half of French 001B. Second semester introductory course in speaking, reading, writing and comprehending French. Topics for conversation are everyday life situations and issues in the French-speaking world. Students will learn the fundamentals of French pronunciation and structure. Students will also study aspects of the diverse cultures of France and other French-speaking countries. Not recommended for native speakers of French. Concurrent enrollment in French 200 is required.
Lecture Hours: 2  Lab Hours: None  Repeatable: No  Grading: O
Prerequisite: FREN 001A or FREN 017, both with C or better
Corequisite: FREN 200
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: C2  District GE: C2  IGETC: 3B

FREN-030 - French Culture Through Films
This course will present an historic view of French films and how they reflect the culture of France and other francophone countries. Films will be shown on campus and subtitled; discussions/lectures will be given in English.
Lecture Hours: 0.5  Lab Hours: 1.5  Repeatable: No  Grading: K
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

FREN-019A - Conversational French
This course is concerned with essentials of French conversation, leading to development of ability to use the French language in everyday situations. It is designed for students without previous experience in the language.
Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: O
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

FREN-019B - Conversational French
This course is concerned with essentials of French conversation, leading to development of ability to use the French language in everyday situations.
Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: O
Prerequisite: FREN 091A
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

FREN-098 - Directed Study
Individual or small groups of students who would benefit from Independent Study under the direction of faculty members in specific or related disciplines may develop individualized learning contracts designed to enhance their individual instructional programs. The students and the faculty member in consultation with the Division Dean will determine appropriate learning objectives and activities as well as the number of units to be earned. Instructions and the Learning Contract forms are available in the Division Office. Repeatable to a maximum of 9 units across all disciplines.
Lecture Hours: None  Lab Hours: 1.5 - 27  Repeatable: 17  Grading: O
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

FREN-200 - French Supervised Skills
This course provides supplemental work for French students to allow them the opportunity to improve expressive and receptive language skills and to allow them more time to work on assigned and individual projects.
Lecture Hours: None  Lab Hours: None  Repeatable: 19  Grading: N
Corequisite: FREN 001A or FREN 018 or FREN 015 or FREN 016 or FREN 101 or FREN 017
CAN: None
Advisory Level: Read: None  Write: None  Math: None
Transfer Status: None  Degree Applicable: NC
CSU GE: None  District GE: None  IGETC: None
**Geography**

**GEOG-010 - Introduction to Physical Geography**

This course is an introduction to physical geography. It covers a variety of topics including atmosphere, weather, climate, water, landforms, soils, and the biosphere. It emphasizes the impact of these processes on civilization. The scientific method is illustrated as related to the discovery of geologic principles. Geologic processes are used as demonstrations of fundamental physical laws.

**GEOG-011 - Introduction to Cultural Geography**

An inquiry into the relationships between human culture and the physical environment. Emphasizes the varieties of human social, economic, and political development in different geographical settings.

**Geology**

**GEOL-010 - Physical Geology**

This course explores the natural processes related to volcanoes, earthquakes, landslides, plate tectonics, mountain building, weathering, erosion, metal ores, and energy resources. The course emphasizes the impact of these processes on civilization. The scientific method is illustrated as related to the discovery of geologic principles. Geologic processes are used as demonstrations of fundamental physical laws. Geology 010 is a general education elective in Natural Science. Students are encouraged to enroll in the companion course, Geology 011.

**GEOL-011 - Earth History**

This is a laboratory course in natural science for general education. The course includes the study of the Earth and life through geologic time. Modern and ancient plants and animals are compared. Students learn to identify fossil organisms and see how life on earth has changed. Students study stratified rocks, maps, and diagrams and learn to interpret them in terms of past events and conditions on earth. Emphasis is placed upon how we unravel the history of the earth. Students are encouraged to enroll in the companion course, Geology 011.

**Glazing**

**GLAZ-136 - Glazing Occupational Work Experience - Parallel Plan**

Occupational Work Experience is designed for students who wish to work or volunteer in a field related to their vocational major. Students are required to provide evidence that they are enrolled in a vocational program (e.g., educational plan or coursework in a vocational subject area). The Parallel Plan is designed for students who wish to take classes and work during the same semester. A maximum of 4 units of Occupational Work Experience credit may be earned during any one semester, to a maximum of 16 units total. Students must be enrolled in at least 7 units including Work Experience units. Courses taken at other accredited colleges or equivalent course work may meet this requirement. Internship/job placement is not guaranteed.

**Corequisite:** 1) Be enrolled during the regular semester in a minimum of 7 units at any accredited college, including Work Experience units or; 2) During a summer session, be enrolled in at least one other class in addition to Work Experience; and 3) Be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.

**CAN:** None

**Advisory Level:** Read: 3 Write: 3 Math: None

**Transfer Status:** CSU Degree Applicable: AA/AS

**CSU GE:** None

**IGETC:** None

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**CSU GE:** B1, BL

**IGETC:** 5A
GLAZ-138 - Glazing Occupational Work Experience - Alternate Plan
Units: 1 - 8

Occupational Work Experience is designed for students who work or volunteer in a field related to their vocational major. Students are required to provide evidence that they are enrolled in a vocational program (e.g., educational plan or coursework in a vocational subject area). The Alternate Plan is designed to allow students attend school one semester and work the next. A maximum of 8 units of Occupational Work Experience credit may be earned during any one semester, to a maximum of 16 units total. Students may only take one (if any) class in addition to work experience. Internship/job placement is not guaranteed.

Lecture Hours: None   Lab Hours: 3 - 24   Repeatable: 15   Grading: O

Corequisite: 1. Need not be enrolled in any other class during the semester besides Work Experience.
2. May be enrolled in at most one other class in addition to Work Experience.
3. Must be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.

CAN: None
Advisory Level: Read: 3   Write: 3   Math: None
Transfer Status: None   Degree Applicable: AAVS
CSU GE: None   District GE: None   IGETC: None

GLAZ-141 - Glazing I Units: 3

Semester one of the course includes labor studies, safe working practices, beginning glass cutting and fabrication, hand tools, power tools, electrical safety for power tools, shop machinery, and glass replacements. Students will work with a variety of hand tools, power tools, and shop machinery common to the glazing industry. Students will receive instruction in glass handling, cutting, and fabrication techniques.

Lecture Hours: 2.5   Lab Hours: 3   Repeatable: No   Grading: L

Open Curriculum: No prerequisite, corequisite or levels
CAN: None
Advisory Level: Read: None   Write: None   Math: None
Transfer Status: None   Degree Applicable: NAA
CSU GE: None   District GE: None   IGETC: None

GLAZ-142 - Glazing II Units: 3

Semester two of the course includes topics on labor studies, solvents and hazardous glazing materials, man lifting devices, rigging hoisting, ladder use and safety, scaffolding, swing staging, transits and leveling devices, mirror layout and measurements, mirror mounting methods, the architectural scale and sketching.

Lecture Hours: 2.5   Lab Hours: 3   Repeatable: No   Grading: L

Open Curriculum: No prerequisite, corequisite or levels
CAN: None
Advisory Level: Read: None   Write: None   Math: None
Transfer Status: None   Degree Applicable: NAA
CSU GE: None   District GE: None   IGETC: None

GLAZ-143 - Glazing IIIA Units: 3

Semester three of the course includes topics on labor studies, introduction to storefronts, storefront one, storefront two, sketching and introduction to architectural blueprints.

Lecture Hours: 2.5   Lab Hours: 3   Repeatable: No   Grading: L

Open Curriculum: No prerequisite, corequisite or levels
CAN: None
Advisory Level: Read: None   Write: None   Math: None
Transfer Status: None   Degree Applicable: NAA
CSU GE: None   District GE: None   IGETC: None

GLAZ-144 - Glazing IIIB Units: 3

Semester four of the course covers basic blueprint reading of architectural drawings, specifications, and shop drawings, and labor studies.

Lecture Hours: 2.5   Lab Hours: 3   Repeatable: No   Grading: L

Open Curriculum: No prerequisite, corequisite or levels
CAN: None
Advisory Level: Read: None   Write: None   Math: None
Transfer Status: None   Degree Applicable: NAA
CSU GE: None   District GE: None   IGETC: None

GLAZ-145 - Glazing IIIA Units: 3

Semester five of the course includes an introduction to curtainwalls and curtainwall layout.

Lecture Hours: 2.5   Lab Hours: 3   Repeatable: No   Grading: L

Open Curriculum: No prerequisite, corequisite or levels
CAN: None
Advisory Level: Read: None   Write: None   Math: None
Transfer Status: None   Degree Applicable: NAA
CSU GE: None   District GE: None   IGETC: None

GLAZ-146 - Glazing IIIIB Units: 3

Semester six includes an introduction to sealants, sealant joint design and substrate preparation, sealant application testing and failure, structural glazing, open/closed cell tapes, gaskets, spacers and setting blocks.

Lecture Hours: 2.5   Lab Hours: 3   Repeatable: No   Grading: L

Open Curriculum: No prerequisite, corequisite or levels
CAN: None
Advisory Level: Read: None   Write: None   Math: None
Transfer Status: None   Degree Applicable: NAA
CSU GE: None   District GE: None   IGETC: None

GUIDE-070 - Self Assessment Units: 1

Students will complete an assessment of themselves through the taking of tests and surveys. A battery of tests will be administered, interpreted, and analyzed for the purpose of helping students to assess values, abilities, personalities and interests toward the setting of realistic personal and life goals and objectives.

Lecture Hours: 1   Lab Hours: None   Repeatable: No   Grading: O

CAN: None
Advisory Level: Read: 2   Write: 2   Math: None
Transfer Status: None   Degree Applicable: AS
CSU GE: None   District GE: None   IGETC: None
**GUIDE-071 - Employment Preparation Skills**  
Units: 1  
This course is an introduction to required employment skills. Time, money, and personnel management skills will be studied. Teamwork, leadership and interpersonal communication skills along with problem solving and decision making skills will also be studied and practiced. The expected level of technological knowledge in different workplaces will be addressed.  
Lecture Hours: 1  
Lab Hours: None  
Repeatable: No  
Grading: O  
CAN: None  
Advisory Level: Read: 2  
Write: 2  
Math: None  
Transfer Status: None  
Degree Applicable: AS  
CSU GE: None  
District GE: None  
IGETC: None

**GUIDE-072 - Marketing Your Job Skills**  
Units: 1  
This sixteen-hour intensive course focuses on the resources, skills, and tools to successfully enter today’s job market. Students will prepare a job search portfolio, sharpen interview skills, and learn to use a wide range of resources in their job search.  
Lecture Hours: 1  
Lab Hours: None  
Repeatable: No  
Grading: O  
CAN: None  
Advisory Level: Read: 2  
Write: 2  
Math: None  
Transfer Status: None  
Degree Applicable: AS  
CSU GE: None  
District GE: None  
IGETC: None

**GUIDE-077 - Introduction to the World of Work**  
Units: 1  
This course provides a general orientation to SJCC with an emphasis on various occupational programs. Tours of each occupational area will be offered, to view classes and students in action.  
Lecture Hours: 1  
Lab Hours: None  
Repeatable: No  
Grading: O  
Open Curriculum: No prerequisite, corequisite or levels  
CAN: None  
Advisory Level: Read: None  
Write: None  
Math: None  
Transfer Status: None  
Degree Applicable: NAA  
CSU GE: None  
District GE: None  
IGETC: None

**GUIDE-078 - World of Work Group Seminar**  
Units: 1  
The Group Seminar class is intended to give continuous support to those enrolled in an occupational area. Areas of success will include small group discussion and problem solving along with in class discussion regarding the various occupational areas which students have chosen to participate in. Guest speakers will share information on campus resources and student support services.  
Lecture Hours: 1  
Lab Hours: None  
Repeatable: No  
Grading: O  
Open Curriculum: No prerequisite, corequisite or levels  
CAN: None  
Advisory Level: Read: None  
Write: None  
Math: None  
Transfer Status: None  
Degree Applicable: NAA  
CSU GE: None  
District GE: None  
IGETC: None

**GUIDE-085 - Blueprint for Success**  
Units: 1  
This course is designed to assist students in enhancing their self-awareness, self-acceptance and self-confidence, through the exploration and clarification of their belief system, values, purpose, personality type, and their strengths and weaknesses. Increase personal effectiveness in school, business and life by examining and dismantling psychological, and societal barriers, and obstacles to success. Develop mental strategies and techniques such as time and stress management, goal setting, and visualization to enhance performance.  
Lecture Hours: 1  
Lab Hours: None  
Repeatable: No  
Grading: L  
CAN: None  
Advisory Level: Read: 2  
Write: 2  
Math: None  
Transfer Status: None  
Degree Applicable: AS  
CSU GE: None  
District GE: None  
IGETC: None

**GUIDE-090 - Student Leadership**  
Units: 1  
Guidance 90 provides instruction in student leadership and prepares students for participation in college activities. Fall semester course work especially emphasizes ASC mission, teamwork, and conducting effective meetings while spring course work focuses upon budget preparation and planning and conducting activities. Mandatory for elected and appointed Associated Student Council members. Recommended for club representatives.  
Lecture Hours: 1  
Lab Hours: None  
Repeatable: No  
Grading: O  
CAN: None  
Advisory Level: Read: 2  
Write: 2  
Math: None  
Transfer Status: CSU  
Degree Applicable: AA/AS  
CSU GE: None  
District GE: None  
IGETC: None

**GUIDE-092 - Career Seminar**  
Units: 0.5 - 1  
A presentation of career opportunities related to designated majors. A coordinated effort of counseling, academic departments on careers, expanding work areas and employment opportunities. The major related career areas for each semester will be announced in the schedule of classes. Open to all students. Repeatable to a maximum of 1 unit.  
Lecture Hours: 0.5 - 1  
Lab Hours: None  
Repeatable: 1  
Grading: O  
Open Curriculum: No prerequisite, corequisite or levels  
CAN: None  
Advisory Level: Read: None  
Write: None  
Math: None  
Transfer Status: None  
Degree Applicable: NAA  
CSU GE: None  
District GE: None  
IGETC: None

**GUIDE-095 - College Study Techniques**  
Units: 1 - 3  
One hour a week per unit plus individualized instruction by arrangement. Upon completion of this course, students will be able to apply study skills to college level coursework. Included are the following: goal setting, time scheduling, surveying textbooks, taking notes from reading assignments and from lectures, vocabulary building, increasing memory skills, preparing for and taking tests, using the library and increasing motivation and concentration.  
Lecture Hours: 2  
Lab Hours: None  
Repeatable: 2  
Grading: O  
CAN: None  
Advisory Level: Read: 2  
Write: 2  
Math: None  
Transfer Status: CSU  
Degree Applicable: AA/AS  
CSU GE: None  
District GE: None  
IGETC: None
GUIDE-096 - Career and Life Planning Units: 0.5 - 3
This class will help students understand career development theory; identify personal characteristics, interest, abilities, goals, values, and life-style preferences; and relate those personal characteristics to the world of work. The student will be made aware of career trends, employment outlook, and career opportunities. The student will also learn about career and life planning as a process and how to explore and investigate occupations, as well as to learn techniques to assist in making realistic choices. Repeatable to a maximum of 3 units.
Lecture Hours: 0.5 Lab Hours: 0.0 Repeatable: 5 Grading: O
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None
GUIDE-097 - Orientation to College Units: 0.5 - 1
The focus of this course is to ease students' transition to college by developing their skills and providing them information necessary for college success. The course includes goal setting and information about college facilities, policies, programs, course offerings and services. In addition, an overview of general education requirements for transfer and graduation as well as an introduction to the registration process and basic education planning are presented. Repeatable to a maximum of 1 unit.
Lecture Hours: 0.5 Lab Hours: 0.0 Repeatable: 1 Grading: O
Open Curriculum: No prerequisite, corequisite or levels
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: None Degree Applicable: NAA
CSU GE: None District GE: None IGETC: None
GUIDE-098 - Directed Study Units: 0.5 - 3
Individual or small groups of students who would benefit from Independent Study under the direction of faculty members in specific or related disciplines may develop individualized learning contracts designed to enhance their individual instructional programs. The students and the faculty member in consultation with the Division Dean will determine appropriate learning objectives and activities as well as the number of units to be earned. Instructions and the Learning Contract forms are available in the Division office. Repeatable to a maximum of 9 units across all disciplines.
Lecture Hours: None Lab Hours: 1.5 - 9 Repeatable: 17 Grading: O
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None
GUIDE-100 - Diagnostic Learning Units: 0.5
This course is designed for the student whose learning style has impeded academic performance in traditional classroom settings. The primary objectives of the course are to inform students of services and accommodations provided through the Disabled Students Program for those who have a specific learning disability.
Lecture Hours: 0.5 Lab Hours: 0.0 Repeatable: No Grading: K
Open Curriculum: No prerequisite, corequisite or levels
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: CSU Degree Applicable: NAA
CSU GE: None District GE: None IGETC: None
GUIDE-102 - Diagnostic Learning - Reading Strategies Units: 0.5 - 4
An intensive individualized course for students who have difficulty reading due to a weakness in one or more of the learning modalities involved in the reading process. Individual objectives as determined in Diagnostic Learning will involve skill areas such as left-to-right visual tracking, decoding, sight vocabulary, reading rate, and comprehension skills. Curriculum materials appropriate to the student's needs will be used in achieving course objectives. Class size is limited and enrollment restricted to those students who qualify under Title V. Repeatable to a maximum of 4 units.
Lecture Hours: 0.5 Lab Hours: 1.5 Repeatable: 7 Grading: K
Prerequisite: GUIDE 100
Corequisite: Or concurrent enrollment in GUIDE 100
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: None Degree Applicable: NAA
CSU GE: None District GE: None IGETC: None
GUIDE-104 - Diagnostic Learning - Writing Strategies Units: 1
This is an individualized course designed for students who can work independently with specific learning disabilities and whose learning problems have impeded the mastery of writing skills such as organization, structure, fluidity, punctuation and grammar. Class size is limited. A student may earn a maximum of 4 units.
Lecture Hours: None Lab Hours: 3 Repeatable: 3 Grading: K
Open Curriculum: No prerequisite, corequisite or levels
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: None Degree Applicable: NAA
CSU GE: None District GE: None IGETC: None
GUIDE-106 - Diagnostic Learning - Spelling Strategies Units: 0.5 - 4
An intensive individualized course offering learning strategies and instructional intervention for students who have difficulty spelling despite traditional methods of instruction. This difficulty is usually due to a weakness in one or more of the learning processes which affect the ability to spell. Class size is limited and enrollment restricted to those students who qualify under Title V. Repeatable to a maximum of 4 units.
Lecture Hours: 0.5 Lab Hours: 1.5 Repeatable: 7 Grading: K
Prerequisite: GUIDE 100
Corequisite: Or concurrent enrollment in GUIDE 100
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: None Degree Applicable: NAA
CSU GE: None District GE: None IGETC: None
GUIDE-108 - Diagnostic Learning - Mathematical Strategies Units: 0.5 - 4
An intensive individualized course offering learning strategies and instructional intervention for students who have difficulty mastering arithmetic and algebra skills due to weakness in one or more of the learning processes involved in the acquisition of math skills. Class size is limited and enrollment restricted to those students who qualify. Repeatable to a maximum of 4 units.
Lecture Hours: 0.5 Lab Hours: 1.5 Repeatable: 7 Grading: K
Prerequisite: GUIDE 100
Corequisite: Or concurrent enrollment in GUIDE 100
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: None Degree Applicable: NAA
CSU GE: None District GE: None IGETC: None
GUIDE-112 - Group Experience Units: 0.5 - 3
This class will assist students in increasing their awareness of others as well as themselves - their potentials, strengths and weaknesses. It is designed to help them function more effectively and better deal with problems and decisions confronting them. Both encounter and discussion techniques will be used. May be repeated for credit 3 times.
Lecture Hours: None Lab Hours: 1.5 Repeatable: 5 Grading: K
Open Curriculum: No prerequisite, corequisite or levels
Advisory Level: None
Transfer Status: None Degree Applicable: NAA
CSU GE: None District GE: None IGETC: None

GUIDE-115 - Computer Assisted Instruction Units: 0.5
This is a self-paced course designed for students who are eligible for Disabled Students Program services to improve basic academic skill areas and/or cognitive processes and logical reasoning skills through the use of appropriate computer equipment and software. The type of equipment and software utilized will be individually adapted to the student's disability and major or vocational goal.
Lecture Hours: None Lab Hours: 1.5 Repeatable: 7 Grading: K
Open Curriculum: No prerequisite, corequisite or levels
Advisory Level: None
Transfer Status: None Degree Applicable: NAA
CSU GE: None District GE: None IGETC: None

GUIDE-117 - College Study Techniques for Students with Disabilities
Upon completion of this course, students will be able to apply study skills to college level coursework. Included are the following: goal setting, time scheduling, taking notes from lectures and reading assignments, increasing memory skills, preparing for taking tests, using the library and increasing motivation and concentration.
Lecture Hours: 1 Lab Hours: None Repeatable: No Grading: O
Open Curriculum: No prerequisite, corequisite or levels
Advisory Level: None
Transfer Status: None Degree Applicable: NAA
CSU GE: None District GE: None IGETC: None

GUIDE-119 - Orientation to College for Disabled Student Units: 1
This course will focus on the Disabled Student's transition to college by developing skills and providing information necessary for college success. The course includes information about college facilities, policies, programs, course offerings and services including special needs, accommodations, technological assistive devices, and academic adjustments. In addition, an overview of general education requirements for graduation, vocational and transfer majors as well as an introduction to the registration process and basic education planning are presented. Each student will develop an Individualized Education Plan and establish personal goals for college education.
Lecture Hours: 1 Lab Hours: None Repeatable: No Grading: O
Open Curriculum: No prerequisite, corequisite or levels
Advisory Level: None
Transfer Status: None Degree Applicable: NAA
CSU GE: None District GE: None IGETC: None

GUIDE-130 - College Success Units: 3
This course will introduce students to the academic skills necessary for becoming a successful college student. Students will develop a sense of belonging to the college through a structured sequence of experiences which will orient them to college, develop academic skills and help to identify future career options. Time and stress management, goal setting, learning styles and study techniques will be taught to improve student performance in majors, increase their transfer of knowledge and skills between disciplines while also improving student retention.
Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: O
Advisory Level: None
Transfer Status: None Degree Applicable: NAA
CSU GE: None District GE: None IGETC: None

GUIDE-150 - Adaptive Word Processing Units: 2
This is an introductory word processing class that addresses the needs of students with various disabilities who may require extensive training and/or the use of adaptive computer hardware and/or software in order to successfully use computers.
Lecture Hours: 1.5 Lab Hours: 1.5 Repeatable: 2 Grading: O
Recommended: Knowledge of the keyboard.
Advisory Level: None
Transfer Status: None Degree Applicable: NAA
CSU GE: None District GE: None IGETC: None

GUIDE-190 - Student Leadership Lab Units: 1 - 3
This course provides guidance for student participation in college activities. Nontransferable college credit up to three units per semester is based upon completion of projects and/or participation in activities determined by individual contract. This course may be taken in conjunction with or independent of Guidance 090. (For open curriculum students, it replaces Guidance 090.) Repeatable to a maximum of 9 units.
Lecture Hours: None Lab Hours: 3 Repeatable: 2 Grading: K
Open Curriculum: No prerequisite, corequisite or levels
Advisory Level: None
Transfer Status: None Degree Applicable: AS
CSU GE: None District GE: None IGETC: None
**Health Education**

**HED-011 - Dynamic Health Concepts**  Units: 3

This course surveys current health issues. Topics include the latest information on drug abuse, nutrition, communicable diseases, human sexuality, chronic and genetic diseases. Primary emphasis is directed to the individual's total emotional, intellectual, and social health from birth to death. Students are empowered to make intelligent, analytical decisions and progress towards positive social, emotional, and physical well-being. This course meets the Health Education requirement for California Teaching Credentials.

Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: L

CAN: None

Advisory Level:  Read: 3  Write: 3  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: E1  District GE: E1  IGETC: None

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**HSCI-001 - Introduction to Health Science**  Units: 2

An introduction to medical terminology, anatomy and physiology. The student will analyze, pronounce, and spell medical terminologies. Body systems will be investigated through the further study of pathology, laboratory tests, diagnostic procedures and treatment procedures.

Lecture Hours: 2  Lab Hours: 0  Repeatable: No  Grading: L

CAN: None

Advisory Level:  Read: 3  Write: 3  Math: None
Transfer Status: None  Degree Applicable: NAA
CSU GE: None  District GE: None  IGETC: None

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**HSCI-010 - Prehospital Emergency Care**  Units: 5.5

Students will acquire the theory and skills necessary to earn an EMT-1 certificate of completion. National Registry skills testing is included in the course. Following the course completion, a National Registry written exam must be taken through a county EMS agency to become state certified. This course meets state regulations for EMT-1 training and is approved by Santa Clara County Emergency Medical Services as preparation for EMT-1 certification.

Lecture Hours: 4  Lab Hours: 4.5  Repeatable: 3  Grading: L

Prerequisite: American Heart Association Healthcare provider CPR card current through semester of enrollment.

Recommended: HSCI 001 or equivalent knowledge in anatomy, physiology and medical terminology.

CAN: None

Advisory Level:  Read: 3  Write: 3  Math: None
Transfer Status: None  Degree Applicable: AS
CSU GE: None  District GE: None  IGETC: None

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**HSCI-012 - EMT-1 Refresher**  Units: 0.5

EMT-1 recertification course approved by Santa Clara County Emergency Medical Services. A current California EMT-1 certification with a lapse of less than 24 months is required. Additional Continuing Education Units (CEUs) may be required to meet certification requirements when the EMT-1 is lapsed more than 6 months.

Lecture Hours: 0  Lab Hours: 1.5  Repeatable: 3  Grading: K

Prerequisite: Current EMT-1 California certification with a lapse of no more than 24 months and Current American Heart Association Healthcare provider CPR card.

CAN: None

Advisory Level:  Read: 3  Write: 3  Math: 1
Transfer Status: None  Degree Applicable: NAA
CSU GE: None  District GE: None  IGETC: None

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**HSCI-020 - Clinical Technician I**  Units: 3

Clinical Technician I prepares a student to become a multitask technician in the health care field. Skill competencies include: anatomy, physiology, medical terminology, phlebotomy, specimen collection and lab testing, preparing instrument packs for sterilization, assisting in minor surgery, obtaining medical histories, assisting with physical examinations, CPR, career ladder, and resume writing for Clinical Technician job opportunities.

Lecture Hours: 2  Lab Hours: 3  Repeatable: No  Grading: L

Prerequisite: HSCI 001 with C or better

CAN: None

Advisory Level:  Read: 3  Write: 3  Math: None
Transfer Status: None  Degree Applicable: NAA
CSU GE: None  District GE: None  IGETC: None

**HSCI-021 - Clinical Technician II**  Units: 3

Weekly reading assignments and completion of critical thinking workbook assignments, weekly quizzes, develop a health promotion teaching plan, develop aseptic techniques/ infection control policy for the Medical Office Procedure Book

Lecture Hours: 2  Lab Hours: 3  Repeatable: No  Grading: L

Prerequisite: HSCI 001 with C or better

CAN: None

Advisory Level:  Read: 3  Write: 3  Math: None
Transfer Status: None  Degree Applicable: NAA
CSU GE: None  District GE: None  IGETC: None

**HSCI-025 - Fundamentals of Polysomnographic Technology I**  Units: 3

Polysomnographic Technology I is the first level of sleep medicine theory. Topics covered include: scope of practice, patient preparation, normal sleep architecture, physiology of hypoxic and hypercapnic mechanisms, and instrumentation. Clinical rotations and study guides for national certification will be provided.

Lecture Hours: 2  Lab Hours: 3  Repeatable: No  Grading: L

Prerequisite: HSCI 001 with C or better

CAN: None

Advisory Level:  Read: 3  Write: 3  Math: None
Transfer Status: None  Degree Applicable: NAA
CSU GE: None  District GE: None  IGETC: None

**HSCI-113 - Prehospital Emergency Care**  Units: 5

This comprehensive course covers the theory and skills necessary to earn a certificate of completion in EMT-1. The course meets state regulations for EMT training and is approved by Santa Clara County Emergency Medical Services as preparation for EMT-1 certification.

Lecture Hours: 4  Lab Hours: 3  Repeatable: No  Grading: L

Prerequisite: HSCI 121, Intro to Prehospital Emergency Care, within 9 months of EMT class start

Corequisite: HSCI 200

CAN: None

Advisory Level:  Read: 2  Write: 2  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSCI-114</td>
<td>Wilderness Medical Care Technician</td>
<td>5</td>
<td>The Wilderness Medical Care Technician Certification course prepares rescue personnel to anticipate, prevent, assess and treat victims in remote or isolated areas. Rescuers might include: Physicians, Nurses, Paramedics, EMTs, River Guides, Park Rangers, Loggers, Construction Workers, and Maintenance personnel. Improvised treatment and extrication will be stressed. This course requires mandatory field trips.</td>
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<td>Lecture Hours: 4  Lab Hours: 3  Repeatable: No  Grading: L</td>
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<td>Recommended: EMT certification, CPR, first aid courses, college level anatomy and physiology classes</td>
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<td>CAN: None</td>
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<td>Advisory Level: Read: 2  Write: 2  Math: None</td>
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<td>Transfer Status: CSU  Degree Applicable: AA/AS</td>
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<td>CSU GE: None  District GE: None  IGETC: None</td>
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<tr>
<td>HSCI-115</td>
<td>EMT-1 Refresher</td>
<td>1-2</td>
<td>Only paramedics or EMT-1's certified in California may attend this course. The course is mandated to update paramedics and EMT-1’s who are seeking certification in the state of California as EMT-1’s.</td>
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<td>Lecture Hours: 1  Lab Hours: 0.5  Repeatable: 1  Grading: L</td>
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<td>Prerequisite: Registered Nurse, Vocational Nurse, Physician's Assistant, Paramedic EMT 1, EMT 2. Nurses must be currently licensed in the State of California. Paramedics must be licensed in the State of California.</td>
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<td>CAN: None</td>
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<td>Advisory Level: Read: 2  Write: 2  Math: None</td>
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<tr>
<td>HSCI-121</td>
<td>Introduction to Prehospital Emergency Care</td>
<td>0.5</td>
<td>This basic introductory course is required for entry into Health Science 113, Prehospital Emergency Care. A CPR certification card will be issued upon successful completion of course requirements.</td>
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<td>Lecture Hours: 0.25  Lab Hours: 0.75  Repeatable: No  Grading: K</td>
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<td>Credit by Exam: Yes</td>
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<td>Transfer Status: None  Degree Applicable: NAA</td>
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<td>CSU GE: None  District GE: None  IGETC: None</td>
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<tr>
<td>HSCI-122</td>
<td>Medical Terminology</td>
<td>1</td>
<td>This course covers medical terminology, basic word structure, suffixes and prefixes as well as body systems, organization of the body and diagnostic test and procedures. Case reports, medical specialists, will be introduced.</td>
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<td>Lecture Hours: 1  Lab Hours: None  Repeatable: No  Grading: L</td>
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<td>Prerequisite: HSCI 113 or DENT 162, both with C or better, or proof of 2 years health related employment</td>
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<td>Advisory Level: Read: 2  Write: 2  Math: None</td>
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<tr>
<td>HSCI-123</td>
<td>Fundamental Clinical Procedures</td>
<td>3</td>
<td>This course introduces the EMT/medical student to fundamental clinic and hospital procedures. Topics include: legal and safety issues of clinic and hospital employment, asepsis, legal documentation, procedures, physical agents to promote healing.</td>
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<td>Lecture Hours: 2  Lab Hours: 3  Repeatable: No  Grading: L</td>
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<td>Prerequisite: HSCI 113 or DENT 162, both with C or better, or proof of 2 years health related employment</td>
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<td>HSCI-124</td>
<td>Venipuncture and Clinical Lab Procedures</td>
<td>3</td>
<td>This course introduces students to venipuncture theory and lab skills. Topics include: the clinical lab setting, asepsis in the lab, patient preparation for lab tests, specimen collection including finger sticks, urinalysis, completion of lab slips, and specimen tracking. Universal precautions will be stressed. Students will be obligated to both receive and administer the procedures.</td>
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<td>Lecture Hours: 2  Lab Hours: 3  Repeatable: No  Grading: L</td>
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<td>Prerequisite: HSCI 113 or DENT 164, both with C or better, or proof of 2 years health related employment</td>
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<td>HSCI-125</td>
<td>Minor Surgery and Surgical Asepsis</td>
<td>3</td>
<td>Students will study all aspects of surgical asepsis. The surgical team member's roles will be presented. Instrument identification, cleaning, autoclaving, and sterile pack preparation will be practiced in the lab. Principles of microbiology and infection control will be stressed throughout the course. Final skills testing will include: surgical hand scrub, gowning and gloving, surgical skin preparation, setting up and adding to a sterile field, and terminal cleaning of the surgical area.</td>
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<td>Lecture Hours: 2  Lab Hours: 3  Repeatable: No  Grading: L</td>
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<td>Prerequisite: HSCI 113 or DENT 162, both with C or better, or proof of 2 years health related employment</td>
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<td>HSCI-126</td>
<td>Pharmacology, Injections, and ECG Theory</td>
<td>3</td>
<td>This course introduces the EMT/medical student to pharmacology theory and injection techniques for intramuscular, subcutaneous, and intradermal medications. Topics include: drug classifications, metric system, reading a prescription, parenteral routes, syringe safety and calibrations, oral medications, identification of ECG components, identifying artifacts, identifying arrhythmia's.</td>
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<td>Lecture Hours: 2  Lab Hours: 3  Repeatable: No  Grading: L</td>
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<td>Prerequisite: HSCI 113 or DENT 164, both with C or better, or proof of 2 years health related employment</td>
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**HSCI-136 - Health Science Occupational Work Experience-Parallel Plan**

Occupational Work Experience is designed for students who work or volunteer in a field related to their vocational major. Students are required to provide evidence that they are enrolled in a vocational program (e.g., educational plan or coursework in a vocational subject area). The Parallel Plan is designed for students who wish to take classes and work during the same semester. A maximum of 4 units of Occupational Work Experience credit may be earned during any one semester, to a maximum of 16 units total. Students must be enrolled in at least 7 units including Work Experience units. Courses taken at other accredited colleges or equivalent course work may meet this requirement. Internship/job placement is not guaranteed.

Lecture Hours: None  Lab Hours: 3 - 12  Repeatable: 15  Grading: O

Corequisite: 1) Be enrolled during the regular semester in a minimum of 7 units at any accredited college, including Work Experience units or; 2) During a summer session, be enrolled in at least one other class in addition to Work Experience; and 3) Be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.

CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

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**HSCI-138 - Health Science Occupational Work Experience-Alternate Plan**

Occupational Work Experience is designed for students who work or volunteer in a field related to their vocational major. Students are required to provide evidence that they are enrolled in a vocational program (e.g., educational plan or coursework in a vocational subject area). The Alternate Plan is designed to allow students to attend school one semester and work the next. A maximum of 8 units of Occupational Work Experience credit may be earned during any one semester, to a maximum of 16 units total. Students may only take one (if any) class in addition to work experience. Internship/job placement is not guaranteed.

Lecture Hours: None  Lab Hours: 3 - 24  Repeatable: 15  Grading: O

Corequisite: 1. Need not be enrolled in any other class during the semester besides Work Experience.
2. May be enrolled in at most one other class in addition to Work Experience.
3. Must be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.

CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

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**HSCI-200 - Supervised Skills Lab**

Supplemental practice and/or instruction is offered to Health Science students. Projects are assigned in courses of concurrent enrollment. Faculty members in charge provide general consultation and supervision.

Lecture Hours: None  Lab Hours: None  Repeatable: 19  Grading: N

Corequisite: HSCI 113

CAN: None
Advisory Level: Read: None  Write: None  Math: None
Transfer Status: None  Degree Applicable: NC
CSU GE: None  District GE: None  IGETC: None

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**HI ST-001 - Survey of American History**

This course surveys the development of U.S. History which, along with Political Science 1, satisfies the CSU requirement in U.S. History and Constitution, and in state and local government. History 1 is a broad approach to the social, constitutional, economic and political history of the U.S. with emphasis upon key events, issues and their backgrounds. Students may fulfill the General Education requirements in Social Science either by completing History 1 and Political Science 1, or by completing History 17A and 17B.

Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: L

CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: D6, F1  District GE: D, D  IGETC: 4F, 7B

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**HI ST-009 - Women in American History**

This is a historical survey course on women in the United States from pre-Columbian to present times. The course will analyze the social, political, and economic aspects of women’s lives. Also, the course will examine the interaction of race, class, and gender. The course will be taught in the form of lectures, reading and discussion of primary and secondary sources, essays, quizzes, exams and through visual aids.

Lecture Hours: 3  Lab Hours: 0  Repeatable: No  Grading: L

CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: D3, D4, D6  District GE: D, ES  IGETC: 4C, 4D, 4F

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**HI ST-010A - Development of Western Culture**

This course covers the political, cultural, and philosophical development of Western culture and society through the study of the institutions, thought, literary and artistic expression of the ancient world and medieval society of Europe to the Reformation. Emphasis is placed on understanding the facets of modern civilization by tracing the social, cultural, and political thought of the past. This course is intended to be a thematic approach which introduces the students to the ideas/accomplishments of significant men and women in each period.

Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: L

CAN: HIST 2; HIST SEQ A = HIST 10A+10B
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: D6  District GE: D  IGETC: 3B

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**HI ST-010B - Development of Western Culture**

This course covers the development of Western culture and society through the study of the institutions, thought, literary and artistic expression from the review of the Renaissance to modern times. Emphasis is placed on understanding the facets of modern civilization by tracing the social, cultural, and political thought of the past. This course is intended to be a thematic approach which introduces the students to the ideas/accomplishments of significant men and women in each period.

Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: L

CAN: HIST SEQ A = HIST 10B+10A
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: D6  District GE: D  IGETC: 3B
**History**

**HIST-017A - History of the United States**

Units: 3

This course is a survey of the history of the United States which, with History 17B, satisfies the requirement in United States History, Constitution and American ideals. The course content examines the history of the United States from pre-Columbian times to Reconstruction. History 1 may not be combined with either History 17A or History 17B to meet the requirement in United States History, Constitution and American ideals.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

CAN: HIST 8; HIST SEQ B = HIST 17A+17B
Advisory Level: Read: 3 Write: 3 Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: D6,F1,F2 District GE: D,D IGETC: 4F,7A

**HIST-017B - History of the United States**

Units: 3

This course is a survey of the history of the United States which, with 17A, satisfies the District requirement in United States history and constitution and in state and local government. Content examines the United States from Reconstruction through the present. Students who have completed History 1 may not receive credit for History 17B.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

CAN: HIST 10; HIST SEQ B = HIST 17B+17A
Advisory Level: Read: 3 Write: 3 Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: D6,F1,F2 District GE: D,D IGETC: 4F,7A

**HIST-021 - African American History**

Units: 3

This course is designed to present the student with the cultural, political, economic and social history of African people in the United States from their origin in Africa to the present day. Also, the course is intended to encourage students to think in an organized and rational manner with the purpose of comprehending how the past functioned in the shaping of the present.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

CAN: None
Advisory Level: Read: 3 Write: 3 Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: D3,D6 District GE: D,ES IGETC: 4F

**HIST-024 - History and Culture of the American Indian**

Units: 3

This course presents an overview of the many Indian cultures in North America and the history of the interaction between these cultures and the dominant white culture from 1492 to the present. The course begins with a review of the theories behind the settlement of the Americas and then surveys the Pre-Columbian civilizations and their achievements. Following this there is a review of representational tribes from each of the major geo-cultural regions along with the history of these tribes' interactions with the Europeans and (later) Americans.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: O

CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: D3,D6 District GE: D,ES IGETC: 4F

**HIST-098 - Directed Study in History**

Units: 0.5 - 9

Individual or small groups of students who would benefit from Independent Study under the direction of faculty members in specific or related disciplines may develop individualized learning contracts designed to enhance their individual instructional programs. The students and the faculty member in consultation with the Division Dean will determine appropriate learning objectives and activities as well as the number of units to be earned. Instructions and the Learning Contract forms are available in the Division office. Repeatable to a maximum of 9 units across all disciplines.

Lecture Hours: None Lab Hours: 1.5 - 27 Repeatable: 17 Grading: O

CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

**Humanities**

**HUMNT-001 - Introduction to Visual and Performing Arts**

Units: 3

This is an interdisciplinary introduction to the basic conceptual vocabulary used in the perception and descriptive analysis of Dance, Music, Theater and Visual Art. Emphasis is placed on the written and verbal application of these concepts to the interpretation of art objects in context, and to practical application in life situations. Examples presented are chosen for their artistic integrity and cultural diversity.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

Credit by Exam: Yes

CAN: None
Advisory Level: Read: 3 Write: 3 Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: C1 District GE: C1 IGETC: 3A

**HUMNT-002 - Introduction to World Literature**

Units: 3

This course introduces students to a variety of literary works from around the world which are significant in illuminating both the universality and diversity of human experience. Readings in the course are chosen for their literary, historical, cultural, philosophical and psychological importance.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: O

CAN: None
Advisory Level: Read: 3 Write: 3 Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: C2 District GE: C2 IGETC: 3B

**Japanese**

**JAPAN-001A - Elementary Japanese**

Units: 5

This course introduces students to elementary skills of the Japanese language. Reading, writing and speaking are equally emphasized. The writing system of Hiragana as well as 30 Chinese characters will be introduced.

Lecture Hours: 5 Lab Hours: None Repeatable: No Grading: O

CAN: JAPAN Seq A = JAPAN 1A + 1B
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: C2 District GE: C2 IGETC: 6A
### JAPAN-001B - Elementary Japanese

**Units:** 5  
This course is an extension of Japanese 001A. It provides continuing practice in the basic communication skills of speaking, reading, and writing. The writing system of Katakana and 50 Chinese characters will be taught. Customs and cultural aspects will be discussed.  
**Lecture Hours:** 5  
**Lab Hours:** None  
**Repeatable:** No  
**Grading:** O  
**Prerequisite:** JAPAN 001A  
**Advisory Level:**  
- Read: 2  
- Write: 2  
- Math: None  
**Transfer Status:** CSU/UC Degree Applicable: AA/AS  
**CSU GE:** C2  
**District GE:** C2  
**IGETC:** None  

**CAN:** JAPAN Seq A = JAPAN 1A + 1B

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### JAPAN-002A - Intermediate Japanese

**Units:** 5  
This course is a continuation of Japanese 001B. The course is designed to review and expand the knowledge of the structure of the language. It includes practice in speaking, reading, and writing. Students are introduced to social and cultural aspects of Japan. Students are introduced to different levels of speech through which they will synthesize and analyze the impact of human relationships among different strata of society.  
**Lecture Hours:** 5  
**Lab Hours:** None  
**Repeatable:** No  
**Grading:** O  
**Prerequisite:** JAPAN 001B  
**Advisory Level:**  
- Read: 2  
- Write: 2  
- Math: None  
**Transfer Status:** CSU/UC Degree Applicable: AA/AS  
**CSU GE:** C2  
**District GE:** C2  
**IGETC:** 3B

### JAPAN-002B - Intermediate Japanese

**Units:** 5  
This course is a continuation of Japanese 002A. The course is designed to review and expand the knowledge of the structure of the language. It includes practice in speaking, reading, and writing. Students are introduced to social and cultural aspects of Japan. Students are introduced to different levels of speech through which they will synthesize and analyze the impact of human relationships among different strata of society.  
**Lecture Hours:** 5  
**Lab Hours:** None  
**Repeatable:** No  
**Grading:** O  
**Prerequisite:** JAPAN 002A  
**Advisory Level:**  
- Read: 2  
- Write: 2  
- Math: None  
**Transfer Status:** CSU/UC Degree Applicable: AA/AS  
**CSU GE:** C2  
**District GE:** C2  
**IGETC:** 3B

### JAPAN-091A - Conversational Japanese

**Units:** 3  
This course is designed for the development of the ability to comprehend and speak the Japanese language in everyday situations. Designed for students without previous experience in the language.  
**Lecture Hours:** 3  
**Lab Hours:** None  
**Repeatable:** No  
**Grading:** O  
**Prerequisite:** JAPAN 091A  
**Advisory Level:**  
- Read: 2  
- Write: 2  
- Math: None  
**Transfer Status:** CSU Degree Applicable: AA/AS  
**CSU GE:** D7  
**District GE:** D  
**IGETC:** 4J

### JAPAN-091B - Conversational Japanese

**Units:** 3  
This course is designed for the development of the ability to comprehend and speak the Japanese language in everyday situations.  
**Lecture Hours:** 3  
**Lab Hours:** None  
**Repeatable:** No  
**Grading:** O  
**Prerequisite:** JAPAN 091A  
**Advisory Level:**  
- Read: 2  
- Write: 2  
- Math: None  
**Transfer Status:** CSU Degree Applicable: AA/AS  
**CSU GE:** None  
**District GE:** None  
**IGETC:** None

### JAPAN-091C - Conversational Japanese

**Units:** 3  
This is an advanced course designed to give students the opportunity to speak Japanese based on modern Japanese written materials.  
**Lecture Hours:** 3  
**Lab Hours:** None  
**Repeatable:** No  
**Grading:**  
**Prerequisite:** JAPAN 091B  
**Advisory Level:**  
- Read: 2  
- Write: 2  
- Math: None  
**Transfer Status:** CSU Degree Applicable: AA/AS  
**CSU GE:** None  
**District GE:** None  
**IGETC:** None

### JAPAN-098 - Directed Study-Japanese

**Units:** 0.5 - 9  
Individual or small groups of students who would benefit from Independent Study under the direction of faculty members in specific or related disciplines may develop individualized learning contracts designed to enhance their individual instructional programs. The students and the faculty member in consultation with the Division Dean will determine appropriate learning objectives and activities as well as the number of units to be earned. Instructions and the Learning Contract forms are available in the Division office. Repeatable to a maximum of 9 units across all disciplines.  
**Lecture Hours:** None  
**Lab Hours:** 1.5 - 27  
**Repeatable:** 17  
**Grading:** O  
**Can:** None  
**Advisory Level:**  
- Read: 2  
- Write: 2  
- Math: None  
**Transfer Status:** CSU Degree Applicable: AA/AS  
**CSU GE:** None  
**District GE:** None  
**IGETC:** None

### JOURN-010 - Mass Media and Society

**Units:** 3  
Mass Media and Society provides a non-technical introduction to the electronic, print, and visual media, together with their role in American society. The course assesses the growth, development, and impact of television, newspapers, magazines, film, radio, advertising, and public relations on consumers in an information-oriented age.  
**Lecture Hours:** 3  
**Lab Hours:** None  
**Repeatable:** No  
**Grading:** O  
**Can:** JOUR 4  
**Advisory Level:**  
- Read: 2  
- Write: 2  
- Math: None  
**Transfer Status:** CSU/UC Degree Applicable: AA/AS  
**CSU GE:** None  
**District GE:** None  
**IGETC:** None
JOURN-014 - Newswriting and Reporting
Units: 3
Critical analysis of and practice in the fundamentals of recognizing, gathering, organizing, and writing selected types of news and feature stories for newspapers; relationship of reporters and the public, thought and language, objective and nonobjective communication; news values, ethical and legal considerations, and electronic writing and editing.
Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: O
CAN: JOUR 2
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

JOURN-021 - Communications Media and Society
Units: 3
This course provides an introduction to communications media—print, electronic and broadcast—and the role they play in society in reflecting, affecting, creating and molding public opinion, ideas and values, and influencing popular culture. The course involves an analysis of the media from the point of view of the audience both in historical and contemporary perspectives, and the production of media from the point of view of the communicator. Legal, ethical and social issues related to the media, including gender and cultural diversity, will be explored.
Lecture Hours: 3 Lab Hours: 0 Repeatable: No Grading: L
CAN: None
Advisory Level: Read: 3 Write: 3 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: C2,D IGETC: None

JOURN-022 - News Writing and Reporting for the Media
Units: 3
The course introduces students to the fundamentals of gathering and organizing information, and writing selected news and feature stories for print and electronic media. Students explore development of multiple reliable sources while covering real stories of campus news. Students are introduced to interviewing techniques, ethical and legal issues in reporting, preparation of content for various media outlets, and Associated Press Style.
Lecture Hours: 2.5 Lab Hours: 1.5 Repeatable: No Grading: L
CAN: None
Advisory Level: Read: 3 Write: 3 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

JOURN-024 - Publications Laboratory Staff: Writing and Editing
Units: 3
Introduction to writing and editing for the student media including print and online editions of the college newspaper, The Times. Students cover relevant community events and address topics of interest to the college community using a state-of-the-art computer laboratory. Repeatable to a maximum of 12 units.
Lecture Hours: 2 Lab Hours: 4 Repeatable: 3 Grading: L
CAN: None
Advisory Level: Read: 3 Write: 3 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: Z

JOURN-025 - Publications Laboratory Staff: Photojournalism
Units: 3
Introduction to newspaper photojournalism and covering campus news for print and online editions of the college's newspaper, The Times. Students use a state-of-the-art publications laboratory with the latest industry software to prepare digital or 35 mm. photos for print and online media. Repeatable up to a maximum of 12 units.
Lecture Hours: 2 Lab Hours: 4 Repeatable: 3 Grading: L
CAN: None
Advisory Level: Read: 3 Write: 3 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

JOURN-030 - Publications Laboratory Staff: Design and Production
Units: 3
Introduction to line illustration or computer graphics created for publication in the campus newspaper. Production students use desktop publishing technology to design and produce the campus newspaper in camera-ready form. Repeatable to a maximum of 12 units.
Lecture Hours: 2 Lab Hours: 4 Repeatable: 3 Grading: L
CAN: None
Advisory Level: Read: 3 Write: 3 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

JOURN-035 - Editorial Management
Units: 1
Introduction to newspaper planning and staff management for senior editors of The Times, City College's campus newspaper.
Lecture Hours: 1 Lab Hours: None Repeatable: 3 Grading: O
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

JOURN-087 - Visual Communications
Units: 3
This course introduces the formal properties of visual literacy as they relate to graphic and information design across all media, as well as, perception, semiotics, and visual persuasion. Students will develop an understanding of the language and power of images in developing a visual intelligence.
Lecture Hours: 2 Lab Hours: 3 Repeatable: No Grading: L
CAN: None
Advisory Level: Read: 3 Write: 3 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: Z

152
JOURN-098  -  Directed Study  
Units: 1 - 3
Individual or small groups of students who would benefit from Independent Study under the direction of faculty members in specific or related disciplines may develop individualized learning contracts designed to enhance their individual instructional programs. The students and the faculty member in consultation with the Division Dean will determine appropriate learning objectives and activities as well as the number of units to be earned. Instructions and the Learning Contract forms are available in the Division office. Repeatable to a maximum of 9 units across all disciplines.
Lecture Hours: None  
Lab Hours: 1.5 - 27  
Repeatable: 17  
Grading: O
CAN: None  
Advisory Level: Read: 2  
Write: 2  
Math: None  
Transfer Status: CSU  
Degree Applicable: AA/AS  
CSU GE: None  
District GE: None  
IGETC: None

JOURN-136  -  Journalism Occupational Work Experience-Parallel Plan  
Units: 1 - 4
Occupational Work Experience is designed for students who work or volunteer in a field related to their vocational major. Students are required to provide evidence that they are enrolled in a vocational program (e.g., educational plan or coursework in a vocational subject area). The Parallel Plan is designed for students who wish to take classes and work during the same semester. A maximum of 4 units of Occupational Work Experience credit may be earned during any one semester, to a maximum of 16 units total. Students must be enrolled in at least 7 units including Work Experience units. Courses taken at other accredited colleges or equivalent course work may meet this requirement. Internship/job placement is not guaranteed.
Lecture Hours: None  
Lab Hours: 3 - 12  
Repeatable: 15  
Grading: O
Corequisite: 1) Be enrolled during the regular semester in a minimum of 7 units at any accredited college, including Work Experience units or; 2) During a summer session, be enrolled in at least one other class in addition to Work Experience; and 3) Be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.
CAN: None  
Advisory Level: Read: 3  
Write: 3  
Math: None  
Transfer Status: CSU  
Degree Applicable: AA/AS  
CSU GE: None  
District GE: None  
IGETC: None

JOURN-138  -  Journalism Occupational Work Experience-Alt Alternate Plan  
Units: 1 - 8
Occupational Work Experience is designed for students who work or volunteer in a field related to their vocational major. Students are required to provide evidence that they are enrolled in a vocational program (e.g., educational plan or coursework in a vocational subject area). The Alternate Plan is designed to allow students attend school one semester and work the next. A maximum of 8 units of Occupational Work Experience credit may be earned during any one semester, to a maximum of 16 units total. Students may only take one (if any) class in addition to work experience. Internship/job placement is not guaranteed.
Lecture Hours: None  
Lab Hours: 3 - 24  
Repeatable: 15  
Grading: O
Corequisite: 1. Need not be enrolled in any other class during the semester besides Work Experience. 2. May be enrolled in at most one other class in addition to Work Experience. 3. Must be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.
CAN: None  
Advisory Level: Read: 3  
Write: 3  
Math: None  
Transfer Status: CSU  
Degree Applicable: AA/AS  
CSU GE: None  
District GE: None  
IGETC: None

LABOR-015  -  Local Union and Community Leadership  
Units: 3
Leadership development involving a study of interpersonal relationships in union and community groups. Techniques to handle problems in social and group conflict. Designed for persons employed in occupations covered by an organized labor contract.
Lecture Hours: 3  
Lab Hours: None  
Repeatable: No  
Grading: O
CAN: None  
Advisory Level: Read: 2  
Write: 2  
Math: None  
Transfer Status: CSU  
Degree Applicable: AA/AS  
CSU GE: D7  
District GE: D  
IGETC: None

LABOR-020  -  Workers' Rights  
Units: 1
The basic rights of employees under the state and federal labor laws form the content of this class. The scope of this class includes the legal rights and obligations of employees, unions and employers. Emphasis is placed on employee’s rights to organize, picket and strike in the context of the laws covering collective bargaining in both private and public collective sectors. The structure and procedures of governmental regulatory agencies charged with the enforcement of employment law are examined.
Lecture Hours: 1  
Lab Hours: None  
Repeatable: No  
Grading: O
CAN: None  
Advisory Level: Read: 2  
Write: 2  
Math: None  
Transfer Status: CSU  
Degree Applicable: AA/AS  
CSU GE: None  
District GE: None  
IGETC: None

LABOR-021  -  Labor Contracts and Grievances  
Units: 1
The aim of this class is to provide a practical guide to understanding the labor contract as a primary tool for advancing workers’ interests in the workplace. Attention will be given to the purpose, structure and function of the contract with particular emphasis on the grievance procedure.
Lecture Hours: 1  
Lab Hours: None  
Repeatable: No  
Grading: O
CAN: None  
Advisory Level: Read: 2  
Write: 2  
Math: None  
Transfer Status: CSU  
Degree Applicable: AA/AS  
CSU GE: None  
District GE: None  
IGETC: None

LABOR-022  -  Labor Negotiations and Dispute Resolution  
Units: 1
The aim of this class is to provide an overview of the collective bargaining process in modern labor relations. Emphasis will be on ways labor and management both compete and collaborate in the process of determining wages and conditions of employment. Alternative dispute resolution systems will be examined and evaluated as possible tools for solving workplace problems. Examples of actual disputes will be analyzed utilizing both the role play and the case study approaches.
Lecture Hours: 1  
Lab Hours: None  
Repeatable: No  
Grading: O
CAN: None  
Advisory Level: Read: 2  
Write: 2  
Math: None  
Transfer Status: CSU  
Degree Applicable: AA/AS  
CSU GE: None  
District GE: None  
IGETC: None
**LABOR-023 - Labor in American Society**  Units: 1

The aim of this class is to provide an understanding of the principles and beliefs that have served as the foundation of American trade unionism. The history of American unionism will be examined with emphasis on understanding the varieties of ways unions have advanced the interests of their members and workers in general. Current examples of union innovation based on the traditions of labor will be explored.

Lecture Hours: 1  Lab Hours: None  Repeatable: No  Grading: O

**Transfer Status: CSU Degree Applicable: AA/AS**

**CAN: None**

**Advisory Level:**  Read: 2  Write: 2  Math: None

**CSU GE:**  None  **District GE:**  None  **IGETC:**  None

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**LABOR-024 - Leadership and Communication**  Units: 1

This course introduces interpersonal leadership skills in the context of union and community organizations. Primary attention is given to active listening, confrontation and problem solving techniques in work and community settings. Volunteer motivation and accountability methods and coalition building strategies are developed. The effective management of small group meetings is also emphasized.

Lecture Hours: 1  Lab Hours: None  Repeatable: No  Grading: O

**CAN: None**

**Advisory Level:**  Read: 2  Write: 2  Math: None

**Transfer Status: CSU Degree Applicable: AA/AS**

**CSU GE:**  None  **District GE:**  None  **IGETC:**  None

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**LABOR-025 - Labor Organizing and Political Action**  Units: 1

This course introduces the techniques utilized in the formation of labor unions in the public and private sectors. It further studies the ways modern unions function in the political arena.

Lecture Hours: 1  Lab Hours: None  Repeatable: No  Grading: O

**CAN: None**

**Advisory Level:**  Read: 2  Write: 2  Math: None

**Transfer Status: CSU Degree Applicable: AA/AS**

**CSU GE:**  None  **District GE:**  None  **IGETC:**  None

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**LABOR-030 - Mediation Principles & Practice**  Units: 3

This course is designed to introduce students to the principles and process of mediation through exercises, lively discussion, mediation simulation, lectures, and relevant reading materials. Students will learn mediation, communication, and negotiation skills and will understand the formal process of mediation by course end.

Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: O

**CAN: None**

**Advisory Level:**  Read: 3  Write: 3  Math: None

**Transfer Status: CSU Degree Applicable: AA/AS**

**CSU GE:**  None  **District GE:**  D  **IGETC:**  None

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**LABOR-031 - Survey of Contemporary Labor/Social Issues for Activists**  Units: 1

This course will provide students knowledge about key contemporary issues and enhance their analytical and problem-solving skills needed to manage the complex processes of negotiation, bargaining, compromise, and political action. The course will focus on how to use the political process, organize and educate on issues such as education, a living wage, crime and substance abuse and health care for workers and their families. The course is intended for all students who wish to increase their leadership skills and engage in more effective social action.

Lecture Hours: 1  Lab Hours: 0  Repeatable: No  Grading: O

**Recommended:** This is an introductory course. Students should have had coursework relating to any discipline in the social sciences, either in high school, junior college, or from work experience.

**CAN: None**

**Advisory Level:**  Read: 2  Write: 2  Math: None

**Transfer Status: CSU Degree Applicable: AA/AS**

**CSU GE:**  None  **District GE:**  None  **IGETC:**  None

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**LABOR-032 - Organizing Immigrant Workers**  Units: 1

This course will review and analyze the history of immigrant legislation and the ability of labor laws to adequately protect immigrant workers. In addition, the course will explore the various legal rights and remedies immigrant workers have in the workplace. The course will emphasize the rights of immigrant workers during union organizing campaigns.

Lecture Hours: 1  Lab Hours: None  Repeatable: No  Grading: O

**CAN: None**

**Advisory Level:**  Read: 2  Write: 2  Math: None

**Transfer Status: CSU Degree Applicable: AA/AS**

**CSU GE:**  None  **District GE:**  None  **IGETC:**  None

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**LABOR-033 - Solving Worksite Problems**  Units: 1

This course will present a supplement/alternative to the grievance procedure for addressing problems in the unionized workplace. Subjects covered will include: identifying issues that build the union, recruiting a committee and developing new leaders, planning and carrying out creative actions that involve the workers, and one-on-one communication as a way of turning workers out to events.

Lecture Hours: 1  Lab Hours: None  Repeatable: No  Grading: O

**CAN: None**

**Advisory Level:**  Read: 2  Write: 2  Math: None

**Transfer Status: CSU Degree Applicable: AA/AS**

**CSU GE:**  None  **District GE:**  None  **IGETC:**  None

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**LABOR-034 - Immigrant Leadership Training**  Units: 3

The student will develop the vision, skills and leadership of immigrants. The student will discuss the commonality of human needs, develop a needs development methodology, analyze the historical context of immigration and immigration laws, and will discuss diverse leadership styles. In addition, the student will develop the following skills: public speaking, team building and teamwork, community organizing, tools of advocacy, and media relations. Finally, the student will focus on leadership development by: assessing current levels of immigrant involvement, and by developing strategies to overcome barriers for immigrants in regards to civic engagement.

Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: O

**CAN: None**

**Advisory Level:**  Read: 3  Write: 3  Math: None

**Transfer Status: CSU Degree Applicable: AA/AS**

**CSU GE:**  None  **District GE:**  None  **IGETC:**  None
### Labor Studies

#### LABOR-098 - Directed Study-Labor Studies  
**Units:** 0.5 - 9

Individual or small groups of students who would benefit from Independent Study under the direction of faculty members in specific or related disciplines may develop individualized learning contracts designed to enhance their individual instructional programs. The students and the faculty member in consultation with the Division Dean will determine appropriate learning objectives and activities as well as the number of units to be earned. Instructions and the Learning Contract forms are available in the Division office. Repeatable to a maximum of 9 units across all disciplines.

<table>
<thead>
<tr>
<th>Lecture Hours: None</th>
<th>Lab Hours: 1.5 - 27</th>
<th>Repeatable: 17</th>
<th>Grading: O</th>
</tr>
</thead>
</table>

**Advisory Level:**
- **Read:** 2
- **Write:** 2
- **Math:** None

**Transfer Status:**
- CSU Degree Applicable: AA/AS

**Laboratory Hours:** None

**Course Prerequisites:**
- CAN: None

**IGETC:** None

**CSU GE:** None

**District GE:** None

**Interfaces: CSU Degree Applicable: AA/AS**

#### LABOR-098 - Directed Study-Labor Technology  
**Units:** 0.5 - 9

Individual or small groups of students who would benefit from Independent Study under the direction of faculty members in specific or related disciplines may develop individualized learning contracts designed to enhance their individual instructional programs. The students and the faculty member in consultation with the Division Dean will determine appropriate learning objectives and activities as well as the number of units to be earned. Instructions and the Learning Contract forms are available in the Division office. Repeatable to a maximum of 9 units across all disciplines.

<table>
<thead>
<tr>
<th>Lecture Hours: None</th>
<th>Lab Hours: 1.5 - 27</th>
<th>Repeatable: 17</th>
<th>Grading: O</th>
</tr>
</thead>
</table>

**Advisory Level:**
- **Read:** 2
- **Write:** 2
- **Math:** None

**Transfer Status:**
- CSU Degree Applicable: AA/AS

**Laboratory Hours:** None

**Course Prerequisites:**
- CAN: None

**IGETC:** None

**CSU GE:** None

**District GE:** None

**Interfaces: CSU Degree Applicable: AA/AS**

#### LABOR-136 - Labor Studies Occupational  
**Units:** 1 - 4

Occupational Work Experience is designed for students who work or volunteer in a field related to their vocational major. Students are required to provide evidence that they are enrolled in a vocational program (e.g., educational plan or coursework in a vocational subject area). The Parallel Plan is designed for students who wish to take classes and work during the same semester. A maximum of 4 units of Occupational Work Experience credit may be earned during any one semester, to a maximum of 16 units total. Students must be enrolled in at least 7 units including Work Experience units. Courses taken at other accredited colleges or equivalent coursework may meet this requirement. Internship/job placement is not guaranteed.

<table>
<thead>
<tr>
<th>Lecture Hours: None</th>
<th>Lab Hours: 3 - 12</th>
<th>Repeatable: 15</th>
<th>Grading: O</th>
</tr>
</thead>
</table>

**Corequisite:**
1. Be enrolled during the regular semester in a minimum of 7 units at any accredited college, including Work Experience units or;
2. During a summer session, be enrolled in at least one other class in addition to Work Experience; and
3. Be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.

**Advisory Level:**
- **Read:** 3
- **Write:** 3
- **Math:** None

**Transfer Status:**
- CSU Degree Applicable: AA/AS

**Laboratory Hours:** None

**Course Prerequisites:**
- CAN: None

**IGETC:** None

**CSU GE:** None

**District GE:** None

**Laboratory Hours:** None

**Course Prerequisites:**
- CAN: None

**IGETC:** None

**CSU GE:** None

**District GE:** None

### Laser Technology

#### LASER-098 - Directed Study-Laser Technology  
**Units:** 0.5 - 9

Laser 100 is the introductory course which will lead to an AS degree in Laser Technology. Presented in this course are the principles, techniques and skills for tasks typically performed by an entry-level laser/electro-optics technician. Areas covered include, but not limited to, laser theory, optics principles, optics cleaning and handling, troubleshooting, laser safety, and beam measurements.

<table>
<thead>
<tr>
<th>Lecture Hours: None</th>
<th>Lab Hours: 3</th>
<th>Repeatable: No</th>
<th>Grading: L</th>
</tr>
</thead>
</table>

**Recommended:** Concurrent enrollment in ELECT 062 and ELECT 121

**Advisory Level:**
- **Read:** 2
- **Write:** 2
- **Math:** 1

**Transfer Status:**
- CSU Degree Applicable: AA/AS

**Laboratory Hours:** None

**Course Prerequisites:**
- CAN: None

**IGETC:** None

**CSU GE:** None

**District GE:** None

#### LASER-098 - Directed Study-Laser Optics  
**Units:** 4

Laser Optics is the second course in a series leading to an AS degree in Laser Technology. This course is an applied optics course with emphasis on modern applications of optical components. The theory of the particle and wave nature of light is considered in the presentation of optical devices. Rayleigh scattering, polarization and optical rotation are stressed. Laboratory is required and must be successfully completed to pass the course.

<table>
<thead>
<tr>
<th>Lecture Hours: 3</th>
<th>Lab Hours: 3</th>
<th>Repeatable: No</th>
<th>Grading: L</th>
</tr>
</thead>
</table>

**Prerequisite:** LASER 100 and ELECT 121 with C or better

**Recommended:** Concurrent enrollment in ELECT 063 and ELECT 122

**Advisory Level:**
- **Read:** 2
- **Write:** 2
- **Math:** None

**Transfer Status:**
- CSU Degree Applicable: AA/AS

**Laboratory Hours:** None

**Course Prerequisites:**
- CAN: None

**IGETC:** None

**CSU GE:** None

**District GE:** None

#### LASER-098 - Directed Study-Intermediate Laser Technology  
**Units:** 4

Intermediate Laser Technology is the third course in a series leading to an AS degree in Laser Technology. This course emphasizes laser safety, theory, types and applications of lasers. The course will also introduce students to the theory of pulsed laser systems. Laboratory is required and must be successfully completed to pass the course.

<table>
<thead>
<tr>
<th>Lecture Hours: 3</th>
<th>Lab Hours: 3</th>
<th>Repeatable: No</th>
<th>Grading: L</th>
</tr>
</thead>
</table>

**Prerequisite:** LASER 100 and ELECT 121, both with C or better

**Recommended:** Concurrent enrollment in ELECT 63 and ELECT 122

**Advisory Level:**
- **Read:** 2
- **Write:** 2
- **Math:** None

**Transfer Status:**
- CSU Degree Applicable: AA/AS

**Laboratory Hours:** None

**Course Prerequisites:**
- CAN: None

**IGETC:** None

**CSU GE:** None

**District GE:** None
LASER-103 - Advanced Laser Technology  Units: 4  
Advanced Laser Technology is a second year course in the series leading to an AS degree in Laser Technology. The topics presented include in-depth treatment of pulsed, solid state and semiconductor lasers, and electro and acoustic-optic modulating devices and materials. Methods of beam diagnostics, and second harmonic generation are also included in the presentation. Laboratory is required and includes the use monochrometers, beam/spectrum analyzers and power and energy meters.  
Lecture Hours: 3  Lab Hours: 3  Repeatable: No  Grading: L  
Prerequisite: LASER 102 and ELECT 063 and ELECT 122, all with C or better  
CAN: None  
Advisory Level: Read: 2  Write: 2  Math: None  
Transfer Status: CSU Degree Applicable: AS  
CSU GE: None  District GE: None  IGETC: None

LASER-112 - Vacuum Techniques  Units: 4  
This course is a second year course leading to an AS degree in Laser Technology. The course is presented in three parts: physics of gases and the vacuum environment; vacuum environment measurement equipment and techniques; and vacuum production equipment and techniques. Laboratory is required and must be successfully completed in order to pass the course.  
Lecture Hours: 3  Lab Hours: 3  Repeatable: No  Grading: L  
Prerequisite: LASER 101 and ELECT 122 (ELECT 122C or ELECT 120B or MATH 022) and ELECT 063 (ELECT 063C OR ELECT 60B), all with C or better  
CAN: None  
Advisory Level: Read: 2  Write: 2  Math: None  
Transfer Status: CSU Degree Applicable: AA/AS  
CSU GE: None  District GE: None  IGETC: None

LASER-120 - Basic Vacuum Technology for Manufacturing  Units: 2.5  
Physics principles are presented to enable understanding of the operation of vacuum devices. The theory of operation of low and high vacuum pumps, gauges, and residual gas analyzers is offered. Employment requiring the use of high vacuum sputtering equipment is recommended.  
Lecture Hours: 2.5  Lab Hours: None  Repeatable: No  Grading: L  
CAN: None  
Advisory Level: Read: 2  Write: 2  Math: None  
Transfer Status: None Degree Applicable: AS  
CSU GE: None  District GE: None  IGETC: None

LASER-122 - Intermediate Vacuum Technology for Manufacturing  Units: 2.5  
This course is the second in a sequence of three courses designed for Disk Drive and Microelectronics Manufacturing. Vacuum system characteristics for batch and in-line processes are studied for sputter deposition, ion-etch, ion-milling, and evaporation.  
Lecture Hours: 2.5  Lab Hours: None  Repeatable: No  Grading: L  
Prerequisite: LASER 120 and ELECT 143, both with C  
CAN: None  
Advisory Level: Read: 2  Write: 2  Math: None  
Transfer Status: None Degree Applicable: AS  
CSU GE: None  District GE: None  IGETC: None

LASER-124 - Sputtering Theory and Physics  Units: 2.5  
This is the third course in the series of vacuum for manufacturing processes. The course presents theory and applications of plasm used in DC and RF sputtering.  
Lecture Hours: 2.5  Lab Hours: None  Repeatable: No  Grading: L  
Prerequisite: LASER 122 and ELECT 144, both with C or better  
CAN: None  
Advisory Level: Read: 2  Write: 2  Math: None  
Transfer Status: None Degree Applicable: AS  
CSU GE: None  District GE: None  IGETC: None

LASER-136 - Laser Technology Occupational Work Experience-Parallel Plan  Units: 1 - 4  
Occupational Work Experience is designed for students who work or volunteer in a field related to their vocational major. Students are required to provide evidence that they are enrolled in a vocational program (e.g., educational plan or coursework in a vocational subject area). The Parallel Plan is designed for students who wish to take classes and work during the same semester. A maximum of 4 units of Occupational Work Experience credit may be earned during any one semester, to a maximum of 16 units total. Students must be enrolled in at least 7 units including Work Experience units. Courses taken at other accredited colleges or equivalent course work may meet this requirement. Internship/job placement is not guaranteed.  
Lecture Hours: None  Lab Hours: 3 - 12  Repeatable: 15  Grading: O  
Corequisite: 1) Be enrolled during the regular semester in a minimum of 7 units at any accredited college, including Work Experience units or; 2) During a summer session, be enrolled in at least one other class in addition to Work Experience; and 3) Be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.  
CAN: None  
Advisory Level: Read: 3  Write: 3  Math: None  
Transfer Status: CSU Degree Applicable: AA/AS  
CSU GE: None  District GE: None  IGETC: None

Occupational Work Experience is designed for students who work or volunteer in a field related to their vocational major. Students are required to provide evidence that they are enrolled in a vocational program (e.g., educational plan or coursework in a vocational subject area). The Alternate Plan is designed to allow students attend school one semester and work the next. A maximum of 8 units of Occupational Work Experience credit may be earned during any one semester, to a maximum of 16 units total. Students may only take one (if any) class in addition to work experience. Internship/job placement is not guaranteed.  
Lecture Hours: None  Lab Hours: 3 - 24  Repeatable: 15  Grading: O  
Corequisite: 1. Need not be enrolled in any other class during the semester besides Work Experience. 2. May be enrolled in at most one other class in addition to Work Experience. 3. Must be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.  
CAN: None  
Advisory Level: Read: 3  Write: 3  Math: None  
Transfer Status: CSU Degree Applicable: AA/AS  
CSU GE: None  District GE: None  IGETC: None
LE-154  -  Basic Police Academy  Units: 22
This is an 880 hour course of training certified by the Commission on Peace Officer Standards and Training (POST) to meet the statutory basic training requirements for peace officers. Course requires significant commitment in time and dedication. It requires both academic and physical skills in addition to extra motivation to endure the intensive agenda.
Lecture Hours: 30.63  Lab Hours: 19.66  Repeatable: No  Grading: L
Prerequisite: POST approved pre-entry English skills assessment exam provided by the academy. Medical clearance by a licensed physician. Criminal History clearance by the Department of Justice pursuant to Penal Code.
CAN: None
Advisory Level:  Read: 3  Write: 3  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

LE-156  -  Police Supervisor  Units: 2
This course emphasizes the basic elements of supervision and how they may be applied to police work. Essentials of good leadership and understanding of the basic needs of human beings as well as ways to stimulate subordinates to better performance are the contents of the course.
Lecture Hours: 4.3  Lab Hours: 0.2  Repeatable: No  Grading: L
CAN: None
Advisory Level:  Read: 2  Write: 2  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

LE-158  -  PC 832 - Firearms  Units: 0.5
This course is designed for public safety personnel attending annual updates, recertification, or remediation mandated by the Commission on Peace Officer Standards and Training. The course covers the legal requirements for carrying and using a firearm within the scope of their job duties. Participants are instructed in the safe handling of firearms and techniques of shooting.
Lecture Hours: 0.46  Lab Hours: 0.92  Repeatable: 2  Grading: K
Prerequisite: Criminal history clearance by the Dept. of Justice as stated by the California Penal Code.
CAN: None
Advisory Level:  Read: 2  Write: 2  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

LE-160  -  Basic Police Academy-Modular  Units: 3
Format, Level III, Part II
A 132 hour course of training that is certified by the Commission on Peace Officer Standards and Training and meets the content and hour requirements established by POST. This course, combined with current PC 832 certificates, meets the requirements for a Level III Reserve Police Officer.
Lecture Hours: 6.63  Lab Hours: 0.92  Repeatable: 2  Grading: L
Prerequisite: Current Valid PC 832 arrest methods and firearms certificates; POST approved pre-entry English skills assessment examination provided by the Academy; Criminal history clearance as provided by the Penal Code; POST approved pre-entry physical agility test provided by the Academy.
CAN: None
Advisory Level:  Read: 2  Write: 2  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

LE-161  -  Basic Police Academy-Modular  Units: 7
Format, Level II
A 280 hour course of training that is certified by the Commission on Peace Officer Standards and Training and meets the content and hour requirements established by POST. This course, combined with current PC 832 certificates, meets the requirement of a Level II Reserve Police Officer. The Level II certificate is a prerequisite for the Level I Reserve Police Officer.
Lecture Hours: 0 - 4.2  Lab Hours: 0  Repeatable: No  Grading: L
Prerequisite: Completion of Level III, parts I & II with current PC 832 certificates.
CAN: None
Advisory Level:  Read: 2  Write: 2  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

LE-162  -  Basic Police Academy-Modular  Units: 12.5
Format, Level I
A 500 hour course of training that is certified by the Commission on Peace Officer Standards and Training and meets the content and hour requirements established by POST. This course, combined with current PC 832 certificates, meets the requirement of a Level I Reserve Police Officer.
Lecture Hours: 14.2  Lab Hours: 14.2  Repeatable: No  Grading: L
Prerequisite: LE 161
CAN: None
Advisory Level:  Read: 2  Write: 2  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

LE-166  -  Non-Lethal Chemical Agent Training  Units: 0.5
This course of instruction includes types of non-lethal chemical agents, methods of dispersal and delivery, safety, first aid, tactics, use of the gas mask and applicable penal code sections. This course meets the requirements of PC 13514.
Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: K
CAN: None
Advisory Level:  Read: 1  Write: None  Math: None
Transfer Status: None  Degree Applicable: NAA
CSU GE: None  District GE: None  IGETC: None

LE-172  -  Advanced Officer Training  Units: 0.5 - 1
This course is designed to provide a mechanism whereby agencies may insure that the necessary new skills required of police officers have been provided and that previously learned skills are maintained and reinforced. It will enable the agency to provide a means of correcting deficiencies while satisfying State teaching requirements. New information and changes in the Criminal Justice System affecting police officers and, when necessary, a review of previously acquired materials will be provided. This course satisfies Advanced Officer Training requirements. It is repeatable for credit once every two years.
Lecture Hours: 1.1 - 2.3  Lab Hours: None  Repeatable: 2  Grading: K
Prerequisite: LE 154 or verification of referral by SBRPSTC Staff.
CAN: None
Advisory Level:  Read: 2  Write: 2  Math: None
Transfer Status: None  Degree Applicable: NAA
CSU GE: None  District GE: None  IGETC: None
LE-173 - Field Evidence Technician  
Units: 2  
This is an 80-hour in-service course which provides training for investigators at a crime scene where evidence needs to be identified, processed, collected, and/or safeguarded. The student will be trained in evidence photography, crime scene sketching, and appropriate reporting.  
Lecture Hours: 2.7  
Lab Hours: 1.8  
Repeatable: No  
Grading: L  
CAN: None  
Advisory Level: Read: 2  
Write: 2  
Math: None  
Transfer Status: None  
Degree Applicable: NAA  
CSU GE: None  
District GE: None  
IGETC: None

LE-175 - Drug Investigation-11550  
Units: 0.5  
This is an 11550 Health & Safety course covering restricted dangerous drugs: Opiates, cocaine, PCP, etc. This course is designed for law enforcement officers desiring to upgrade, refine, or develop an expertise in the field of recognition, identification and apprehension of individuals under the influence of narcotics and dangerous drugs. Included is informant development and District Attorney legal update.  
Lecture Hours: 1.4  
Lab Hours: None  
Repeatable: No  
Grading: L  
CAN: None  
Advisory Level: Read: 2  
Write: 2  
Math: None  
Transfer Status: CSU  
Degree Applicable: AS  
CSU GE: None  
District GE: None  
IGETC: None

LE-176 - Background Investigation  
Units: 1  
A POST certified course designed to develop law enforcement officers with the skills to be an accomplished Background Investigator. This course includes the fundamentals of background investigation, interviewing, the use of psychological screening, Polygraphs, legal aspects of background investigation, and verbal/ non-verbal communication.  
Lecture Hours: 2.3  
Lab Hours: None  
Repeatable: No  
Grading: L  
CAN: None  
Advisory Level: Read: 2  
Write: 2  
Math: None  
Transfer Status: None  
Degree Applicable: AS  
CSU GE: None  
District GE: None  
IGETC: None

LE-178 - Field Training Officer  
Units: 1  
This course is primarily designed for police officers that have been or will be accepted into field officer programs in their respective law enforcement agencies. This course has certification from the California Commission on Peace Officer Standards and Training and follows the guidelines and standards under 832.3 of the Penal Code.  
Lecture Hours: 16 - 7  
Lab Hours: None  
Repeatable: No  
Grading: K  
CAN: None  
Advisory Level: Read: 2  
Write: 2  
Math: None  
Transfer Status: CSU  
Degree Applicable: AA/AS  
CSU GE: None  
District GE: None  
IGETC: None

LE-179 - Skills and Knowledge Modular  
Units: 0.5 - 2  
Training  
This course offers in-service training curriculum for public safety personnel. Each module is eight hours long and is either certified through POST or State Board of Corrections - Standards for Corrections (STC) or the Office of the State Fire Marshall. Students will choose three or more modules per semester to earn from .5 to 2 units. Each module may be repeated a maximum of three times for credit once every two years. This course is not part of a degree or certificate program.  
Lecture Hours: 0.5  
Lab Hours: None  
Repeatable: 15  
Grading: K  
CAN: None  
Advisory Level: Read: 2  
Write: 2  
Math: None  
Transfer Status: None  
Degree Applicable: NAA  
CSU GE: None  
District GE: None  
IGETC: None

Learning Skills

LS-090 - Directed Tutoring Experience  
Units: 1  
Learning Skills 090 is a one-unit, transferable course that provides training for tutors. In this course, students will learn to employ active learning differences among the students they will tutor. By successfully completing LS 090 and 20 hours of tutoring, students meet the district requirement for Tier II pay eligibility.  
Lecture Hours: 1  
Lab Hours: None  
Repeatable: No  
Grading: O  
CAN: None  
Advisory Level: Read: 2  
Write: 2  
Math: None  
Transfer Status: CSU  
Degree Applicable: AA/AS  
CSU GE: None  
District GE: None  
IGETC: None

LS-210 - Supervised Tutoring  
Units: None  
Students will receive tutoring assistance in areas of identified academic need. With the assistance of appropriate faculty, tutors will be assigned who have demonstrated competency in a particular subject, skill and/or discipline and who have successfully completed a tutor training course.  
Lecture Hours: None  
Lab Hours: None  
Repeatable: 19  
Grading: N  
Open Curriculum: No prerequisite, corequisite or levels  
CAN: None  
Advisory Level: Read: None  
Write: None  
Math: None  
Transfer Status: None  
Degree Applicable: NONC  
CSU GE: None  
District GE: None  
IGETC: None

Library Studies

LIB-011 - Introduction to Library Resources  
Units: 1  
This course covers organization of materials in the library and use of basic library resources, including the public catalog, CD-ROM databases, periodical indexes, dictionaries, general encyclopedias, non-book materials, and the Internet. Emphasis is placed on learning to identify, locate, and use basic library resources.  
Lecture Hours: 3  
Lab Hours: None  
Repeatable: No  
Grading: K  
CAN: None  
Advisory Level: Read: 2  
Write: 2  
Math: None  
Transfer Status: CSU/UC  
Degree Applicable: AA/AS  
CSU GE: None  
District GE: None  
IGETC: None
**LIB-015 - Electronic Research and the Internet**

This course provides hands-on training for students doing course-related or personal research using the Internet and other electronic resources. Students will learn criteria for evaluating and comparing print and electronic resources. They will learn how to document and cite sources. The World Wide Web and e-mail will be discussed and used.

Lecture Hours: 2  Lab Hours: 3  Repeatable: No  Grading: L

Recommended: some familiarity with sending emails and using the computer

Advisory Level: Read: 2  Write: 2  Math: 1

Transfer Status: CSU  Degree Applicable: AA/AS

CSU GE: None  District GE: None  IGETC: None

**LIB-022 - Internet Research Strategies**

This course focuses on using the World Wide Web to access information useful for completing class assignments in academic subject areas. In addition to learning how to formulate searches and locate appropriate information, students will learn how to evaluate information and how to document information found via Web searches.

Lecture Hours: 0.5  Lab Hours: 1.5  Repeatable: No  Grading: O

CAN: None

Advisory Level: Read: 2  Write: 2  Math: None

Transfer Status: CSU  Degree Applicable: AA/AS

CSU GE: None  District GE: None  IGETC: None

**MACH-098 - Directed Study in Machine Technology**

Individual or small groups of students who would benefit from Independent Study under the direction of faculty members in specific or related disciplines may develop individualized learning contracts designed to enhance their individual instructional programs. The students and the faculty member in consultation with the Division Dean will determine appropriate learning objectives and activities as well as the number of units to be earned. Instructions and the Learning Contract forms are available in the Division office. Repeatable to a maximum of 9 units across all disciplines.

Lecture Hours: None  Lab Hours: 1.5 - 27  Repeatable: 17  Grading: O

CAN: None

Advisory Level: Read: 2  Write: 2  Math: None

Transfer Status: CSU  Degree Applicable: AA/AS

CSU GE: None  District GE: None  IGETC: None

**MACH-100 - Shop Math and Blueprint Reading**

Problem solving techniques are emphasized through the combined application of shop mathematics, blueprint reading, and industrial reference materials in this course. Students are also oriented to the mechanical occupations.

Lecture Hours: 4  Lab Hours: None  Repeatable: No  Grading: L

Credit by Exam: Yes

Recommended: 3 units of MATH 310 with CR or placement based on math assessment.

CAN: None

Advisory Level: Read: None  Write: None  Math: None

Transfer Status: CSU  Degree Applicable: AA/AS

CSU GE: None  District GE: None  IGETC: None

**MACH-101 - Introduction to Machine Technology**

The practical and theoretical aspects of machine tool processes. Student are instructed in the proper and safe use of tools and equipment, hand tools, measuring instruments, layout and inspection, metal identification, drill press work, band machining, and gauges. Students are introduced to simple lathe, milling machine setups and types and uses of abrasives.

Lecture Hours: 2  Lab Hours: 3  Repeatable: No  Grading: L

Credit by Exam: Yes

CAN: None

Advisory Level: Read: 3  Write: 3  Math: 1

Transfer Status: CSU  Degree Applicable: AA/AS

CSU GE: None  District GE: None  IGETC: None

**MACH-110 - Precision Measurement**

The primary purpose of this course is to provide a source of learning for specific methods and techniques that can be used to ensure functional inspection of geometric tolerances. This course is designed specifically for operators, machinists, inspectors, quality technicians and engineers, and other people in manufacturing companies who have the need to know about inspection methods and techniques. This course will introduce students to the methodology of practical measurements and instrument selection and all the geometric dimensioning and tolerancing in the standard, a representative sample of applications, and more than one method of inspection for each symbol.

Lecture Hours: 2  Lab Hours: 3  Repeatable: No  Grading: L

Credit by Exam: Yes

Prerequisite: MACH 100 with C or better

CAN: None

Advisory Level: Read: 3  Write: 3  Math: None

Transfer Status: CSU  Degree Applicable: AA/AS

CSU GE: None  District GE: None  IGETC: None

**MACH-111 - Advanced Shop Math Applications**

This class will cover specialized math applications used in the machine occupation. Students will learn machine tool setup and advanced math applications for compound angles, dovetails, bolt-hole patterns, thread pitch dimensions, dividinghead, spur and helical gears.

Lecture Hours: 2  Lab Hours: 0  Repeatable: No  Grading: L

Recommended: MACH 100 or comparable experience is helpful.

CAN: None

Advisory Level: Read: 3  Write: 3  Math: 1

Transfer Status: CSU  Degree Applicable: AA/AS

CSU GE: None  District GE: None  IGETC: None

**MACH-120 - Principles of Machine Tool Practices 1, Measurement Emphasis**

This course is an introduction to the fundamental and practical application of measurement tools, blueprint reading, shop math and practices of the machine trade. Students are instructed in the principles and safe practice of basic machine processes including; layout, saws, tool grading, hole and threading operations, deburring and inspection techniques. Instruction will include the set-up and operation of drill press, bandsaw and grinding machines.

Lecture Hours: 3  Lab Hours: 5  Repeatable: No  Grading: L

Corequisite: MACH 123 and MACH 126 and MACH 129

CAN: None

Advisory Level: Read: 2  Write: 2  Math: None

Transfer Status: None  Degree Applicable: AS

CSU GE: None  District GE: None  IGETC: None
MACH-121  -  Machine Tool Fundamentals 1, Measurement Emphasis  
Units: 4.5

This course is an introduction to the fundamental and practical application of measuring tools, blueprint reading, shop math and practices of the machine trade. Students are instructed in the principles and safe practice of basic machine processes including: layout, saws, tool grinding, hole and threading operations, deburring and inspection techniques. Instruction will include the set-up and operation of drill press band saw and grinding machines. This class is equivalent to Machine Technology 120 in content, but in a non-accelerated format.

Lecture Hours: 3  Lab Hours: 5  Repeatable: No  Grading: L

Open Curriculum: No prerequisite, corequisite or levels
Advisory Level: Read: None  Write: None  Math: None
Transfer Status: None  Degree Applicable: AS
CSU GE: None  District GE: None  IGETC: None

MACH-123  -  Principles of Machine Tool Practices 2, Lathe Emphasis  
Units: 4.5

This course covers intermediate blueprint reading and mathematical problem solving. Students are instructed in the principles and safe operation of various types of lathes, including: speed and feed calculations, work holding devices, threading, thread cutting tapers, knurling and basic set-up procedures.

Lecture Hours: 3  Lab Hours: 5  Repeatable: No  Grading: L

Prerequisite: MACH 121 with C or better
Corequisite: or concurrent enrollment in MACH 120 and MACH 126 and MACH 129

CAN: None
Advisory Level: Read: 2  Write: 2  Math: 1
Transfer Status: None  Degree Applicable: AS
CSU GE: None  District GE: None  IGETC: None

Units: 4.5

This course covers advanced blueprint and mathematical problem solving. Students are instructed in the principles and safe operation of the milling machine, including: location and work hold devices, indexing and rotary devices, various machine operations, speed and feed calculations, and basic set-up procedures.

Lecture Hours: 3  Lab Hours: 5  Repeatable: No  Grading: L

Prerequisite: MACH 123 with C or better
Corequisite: or concurrent enrollment in MACH 120 and MACH 123 and MACH 129

CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: None  Degree Applicable: AS
CSU GE: None  District GE: None  IGETC: None

MACH-129  -  CNC Operator Fundamentals  
Units: 4.5

This course is an introduction to Computer Numerically Controlled machines. Students are instructed in the principles and safe operation of the CNC milling machine including: machine construction, controller functions, tooling, set-up and dry-run procedures, program input and editing.

Lecture Hours: 3  Lab Hours: 5  Repeatable: No  Grading: L

Prerequisite: MACH 123 with C or better
Corequisite: or concurrent enrollment in MACH 120 and MACH 123 and MACH 126

CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: None  Degree Applicable: AS
CSU GE: None  District GE: None  IGETC: None

MACH-136  -  Machine Technology Units: 1 - 4
Occupational Work Experience-Parallel Plan

Occupational Work Experience is designed for students who work or volunteer in a field related to their vocational major. Students are required to provide evidence that they are enrolled in a vocational program (e.g., educational plan or coursework in a vocational subject area). The Parallel Plan is designed for students who wish to take classes and work during the same semester. A maximum of 4 units of Occupational Work Experience credit may be earned during any one semester, to a maximum of 16 units total. Students must be enrolled in at least 7 units including Work Experience units. Enrollment in an accredited secondary program Internship/job placement is not guaranteed.

Lecture Hours: None  Lab Hours: 3 - 12  Repeatable: 15  Grading: O

Corequisite: 1) Be enrolled during the regular semester in a minimum of 7 units at any accredited college, including Work Experience units or; 2) During a summer session, be enrolled in at least one other class in addition to Work Experience; and 3) Be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.

CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

MACH-138  -  Machine Technology Units: 1 - 8
Occupational Work Experience-A cc e lera ted Plan

Occupational Work Experience is designed for students who work or volunteer in a field related to their vocational major. Students are required to provide evidence that they are enrolled in a vocational program (e.g., educational plan or coursework in a vocational subject area). The Alternate Plan is designed to allow students to attend school one semester and work the next. A maximum of 8 units of Occupational Work Experience credit may be earned during any one semester, to a maximum of 16 units total. Students may only take one (if any) class in addition to work experience. Internship/job placement is not guaranteed.

Lecture Hours: None  Lab Hours: 3 - 24  Repeatable: 15  Grading: O

Corequisite: 1. Need not be enrolled in any other class during the semester besides Work Experience. 2. May be enrolled in at most one other class in addition to Work Experience. 3. Must be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.

CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

MACH-151A  -  Advanced Lathe Practices  
Units: 4

Students are instructed in the complete operation of the lathe, including work holding devices, calculations, and standard operations. Operations include single point threading, taper turning, knurling, and radius cutting.

Lecture Hours: 3  Lab Hours: 5  Repeatable: No  Grading: L

Prerequisite: MACH 101 with C or better

CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None
MACH-151B - Advanced Milling Machine Practices

This course introduces students to the theory and application of advanced machine tools processes, with focus on all milling machine operations. Students are instructed in the proper and safe operation of equipment and tools, advanced machine set-ups, indexing heads, rotary tables, and vertical shaping attachments. Special emphasis is placed on use of charts and reference data for calculations.

Lecture Hours: 3 Lab Hours: 3 Repeatable: No Grading: L

Prerequisite: MACH 101 with C or better

CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

MACH-151C - Applied Problems in Shop Practices

Advanced machine processes related to heat treatment of metals, tool and cutter grinding, job boring, non-traditional machining processes such as Electro-Discharge Machining (EDM), Electro-Chemical Milling (ECM), Ultrasonic Grinding, job boring, non-traditional machining processes such as Electro-Machining, Laser, Plasma Beam and Numerical Control (CNC) machining concepts. Special emphasis on job training skills, current industry needs.

Lecture Hours: 3 Lab Hours: 3 Repeatable: No Grading: L

Prerequisite: MACH 151B with C or better

CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

MACH-153A - Operator/Programmer I

This is an introduction to Computerized Numerical Control (CNC) milling machines and machining techniques with emphasis on terminology, pre-planning skills, and basic program writing for Manual Data Input applications. Laboratory exercises will focus on CNC controls.

Lecture Hours: 3 Lab Hours: 6 Repeatable: 1 Grading: L

Credit by Exam: Yes
Prerequisite: MATH 011 or MATH 011R or MATH 011S and MACH 101, all with C or better

CAN: None
Advisory Level: Read: 3 Write: 3 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

MACH-153B - Operator/Programmer II

This course is designed to develop the skills required of a CNC Programmer/Operator. Pre-planning, program generation, machine set-up, machine operation, and editing requirements are covered with emphasis placed on milling. The laboratory applications primarily focus on the use of HAAS and Fadal EIA controls.

Lecture Hours: 3 Lab Hours: 6 Repeatable: No Grading: L

Credit by Exam: Yes
Prerequisite: MACH 153A with C or better

CAN: None
Advisory Level: Read: 3 Write: 3 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

MACH-154 - Introductory CAD/CAM Operations for Machinists and Operators

Using PCs with various operating systems, students will utilize SurfCAM, MasterCAM, and other CAMs to prepare CNC Milling program files from supplied drawings and models. There will be an emphasis on terminology, planning techniques, and job documentation.

Lecture Hours: 1 Lab Hours: 3 Repeatable: No Grading: O

Prerequisite: MACH 153B with C or better

CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AS
CSU GE: None District GE: None IGETC: None

MACH-155 - Introduction to CNC 4th Axis

This course is designed to develop the skills necessary for a CNC machinist to utilize a rotary 4th Axis attachment on a VMC. Pre-planning, program generation, 4th Axis set-up and operation, documentation, and MDI editing requirements are performed by the student on a Haas VMC with a 4th Axis attachment to develop these skills. The laboratory applications will emphasize the 4th Axis as a programmed indexer and 3d surface machining.

Lecture Hours: 2 Lab Hours: 2 Repeatable: No Grading: O

Prerequisite: MACH 153B with C or better

CAN: None
Advisory Level: Read: 3 Write: 3 Math: None
Transfer Status: CSU Degree Applicable: AS
CSU GE: Z District GE: None IGETC: None

MACH-156 - CNC Lathe I

This is an introduction to Computerized Numerical Control (CNC) turning machines and lathe machining techniques with emphasis on terminology, pre-planning skills, and basic program writing for Manual Data Input applications. Laboratory exercises will focus on the Fanuc 21i-T (on Daewoo Lynx CNC Lathe) and Mazatrol CNC controls (using computer simulators).

Lecture Hours: 3 Lab Hours: 6 Repeatable: No Grading: L

Credit by Exam: Yes
Prerequisite: MACH 151A or MACH 151B, both with C or better

CAN: None
Advisory Level: Read: 3 Write: 3 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: Z District GE: None IGETC: None

MACH-157 - CNC Lathe II

This course is designed to develop the skills required of a CNC Lathe Programmer/Operator. Pre-planning, program generation, machine set-up, machine operation, and editing requirements are covered with emphasis placed on turning. The laboratory applications primarily focused on the use of Fanuc control systems.

Lecture Hours: 3 Lab Hours: 6 Repeatable: No Grading: L

Credit by Exam: Yes
Prerequisite: MACH 156 with C or better

CAN: None
Advisory Level: Read: 3 Write: 3 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: Z District GE: None IGETC: None
Machine Technology

MACH-158 - Advanced CAD/CAM Operations for Machinists and Operators
Units: 2

Using PCs, students will prepare CNC Turning/Milling programs of moderately complex parts from supplied blueprints/models using FeatureCAM, SurfCAM, MasterCAM and other CAMs. There will be an emphasis on speed, accuracy, planning, and job documentation.

Lecture Hours: 1 Lab Hours: 3 Repeatable: No Grading: O

Prerequisite: MACH 154 with C or better

CAN: None
Advisory Level: Read: 3 Write: 3 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

MACH-359 - Beginning Fundamentals of Machine Technology
Units: 0.5

This course focuses on the practical aspects of machine tool processes. Students are introduced to the proper and safe application of measuring instruments and various hand tools. Students will learn basic set-up and operation of the lathe, milling machine, drill press and saws, with emphasis on safety.

Lecture Hours: 0.5 Lab Hours: 0.5 Repeatable: No Grading: K

Open Curriculum: No prerequisite, corequisite or levels

CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: None Degree Applicable: NAA
CSU GE: None District GE: None IGETC: None

Manufacturing

MFG-060 - Introduction to Automation Technology
Units: 5

This course introduces students to the basics of automation used at home, in building management and in industry. The X10 standard for home automation is discussed. The course covers components of an automation system and component operation such as sensors and servo systems. Automation applied to the semiconductor industry and building management is emphasized. The theory-lecture is re-enforced with hands on lab that provide application of the principles of operation and sensors and motion systems as well as simple control systems. Up-to-date technologies and possible future technologies are discussed.

Students also participate in research and oral presentations involving automation.

Lecture Hours: 4 Lab Hours: 6 Repeatable: No Grading: L

Prerequisite: ELECT 062
Corequisite: Or concurrent enrollment in ELECT 062
Recommended: CT 077

CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

MFG-103 - Measurement and Test
Units: 3

Students will learn to use instrumentation devices for the measurement of mechanical, electrical, fluid and other properties common to design and manufacturing processes. Fundamentals of data analysis and control systems will also be studied. This course is useful for engineering, design, manufacturing, and industrial technology applications.

Lecture Hours: 2 Lab Hours: 3 Repeatable: No Grading: L

Credit by Exam: Yes

CAN: None
Advisory Level: Read: 3 Write: 3 Math: 1
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

MFG-111 - Statistical Process Control
Units: 2

Students will learn how to use statistical tools and techniques to improve product quality and reduce production costs during rather than after production. The student will learn statistical control charts, evaluate process capability, design and evaluate sampling plans to improve manufacturing methods.

Lecture Hours: 2 Lab Hours: None Repeatable: No Grading: L

Credit by Exam: Yes

CAN: None
Advisory Level: Read: 2 Write: 2 Math: 1
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

MFG-112 - Technical Problem Solving
Units: 2

Students will develop leadership and problem solving skills applicable to technical fields. Data gathering, small group teambuilding and action plans will be taught and developed as part of this course. This course is useful for engineering, manufacturing, and industrial technology applications.

Lecture Hours: 2 Lab Hours: None Repeatable: No Grading: L

Credit by Exam: Yes

CAN: None
Advisory Level: Read: 3 Write: 3 Math: 1
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

MFG-136 - Manufacturing Occupational Work Experience-Parallel Plan
Units: 1 - 4

Occupational Work Experience is designed for students who work or volunteer in a field related to their vocational major. Students are required to provide evidence that they are enrolled in a vocational program (e.g., educational plan or course in a vocational subject area). The Parallel Plan is designed for students who wish to take classes and work during the same semester. A maximum of 4 units of Occupational Work Experience credit may be earned during any one semester, for a maximum of 16 units total. Students must be enrolled in at least 7 units including Work Experience units. Enrollment in an accredited secondary program Internship/job placement is not guaranteed.

Lecture Hours: None Lab Hours: 3 - 12 Repeatable: 15 Grading: O

Corequisite: 1) Be enrolled during the regular semester in a minimum of 7 units at any accredited college, including Work Experience units or 2) During a summer session, be enrolled in at least one other class in addition to Work Experience; and 3) Be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.

CAN: None
Advisory Level: Read: 3 Write: 3 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None
MFG-138 - Manufacturing Occupational Work Experience-Alternate Plan  Units: 1 - 8

Occupational Work Experience is designed for students who work or volunteer in a field related to their vocational major. Students are required to provide evidence that they are enrolled in a vocational program (e.g., educational plan or coursework in a vocational subject area). The Alternate Plan is designed to allow students attend school one semester and work the next. A maximum of 8 units of Occupational Work Experience credit may be earned during any one semester, to a maximum of 16 units total. Students may only take one (if any) class in addition to work experience. Internship/job placement is not guaranteed.

Lecture Hours: None  Lab Hours: 3 - 24  Repeatable: 15  Grading: O

Corequisite: 1. Need not be enrolled in any other class during the semester besides Work Experience. 2. May be enrolled in at most one other class in addition to Work Experience. 3. Must be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.

CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

MKTG-098 - Directed Study in Marketing  Units: 0.5 - 9

Individual or small groups of students who would benefit from Independent Study under the direction of faculty members in specific or related disciplines may develop individualized learning contracts designed to enhance their individual instructional programs. The students and the faculty member in consultation with the Division Dean will determine appropriate learning objectives and activities as well as the number of units to be earned. Instructions and the Learning Contract forms are available in the Division office. Repeatable to a maximum of 9 units across all disciplines.

Lecture Hours: None  Lab Hours: 1.5 - 27  Repeatable: 17  Grading: O

CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

MKTG-110 - Introduction to Personal Selling  Units: 3

This course provides the fundamentals of selling skills, qualifications for effective selling as well as techniques for organizing, staffing, motivating and evaluating the sales force. Topics covered in this course will include principles in selling, sales presentations, the salesperson as a merchandiser, customer service, sales organizations and functions, forecasting, sales force selection and training. Case studies will be used.

Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: L

CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

MKTG-112 - Marketing Communications  Units: 3

This course introduces the students to the fast-changing field of advertising and promotion. Emphasis is placed on integrated marketing communications (IMC) we call the "big picture" approach to planning marketing and promotional programs and coordinating the various communication functions: advertising, public relations, direct marketing, sales promotion, and personal selling. To understand the role of advertising and promotion in today's business world, one must recognize how a firm can use all the promotional tools to communicate with its customers.

Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: L

Recommended: MKTG 120
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

MKTG-120 - Marketing Principles  Units: 3

This course provides an introduction to the theory and practice of marketing as well as the integration of marketing activities of a business. Students will learn about marketing research, management of products and services, pricing policies and strategies, channels of distribution, physical distribution and logistics management, promotion strategies and tactics, government regulations and marketing ethics.

Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: L

CAN: None
Advisory Level: Read: 2  Write: 2  Math: 2
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

MKTG-121 - Marketing Strategies and Planning  Units: 2

This course allows small groups of students to serve as the management team of a company which competes in a simulated market environment with companies managed by other student groups. Through the simulation of marketing activities, students manage an artificial business firm making most of the major marketing decisions that are required of actual business managers. They are faced with problem situations very much like those which exist in the real world and gain valuable practice in making managerial decisions. Practical computer application or microcomputer-related activity may be included.

Lecture Hours: 2  Lab Hours: None  Repeatable: No  Grading: O

Recommended: MKTG 120 with C or better
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

MKTG-124 - International Marketing  Units: 3

This course introduces students to the essentials in marketing in the global market with emphasis in a variety of areas necessary for developing and implementing a successful international marketing operation. Topics covered include an examination of the changing global economy; identifying and adapting to the differences in culture, legal, political, social and economic systems; product development, pricing considerations and strategies, selection of distribution channels, logistics management and promotional strategies; negotiation and personal selling.

Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: L

CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

MKTG-126 - Retail Management  Units: 3

Retail management introduces students to the principles and practices of retail store operations. All major topics will be covered: consumers; site location; designing, staffing, and organizing; developing retail offering and getting merchandise into the store; developing and controlling the merchandise plan; setting and adjusting retail prices; promotional activities; and the importance of environmental influences; and financial statements and operations control.

Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: L

Recommended: MKTG 120 with C or better
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None
**Marketing**

**MKTG-128 - Electronic Marketing**

Units: 3

This course covers the principles of marketing in the context of application to the electronic businesses and marketing traditional businesses on the Internet. Topics covered will include developing new products/services in the web context, traffic building, brand recognition, consumer behavior, pricing, e-tailing, customer support and marketing planning for e-commerce. Case studies will be an integral part of the course.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

**Mathematics**

**MATH-011A - Introductory Algebra**

Units: 5

This is the first course in the algebra sequence in preparation for college-level mathematics. Topics include: operations on signed numbers and on polynomaical and rational expressions; methods for the solution of linear, quadratic and rational equations, and linear inequalities. The solution of word problems by algebraic formulation is integrated throughout the course. Optional topics may include methods for solving systems of linear equations and roots and radicals. This 5-unit version of basic algebra is designed for students who have never before satisfactorily completed an algebra course. Only three units are applicable toward the associate degree. Completion with a grade "C" or better fulfills the mathematics competency requirement for the AS degree.

Lecture Hours: 5 Lab Hours: None Repeatable: No Grading: O

Prerequisite: 3 units of MATH 310 with CR or placement based on math assessment.

CAN: None
Advisory Level: Read: 1 Write: None Math: None
Transfer Status: None Degree Applicable: AS
CSU GE: None District GE: M IGETC: None

**MATH-011L - Mathematics 1L Workshop**

Units: 1

This course is an adjunct to Mathematics 011. It is designed to provide students with additional in-class academic experiences and expectations, and stresses excellence and peer interaction. Under the direction of the workshop leader, students will work in small groups solving challenging problems related to the content of Mathematics 011.

Lecture Hours: None Lab Hours: 3 Repeatable: No Grading: O

Corequisite: MATH 011A or MATH 011R or MATH 011S or MATH 012

CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: None Degree Applicable: AS
CSU GE: None District GE: None IGETC: None

**MATH-011R - Review of Introductory Algebra**

Units: 3

This is a fast-paced review of introductory algebra. Topics covered include operations with algebraic expressions, polynomials and rational expressions, factoring polynomials, linear equations, solutions of quadratic equations by factoring, solutions of linear systems by graphing, elimination, substitution, and algebraic methods for solving word problems. Students who have received credit for Mathematics 011A, 011R, or 012 will not receive credit for this course.

Lecture Hours: 3 Lab Hours: None Repeatable: 4 Grading: O

Prerequisite: 3 units of MATH 310 with CR or placement based on math assessment.

CAN: None
Advisory Level: Read: 1 Write: None Math: None
Transfer Status: None Degree Applicable: AS
CSU GE: None District GE: M IGETC: None

**MATH-011S - Self-Paced Introductory Algebra**

Units: 1 - 5

This is a self-paced course in introductory algebra. Topics covered include operations with algebraic expressions, polynomials and rational expressions, factoring polynomials, linear equations, solutions of quadratic equations by factoring, solutions of linear systems by graphing, elimination, substitution, and algebraic methods for solving word problems. Students who have received credit for Mathematics 11A, 11R, or 12 will not receive credit for this course.

Lecture Hours: 1.5 Lab Hours: 9 Repeatable: 4 Grading: K

Prerequisite: 3 units of MATH 310 with CR or placement based on math assessment.

Recommended: Current knowledge of the concepts of Mathematics 310, Basic Mathematics

CAN: None
Advisory Level: Read: 1 Write: None Math: None
Transfer Status: None Degree Applicable: AS
CSU GE: None District GE: M IGETC: None

**MATH-013 - Intermediate Algebra**

Units: 5

This course continues the Algebra sequence and is a prerequisite to college level math courses. It is required of students planning to transfer to CSU or UC systems. Intermediate Algebra reviews the first course in algebra and explores more deeply the real number system, properties of algebraic systems, absolute value in equations and inequalities, complex numbers, properties of rational exponents and logarithms, roots and radicals, functions, and inverse functions. Content may include determinants, Cramer's rule, matrices, simultaneous solutions of sets of equations, sequences and series, or conic sections.

Lecture Hours: 5 Lab Hours: None Repeatable: No Grading: O

Prerequisite: MATH 011A or 011R or MATH 012 or MATH 011S or MATH 101 or ELECT 121; all with C or better or placement based on assessment.

CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: None Degree Applicable: AS
CSU GE: None District GE: None IGETC: None

**MATH-013L - Mathematics 13 Workshop**

Units: 1

This course is an adjunct to Mathematics 013. It is designed to provide students with additional in-class academic experiences and expectations, and stresses excellence and peer interaction. Under the direction of the workshop leader, students will work in small groups solving challenging problems related to the content of Mathematics 013.

Lecture Hours: None Lab Hours: 3 Repeatable: No Grading: O

Corequisite: MATH 013

CAN: None
Advisory Level: Read: 1 Write: None Math: None
Transfer Status: None Degree Applicable: AS
CSU GE: None District GE: None IGETC: None

**MATH-013S - Self-paced Intermediate Algebra**

Units: 1 - 5

This is a self-paced course using computer aided instruction. The course may be completed over one or more semesters. This course continues the algebra sequence and is equivalent to the second year of college preparatory algebra. It is prerequisite to mathematics courses which transfer to the CSU or UC systems. Intermediate Algebra reviews the first course in algebra and explores more deeply the real number system, properties of algebraic systems, absolute value in equations and inequalities, complex numbers, simultaneous solutions of sets of equations, determinants, matrices, conic sections, functions, and inverse functions. Content may include exponential and logarithmic functions or sequences and series.

Lecture Hours: 1 - 5 Lab Hours: None Repeatable: 4 Grading: K

Prerequisite: MATH 011A or MATH 011R or MATH 012 or MATH 011S or MATH 101 or ELECT 121; all with C or better

CAN: None
Advisory Level: Read: 1 Write: None Math: None
Transfer Status: None Degree Applicable: AS
CSU GE: None District GE: None IGETC: None
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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>MATH-014</td>
<td>Geometry</td>
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<tr>
<td>MATH-021</td>
<td>Precalculus Algebra</td>
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<td>MATH-022</td>
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<td>MATH-025</td>
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<td>MATH-051</td>
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<tr>
<td>MATH-052</td>
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<td>3</td>
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<tr>
<td>MATH-052L</td>
<td>Mathematics 052 Skills Laboratory</td>
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</tbody>
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The course involves the study of plane geometric figures and relationships. This includes logical proofs, constructions, and numerical calculations. It may include additional topics in solid geometry and analytic geometry. This course is highly recommended for anyone who has not had or wishes to review high school geometry. This course is a pre-requisite to Precalculus Algebra.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: O
Prerequisite: MATH 011A or MATH 011R or MATH 011S or MATH 012 or MATH 101 or ELECT 121; all with C or better or placement based on assessment.

CAN: None
Advisory Level: Math: None
Transfer Status: None Degree Applicable: AS
CSU GE: None District GE: None IGETC: None

This course is designed to prepare the student for the level of algebra required in calculus. Study will be made of basic algebraic concepts, complex numbers, equations and inequalities of the first and second degree, functions and graphs, linear and quadratic functions, polynomial functions of higher degree, rational functions, and systems of equations and inequalities. Additional topics may include exponential and logarithmic functions, matrices, counting and probability, conic sections, and sequences and series. Students may not receive credit for both Math 021 and 022.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L
Credit by Exam: Yes
Prerequisite: (MATH 013 or ELECT 122) and MATH 014, all with C or better or equivalent.

CAN: MATH 10
Advisory Level: Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: B4 District GE: B4 IGETC: 2A

This course is a pre-requisite to Precalculus Algebra 021. It is designed to provide students with additional in-class academic experiences and expectations, and stresses excellence and peer interaction. Under the direction of the workshop leader, students will work in small groups solving challenging problems related to the content of Mathematics 021.

Lecture Hours: None Lab Hours: 3 Repeatable: No Grading: L
Corequisite: MATH 021

CAN: None
Advisory Level: Math: None
Transfer Status: None Degree Applicable: AS
CSU GE: None District GE: None IGETC: None

This course in numerical and analytical trigonometry is designed to prepare the student for the level of trigonometry and advanced algebraic concepts necessary for calculus. Study will be made of trigonometric functions, basic identities, equations, graphing, inverse trigonometric functions, vectors, polar coordinates, conic sections, and sequences and series. Students may not receive credit for both Math 022 and Math 025.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L
Credit by Exam: Yes
Prerequisite: (MATH 013 or ELECT 122) and MATH 014, all with C or better or equivalent.

CAN: MATH 8
Advisory Level: Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: B4 District GE: B4 IGETC: None

This course is an adjunct to Mathematics 021. It is designed to provide students with additional in-class academic experiences and expectations, and stresses excellence and peer interaction. Under the direction of the workshop leader, students will work in small groups solving challenging problems related to the content of Mathematics 021.

Lecture Hours: None Lab Hours: 3 Repeatable: No Grading: L
Corequisite: MATH 021

CAN: None
Advisory Level: Math: None
Transfer Status: None Degree Applicable: AS
CSU GE: None District GE: None IGETC: None

This course is an intensive combined course in precalculus algebra and trigonometry designed primarily as preparation for the calculus. Study will be made of basic algebraic concepts, complex numbers, equations and inequalities of the first and second degree, functions and graphs, linear and quadratic functions, polynomial functions of higher degree, systems of equations and inequalities, rational functions, exponential and logarithmic functions, trigonometric functions, basic identities, equations, graphing, inverse trigonometric functions, vectors, polar coordinates, conic sections, and sequences and series. Students may not receive credit for both Math 021 and Math 025, or for both Math 022 and Math 025.

Lecture Hours: 5 Lab Hours: None Repeatable: No Grading: L
Credit by Exam: Yes
Prerequisite: (MATH 013 or ELECT 122) and MATH 014, all with C or better or equivalent.

CAN: MATH 16
Advisory Level: Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: B4 District GE: B4 IGETC: 2A

This course is intended for non-science majors, such as social studies or humanities students. It fulfills the general education requirement in Mathematics in the CSU system. Topics will be selected from: patterns, inductive reasoning, methods of proof, problem solving, set theory and logic, counting principles, probability and statistics, basic computer programs, consumer arithmetic, geometry, number systems, mathematical modeling, code theory, exponential and logarithmic functions, fractals, graph theory, mathematics of social science, and cryptography.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L
Credit by Exam: Yes
Prerequisite: MATH 013 or ELECT 122, both with C or better

CAN: MATH 2
Advisory Level: Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: B4 District GE: B4 IGETC: None

Mathematics 052 or its equivalent is required of prospective elementary teachers. It covers the structures of the real number system, elementary number theory, and manipulative techniques useful in presenting mathematical concepts to children. Students learn by lecture, problem-solving, and participating in projects. An optional Math 052 laboratory is available.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L
Prerequisite: MATH 013 and MATH 014, both with C or better

CAN: MATH 4
Advisory Level: Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: B4 District GE: B4 IGETC: None

This course is designed for students concurrently enrolled in Mathematics 052, Mathematics for Elementary Education. Students will reinforce their arithmetic, algebraic, and problem-solving skills to support their learning of the Math 052 course material. Math 052L is an optional course for students in Math 052.

Lecture Hours: None Lab Hours: 1.5 Repeatable: No Grading: K
Corequisite: MATH 052

CAN: None
Advisory Level: Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None
### Mathematics

#### MATH-061 - Finite Mathematics

**Units:** 3

Finite Mathematics is the application of skills acquired in algebra to problems in economics, behavioral sciences and social science. Content includes systems of linear equations and inequalities, matrices, linear programming set theory, counting techniques, probability theory, mathematics of finance, and Markov processes. Optional topics include game theory and graph theory.

- **Lecture Hours:** 3
- **Lab Hours:** None
- **Repeatable:** No
- **Grading:** L

**Prerequisite:** MATH 013 or ELECT 122, both with C or better

**Advisory Level:**
- **Read:** 2
- **Write:** 2
- **Math:** None

**Transfer Status:**
- **CSU/UC Degree Applicable:** AA/AS

**CAN:**
- **MATH 12
- **STAT 2**

**MATH-063 - Elementary Statistics

**Units:** 3

This course is an introduction to the study of statistics. It does not require a knowledge of the calculus but does assume a familiarity with the basic concepts of intermediate algebra. Topics to be covered will include methods of describing data, common sample statistics, probability theory, random variables, common statistical distributions, point and interval estimation, hypothesis testing, and regression and correlation. Additional topics may include goodness of fit, tests of independence, non-parametric methods, and analysis of variance. Students will be required to use a computer software package or a hand calculator to complete several laboratory projects.

- **Lecture Hours:** 3
- **Lab Hours:** None
- **Repeatable:** No
- **Grading:** L

**Credit by Exam:** Yes

**Prerequisite:** MATH 013 or ELECT 122, both with C or better

**Advisory Level:**
- **Read:** 2
- **Write:** 2
- **Math:** None

**Transfer Status:**
- **CSU/UC Degree Applicable:** AA/AS

**CAN:**
- **MATH 12
- **STAT 2**

#### MATH-070 - Discrete Mathematics

**Units:** 3

This course is useful in preparing for work in computer science and for further study of combinatorics or probability and statistics. The content includes set theory, logic, counting techniques, and introduction to probability theory, recurrence relations, graphs, trees, network models and Boolean Algebra. Computer assignments will be given to explore some of these topics.

- **Lecture Hours:** 3
- **Lab Hours:** None
- **Repeatable:** No
- **Grading:** L

**Prerequisite:** (MATH 021 and MATH 022) or MATH 025, all with C or better

**Advisory Level:**
- **Read:** 2
- **Write:** 2
- **Math:** None

**Transfer Status:**
- **CSU/UC Degree Applicable:** AA/AS

**CAN:**
- **CSCI 26
- **CSCI 26H**

#### MATH-071 - Calculus I with Analytic Geometry

This is the first course in calculus and analytic geometry for students majoring in mathematics, physical science, computer science, or engineering. It includes functions and graphs, topics in analytic geometry, the analysis of algebraic and trigonometric functions, limits, derivatives, integrals, and applications.

- **Lecture Hours:** 5
- **Lab Hours:** None
- **Repeatable:** No
- **Grading:** L

**Credit by Exam:** Yes

**Prerequisite:** (MATH 021 and MATH 022) or MATH 025, all with C or better

**Advisory Level:**
- **Read:** 2
- **Write:** 2
- **Math:** None

**Transfer Status:**
- **CSU/UC Degree Applicable:** AA/AS

**CAN:**
- **MATH 18
- **MATH SEQ B = MATH 71+72
- **MATH SEQ C = MATH 71+72+73**

**MATH-071L - Mathematics 71 Workshop

**Units:** 1

This course is adjunct to Mathematics 071. It is designed to provide students with additional in-class academic experiences and expectations, stressing peer interaction. Under the direction of the workshop leader, students will work in small groups to solve challenging problems related to the content of Mathematics 071.

- **Lecture Hours:** None
- **Lab Hours:** 3
- **Repeatable:** No
- **Grading:** L

**Corequisite:** MATH 071

**Advisory Level:**
- **Read:** 2
- **Write:** 2
- **Math:** None

**Transfer Status:**
- **CSU Degree Applicable:** AA/AS

**CAN:**
- **None
- **MATH 12**

#### MATH-072 - Calculus II with Analytic Geometry

This is the second course in calculus and analytic geometry for students majoring in mathematics, physical sciences, computer science, or engineering. It contains a thorough study of logarithmic and exponential functions, hyperbolic functions, inverse trigonometric and hyperbolic functions, topics in analytic geometry, techniques of integration, parametric equations and polar coordinates, infinite sequences and series, and further applications of integration. Additional topics may include vectors and vector calculus in the plane.

- **Lecture Hours:** 5
- **Lab Hours:** 0
- **Repeatable:** No
- **Grading:** L

**Credit by Exam:** Yes

**Prerequisite:** MATH 071 with C or better

**Advisory Level:**
- **Read:** 2
- **Write:** 2
- **Math:** None

**Transfer Status:**
- **CSU/UC Degree Applicable:** AA/AS

**CAN:**
- **MATH 20
- **MATH SEQ B = MATH 72+71
- **MATH SEQ C = MATH 72+71+73**

**MATH-072L - Mathematics 72 Workshop

**Units:** 1

This course is adjunct to Mathematics 072. It is designed to provide students with additional in-class academic experiences and expectations, stressing peer interaction. Under the direction of the workshop leader, students will work in small groups to solve challenging problems related to the content of Mathematics 072.

- **Lecture Hours:** None
- **Lab Hours:** 3
- **Repeatable:** No
- **Grading:** L

**Corequisite:** MATH 072

**Advisory Level:**
- **Read:** 2
- **Write:** 2
- **Math:** None

**Transfer Status:**
- **CSU Degree Applicable:** AA/AS

**CAN:**
- **None
- **MATH 20**

#### MATH-073 - Multivariable Calculus

Mathematics 73 completes the three semester calculus sequence begun with Mathematics 71 and 72. Mathematics 73 is required of mathematical majors, engineering majors and some physical science majors. In this course the concepts of calculus are extended to functions of more than one variable. The content includes three dimensional analytic geometry and vectors, partial derivatives, multiple integrals and vector calculus.

- **Lecture Hours:** 4
- **Lab Hours:** None
- **Repeatable:** No
- **Grading:** L

**Credit by Exam:** Yes

**Prerequisite:** MATH 072 with C or better

**Advisory Level:**
- **Read:** 2
- **Write:** 2
- **Math:** None

**Transfer Status:**
- **CSU/UC Degree Applicable:** AA/AS

**CAN:**
- **MATH 22
- **MATH SEQ C = MATH 71+72+73**

**MATH-073L - Mathematics 73 Workshop

**Units:** 1

This course is adjuct to Mathematics 073. It is designed to provide students with additional in-class academic experiences and expectations, stressing peer interaction. Under the direction of the workshop leader, students will work in small groups to solve challenging problems related to the content of Mathematics 073.

- **Lecture Hours:** None
- **Lab Hours:** 3
- **Repeatable:** No
- **Grading:** L

**Corequisite:** MATH 073

**Advisory Level:**
- **Read:** 2
- **Write:** 2
- **Math:** None

**Transfer Status:**
- **CSU/UC Degree Applicable:** AA/AS

**CAN:**
- **None
- **MATH 22
- **MATH SEQ C = MATH 71+72+73**
MATH-078 - Differential Equations
This course is a study of ordinary differential equations and their applications to problems in engineering and science. Methods are developed for solving equations of order one, linear equations of arbitrary order, and linear systems. Students are introduced to series methods, Laplace transforms and numerical methods. Use of mathematical software (e.g., MATLAB, Maple) will also be introduced. Note: Some UC campuses combine differential equations with linear algebra and give transfer credit for Math 78 only when it is transferred together with Math 79. Some CSU campuses offer differential equations as an upper division course and give content credit only for Math 78.
Lecture Hours: 3, Lab Hours: None, Repeatable: No, Grading: L
Prerequisite: MATH 072 with C or better
Recommended: MATH 073
CAN: MATH 24
Advisory Level: Read: 2, Write: 2, Math: 7
Transfer Status: CSU/UC, Degree Applicable: AA/AS
CSU GE: B4, District GE: B4, IGETC: 2A
Units: 3

MATH-079 - Linear Algebra
This course is designed for students majoring in math, physics, computer science, or engineering. Content includes linear systems and matrices, linear transformations, determinants, vector spaces and their properties, orthogonality and inner product spaces, eigenvalues and eigenvectors, diagonalization and applications of matrix algebra to computer graphics. Students will also be introduced to calculations using mathematical software (e.g. MATLAB or similar).
Note: Some UC campuses combine differential equations with linear algebra and give credit for Math 79 only when it is transferred with Math 78. Some CSU campuses offer linear algebra as an upper division course and so will give content credit only for Math 79.
Lecture Hours: 3, Lab Hours: None, Repeatable: No, Grading: L
Credit by Exam: Yes
Prerequisite: MATH 072 with C or better
Recommended: MATH 73
CAN: MATH 26
Advisory Level: Read: 2, Write: 2, Math: 7
Transfer Status: CSU/UC, Degree Applicable: AA/AS
CSU GE: B4, District GE: B4, IGETC: 2A
Units: 3

MATH-082 - Computer Programming with Mathematical and Scientific Applications
This course is an introduction to program design and its use in solving problems in mathematics and science. Issues of programming style, approaches to program design, program documentation and debugging are discussed. Topics include language syntax, data input and output, algorithmic development, control structures, methods, recursion, data structures, searching, sorting, classes and data abstractions. Numerous programming assignments requiring a knowledge of the calculus are given. Course is designed for students planning to transfer into upper division majors which have a calculus based programming requirement using a high-level language. (Currently, SJCC is using Java as the language for this course.)
Lecture Hours: 3, Lab Hours: 3, Repeatable: No, Grading: L
Credit by Exam: Yes
Prerequisite: MATH 071 with C or better
Corequisite: CIS 200
CAN: None
Advisory Level: Read: None, Write: None, Math: 5
Transfer Status: CSU/UC, Degree Applicable: AA/AS
CSU GE: None, District GE: None, IGETC: None
Units: 4

MATH-083 - Data Structures and Advanced Programming
This course covers data structures, algorithms, data abstraction, and encapsulation. Topics to be studied include modular programming, exception throwing, reference variables, storage allocation, lists, stacks, queues, trees, graphs, hashing, searching and sorting algorithms, and Big-O analysis of algorithms. This course, and Math 082 are designed for students planning to transfer into upper division majors which require a calculus-based, two-semester sequence, based on a high level programming language. (Currently, SJCC is using Java as the language for this course.)
Lecture Hours: 3, Lab Hours: 3, Repeatable: No, Grading: L
Credit by Exam: Yes
Prerequisite: MATH 082 with C or better
Corequisite: CIS 200
CAN: None
Advisory Level: Read: 2, Write: 2, Math: None
Transfer Status: CSU/UC, Degree Applicable: AA/AS
CSU GE: None, District GE: None, IGETC: None
Units: 4

MATH-098 - Directed Study in Mathematics
Individual or small groups of students who would benefit from Independent Study under the direction of faculty members in specific or related disciplines may develop individualized learning contracts designed to enhance their individual instructional programs. The students and the faculty member in consultation with the Division Dean will determine appropriate learning objectives and activities as well as the number of units to be earned. Instructions and the Learning Contract forms are available in the Division office. Repeatable to a maximum of 9 units across all disciplines.
Lecture Hours: None, Lab Hours: 1.5 - 27, Repeatable: 17, Grading: O
CAN: None
Advisory Level: Read: 2, Write: 2, Math: None
Transfer Status: CSU, Degree Applicable: AA/AS
CSU GE: None, District GE: None, IGETC: None
Units: 0.5 - 9

MATH-310 - Basic Mathematics
This course provides college students a review and practice in fundamental computational skills in mathematics needed for various courses and life situations. The course content includes arithmetic operations with whole numbers, fractions, decimals, percents, measurements and aspects of geometry. This course may be offered on a lecture or self-paced basis. Repeatable to a maximum of 3 units.
Lecture Hours: 1 - 3, Lab Hours: 3 - 9, Repeatable: 2, Grading: K
Open Curriculum: No prerequisite, corequisite or levels
CAN: None
Advisory Level: Read: None, Write: None, Math: None
Transfer Status: None, Degree Applicable: NAA
CSU GE: None, District GE: None, IGETC: None
Units: 1 - 3

MATH-311 - Pre-Algebra
This course is designed for those students who have a foundation in arithmetic but need to develop further skills before taking Introductory Algebra. It is intended to serve as a bridge between arithmetic operations and elementary algebra. Topics include: integers, fractions, decimals, percents, exponents, scientific notation, order of operations, variables, algebraic expressions, equations, basic geometric shapes and simple applications.
Lecture Hours: 3, Lab Hours: None, Repeatable: No, Grading: K
Prerequisite: 3 units of MATH 310 with CR or placement based on math assessment.
CAN: None
Advisory Level: Read: None, Write: None, Math: None
Transfer Status: None, Degree Applicable: NAA
CSU GE: None, District GE: None, IGETC: None
Units: 3
**Mathematics**

**MATH-320 - Basic Arithmetic Skills**
- **Units:** 1

This is a self-paced lab course in basic Arithmetic. This course prepares students for Math 310. This course will focus on basic skills including addition, subtraction, multiplication and division of whole numbers, fractions, and decimals.

Lecture Hours: None  Lab Hours: 3  Repeatable: No  Grading: K

Open Curriculum: No prerequisite, corequisite or levels

CAN: None

Advisory Level: Read: None  Write: None  Math: None

Transfer Status: None  Degree Applicable: NAA

CSU GE: None  District GE: None  IGETC: None

**Meat Cutting Apprenticeship**

**MCUT-001 - Meat Cutting I**
- **Units:** 3

This is the first of two Meat Cutting Apprenticeship courses. Students must be enrolled in the Santa Clara County Meat Cutter's Joint Apprenticeship to enroll. Students learn safety and sanitation related to meat cutting; classification, identification, handling and curing.

Lecture Hours: 3  Lab Hours: 0  Repeatable: No  Grading: L

Corequisite: Student must be employed as a meat cutter apprentice with a participating employer.

CAN: None

Advisory Level: Read: 2  Write: 2  Math: None

Transfer Status: None  Degree Applicable: NAA

CSU GE: None  District GE: None  IGETC: None

**MCUT-002 - Meat Cutting II**
- **Units:** 3

This is the second of two Meat Cutting Apprenticeship courses leading to journeyman status. Students must be enrolled in the Santa Clara County Meat Cutter Apprenticeship to enroll. Students learn safety and sanitation related to meat cutting; classification, identification, handling and curing.

Lecture Hours: 3  Lab Hours: 0  Repeatable: No  Grading: L

Corequisite: Student must be employed as a meat cutter apprentice with a participating employer.

CAN: None

Advisory Level: Read: 2  Write: 2  Math: None

Transfer Status: None  Degree Applicable: NAA

CSU GE: None  District GE: None  IGETC: None

**MCUT-138 - Meat Cutting Occupational Work Experience - Alternate Plan**
- **Units:** 1 - 8

Occupational Work Experience is designed for students who work or volunteer in a field related to their vocational major. Students are required to provide evidence that they are enrolled in a vocational program (e.g., educational plan or coursework in a vocational subject area). The Alternate Plan is designed to allow students attend school one semester and work the next. A maximum of 8 units of Occupational Work Experience credit may be earned during any one semester, to a maximum of 16 units total. Students may only take one (if any) class in addition to work experience. Internship/job placement is not guaranteed.

Lecture Hours: 0  Lab Hours: 3 - 24  Repeatable: 15  Grading: O

Corequisite: 1. Need not be enrolled in any other class during the semester besides Work Experience. 2. May be enrolled in at most one other class in addition to Work Experience. 3. Must be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.

CAN: None

Advisory Level: Read: 3  Write: 3  Math: None

Transfer Status: None  Degree Applicable: AA/AS

CSU GE: None  District GE: None  IGETC: None

**Meteorology**

**METEO-010 - Weather and Climate**
- **Units:** 3

This course introduces the student to the science of the atmosphere. It employs physical and chemical principles in exploring the evolution of the atmosphere's structure and composition, the causes of weather, radiation and energy in the atmosphere, adiabatic processes, condensation and precipitation, formation of clouds, the origins and development of storms, urban weather, acid rain and photochemical smog, ozone, depletion, the greenhouse effect, elements of forecasting, global and local climates, and climatic change. The course is designed for non-science majors and to apply to the baccalaureate general education requirements in physical science at the CSU or UC systems.

Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: L

Recommended: 3 units of MATH 310 with CR or placement based on assessment.

CAN: None

Advisory Level: Read: 2  Write: 2  Math: 1

Transfer Status: CSU/UC  Degree Applicable: AA/AS

CSU GE: B1  District GE: B  IGETC: 5A

**Microbiology**

**MICRO-070 - General Microbiology**
- **Units:** 5

Microbiology covers the structure and activities of microorganisms, including protozoa, algae, fungi, bacteria, and viruses. Principles of microbial control, metabolism, genetics, environmental microorganisms, food and industrial microbiology, disease, modes of infection, and immunity will be studied. Aseptic laboratory technique and the application of microbiology to human welfare are emphasized.

Lecture Hours: 3  Lab Hours: 6  Repeatable: No  Grading: L

Prerequisite: (CHEM 001A or CHEM 011A or CHEM 015 or CHEM 030A or CHEM 065 or CHEM 089) and (A&P 003 or ANAT 001 or BIOL 001 or BIOL 002 or PHYSIO 060); all with C or better

CAN: BIOL 14

Advisory Level: Read: 3  Write: None  Math: 2

Transfer Status: CSU/UC  Degree Applicable: AA/AS

CSU GE: None  District GE: None  IGETC: None

**MICRO-098 - Directed Study in Microbiology**
- **Units:** 0.5 - 9

Individual or small groups of students who would benefit from Independent Study under the direction of faculty members in specific or related disciplines may develop individualized learning contracts designed to enhance their individual instructional programs. The students and the faculty member in consultation with the Division Dean will determine appropriate learning objectives and activities as well as the number of units to be earned. Instructions and the Learning Contract forms are available in the Division Office. Repeatable to a maximum of 9 units across all disciplines.

Lecture Hours: None  Lab Hours: 1.5 - 27  Repeatable: 17  Grading: O

CAN: None

Advisory Level: Read: 3  Write: 3  Math: None

Transfer Status: CSU  Degree Applicable: AA/AS

CSU GE: None  District GE: None  IGETC: None
**MultiMedia**

**MULTI-136 - Multimedia/Digital Arts**

**Occupational Work Experience - Parallel Plan**

Occupational Work Experience is designed for students who work or volunteer in a field related to their vocational major. Students are required to provide evidence that they are enrolled in a vocational program (e.g., educational plan or coursework in a vocational subject area). The Parallel Plan is designed for students who wish to take classes and work during the same semester. A maximum of 4 units of Occupational Work Experience credit may be earned during any one semester, to a maximum of 16 units total. Students must be enrolled in at least 7 units including Work Experience units. Courses taken at other accredited colleges or equivalent course work may meet this requirement. Internship/job placement is not guaranteed.

Lecture Hours: None  Lab Hours: 3 - 12  Repeatable: 15  Grading: O

Corequisite: 1) Be enrolled during the regular semester in a minimum of 7 units at any accredited college, including Work Experience units or; 2) During a summer session, be enrolled in at least one other class in addition to Work Experience; and 3) Be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.

CAN: None  Advisory Level: Read: 3  Write: 3  Math: None

Transfer Status: CSU GE: None  District GE: None  IGETC: None

**MULTI-138 - Multimedia/Digital Arts**

**Occupational Work Experience - Alternate Plan**

Occupational Work Experience is designed for students who work or volunteer in a field related to their vocational major. Students are required to provide evidence that they are enrolled in a vocational program (e.g., educational plan or coursework in a vocational subject area). The Alternate Plan is designed to allow students attend school one semester and work the next. A maximum of 8 units of Occupational Work Experience credit may be earned during any one semester, to a maximum of 16 units total. Students may only take one (if any) class in addition to Work Experience. Internship/job placement is not guaranteed.

Lecture Hours: None  Lab Hours: 3 - 24  Repeatable: 15  Grading: O

Corequisite: 1. Need not be enrolled in any other class during the semester besides Work Experience. 2. May be enrolled in at least one other class in addition to Work Experience. 3. Must be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.

CAN: None  Advisory Level: Read: 3  Write: 3  Math: None

Transfer Status: CSU GE: None  District GE: None  IGETC: None

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**Music**

**MUSIC-014 - Musicians' Workshop**

This is a course in music rehearsal process which culminates in public performance. Students participate as musicians, rehearsing and performing repertory, arrangements and original student and faculty compositions.

Lecture Hours: None  Lab Hours: 1.5  Repeatable: 15  Grading: L

Open Curriculum: No prerequisite, corequisite or levels  CAN: None  Advisory Level: Read: None  Write: None  Math: None  Transfer Status: CSU GE: None  District GE: None  IGETC: None

**MUSIC-020 - Class Piano**

**Units: 1**

This course is designed for intermediate pianists to improve their technique and interpretive abilities. Study and testing materials are drawn from a graduated series of exercises, études, and representative piano works. The student will learn how to assess and provide the stylistic nuances and phrasing concepts required for the performance of repertoire work from the Renaissance through the 20th century. Repeatable to a maximum of 4 units.

Lecture Hours: None  Lab Hours: 3  Repeatable: 3  Grading: O

Prerequisite: MUSIC 050B

CAN: None  Advisory Level: Read: None  Write: None  Math: None

Transfer Status: CSU/UC GE: None  Degree Applicable: AA/AS  CSU GE: None  District GE: None  IGETC: None

**MUSIC-028 - Class Guitar**

**Units: 1**

This course is designed for intermediate classical guitar students. The emphasis is on left and right hand positions, sitting posture, and tone production. It introduces progressive scales, arpeggios and tremolo exercises. The student will develop performance competency of the guitar repertoire - Renaissance, Baroque, Classical, Romantic, and Contemporary Periods. Repeatable to a maximum of 4 units.

Lecture Hours: None  Lab Hours: 3  Repeatable: 3  Grading: O

Prerequisite: MUSIC 058A and MUSIC 058B

CAN: None  Advisory Level: Read: None  Write: None  Math: None

Transfer Status: CSU/UC GE: None  Degree Applicable: AA/AS  CSU GE: None  District GE: None  IGETC: None

**MUSIC-039 - Chamber Music**

**Units: 1.5**

Chamber Music is a four semester team-taught course designed to enable a student to study, rehearse, and perform chamber music of the Renaissance, Baroque, Classic, Romantic, and Contemporary periods. Small ensembles of strings, woodwinds, brass, voice, and guitar will be formed. Students will be placed in groups commensurate with their ability and interest and will perform in a recital format on several occasions each semester. Music to be studied will range from intermediate to advanced in difficulty and will be selected from masterworks of renowned composers. Repeatable to a maximum of 6 units.

Lecture Hours: None  Lab Hours: 4.5  Repeatable: 3  Grading: O

Prerequisite: MUSIC 059A and MUSIC 059B or tech ability to perform 2 sonatas of the early baroque era

CAN: None  Advisory Level: Read: None  Write: None  Math: None

Transfer Status: CSU/UC GE: None  Degree Applicable: AA/AS  CSU GE: None  District GE: None  IGETC: None

**MUSIC-050A - Beginning Piano**

**Units: 1**

This is an introductory course in piano. The course is designed for students wanting to learn music using the piano as a vehicle for learning. The course covers basic theory concepts such as the 5-finger pattern, intervals, chords, simple chord progressions, and scales. This course reinforces concepts taught in the theory courses. Students will harmonize simple melodies, transpose and improvise simple pieces and patterns. Repeatable to a maximum of 4 units.

Lecture Hours: None  Lab Hours: 3  Repeatable: 3  Grading: O

Open Curriculum: No prerequisite, corequisite or levels  CAN: None  Advisory Level: Read: None  Write: None  Math: None  Transfer Status: CSU/UC GE: None  Degree Applicable: AA/AS  CSU GE: None  District GE: None  IGETC: None
Music

MUSIC-050B - Beginning Piano Units: 1
This is the second semester introductory course in piano. The course is designed for students wanting to learn music using the piano as a vehicle for learning. The course expands on basic theory concepts like the 5-finger pattern, intervals, chords, simple chord progressions, and scales. This course reinforces concepts taught in the theory courses. Students will harmonize simple melodies, transpose and improvise simple pieces and patterns. Repeatable to a maximum of 4 units.
Lecture Hours: None Lab Hours: 3 Repeatable: 3 Grading: O
Prerequisite: MUSIC 050A
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

MUSIC-054A - Beginning Brass Units: 1
This course introduces the student to the fundamentals of playing brass instruments. Students will learn the discipline and physical coordination of the components of sound production as they apply to the breath and body, specifically embouchure, tongue, hands, arms and use of weight quality. The importance of the ear in the recognition of pitch sequences, rhythmic patterns and tone quality is a controlling element in the process. Creative responses to musical situations require the student to apply reasoning and critical thinking skills and to use aesthetic judgment based on a set of parameters. Learning to read music notation is a requirement of the course. Study and testing materials are drawn from basic technical and rhythmical studies, scales, and simple songs.
Lecture Hours: None Lab Hours: 3 Repeatable: 3 Grading: O
Open Curriculum: No prerequisite, corequisite or levels
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

MUSIC-054B - Beginning Brass Units: 1
This course continues the reinforcement and application of the fundamentals of playing a brass instrument as established in Music 054A, Beginning Brass. The students will learn to apply these fundamentals to music situations of increasing complexity and difficulty. Study and testing material are drawn from progressively more advanced technical and rhythmic studies, solo repertoire and scales and arpeggios. It is recommended that students who are having difficulty reading music notation take Music 050A or Music 099 as a corequisite to Music 054B.
Lecture Hours: None Lab Hours: 3 Repeatable: 3 Grading: O
Prerequisite: MUSIC 054A
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

MUSIC-058A - Beginning Guitar Units: 1
A study of folk and pop guitar technique and musicianship involving a series of exercises and songs. Fundamentals of tone production: sitting position, hand and arm positions, basic technical and rhythmic studies. Repeatable to a maximum of 4 units.
Lecture Hours: None Lab Hours: 3 Repeatable: 3 Grading: O
Open Curriculum: No prerequisite, corequisite or levels
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

MUSIC-058B - Beginning Guitar Units: 1
This is a beginning course of class instruction in guitar which introduces the student to correct hand and arm position and posture, fundamentals of tone production, and basic technical and rhythmical studies. Repeatable to a maximum of 4 units.
Lecture Hours: None Lab Hours: 3 Repeatable: 3 Grading: O
Prerequisite: MUSIC 058A
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

MUSIC-059A - Introduction to Chamber Music Units: 1.5
This course is an introduction to chamber music for students with little or no previous experience. This part will cover fundamentals of ensemble playing such as the role of each instrument in various types of ensembles, correct placement and seating in each group, how to begin a work without a conductor and how to listen and interact during actual rehearsal or performance of music.
Lecture Hours: None Lab Hours: 4.5 Repeatable: 3 Grading: O
Open Curriculum: No prerequisite, corequisite or levels
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

MUSIC-059B - Introduction to Chamber Music Units: 1.5
The development of technical skills, reading ability, and awareness of time sequence in order to function in ensemble will be covered. Knowledge of other instruments and how they produce sound, and basic concepts of intonation adjustment will also be analyzed.
Lecture Hours: None Lab Hours: 4.5 Repeatable: 3 Grading: O
Prerequisite: MUSIC 059A
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

MUSIC-083 - Exploring The World of Music Units: 3
This course introduces the elements of music from a cross-cultural perspective. Religious, cultural societal, and political influences from various geographical locations will be explored.
Lecture Hours: 3 Lab Hours: 0 Repeatable: No Grading: O
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: C1 District GE: C1 IGETC: 3A
MUSIC-091 - Music Appreciation: Western Civilization

This course introduces the student with little or no previous experience in musical performance or listening to the traditions of European-American music. The student will learn about the elements of sound and how the use and combinations of those elements have been influenced by the changing social, political, technological, and economic patterns of the Western industrialized nations. The student will gain insights to achieving the best listening experience through the study of the forms and styles of music ranging from Gregorian chant to the Beatles.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: O

CAN: MUSIC 10
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: C1 District GE: C1

MUSIC-095 - Music Appreciation: Jazz

This course introduces the student with little or no previous experience in musical performance or listening to the traditions of jazz music. The student will learn about the musical elements of jazz and view the development of the jazz art form as a product of culture. The student will learn to aurally recognize the elements of jazz and trace the development and evolution of the styles and structures of jazz from its inception to the present.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: O

CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: C1 District GE: C1

MUSIC-098 - Directed Study in Music

Individual or small groups of students who would benefit from Independent Study under the direction of faculty members in specific or related disciplines may develop individualized learning contracts designed to enhance their individual instructional programs. The students and the faculty member in consultation with the Division Dean will determine appropriate learning objectives and activities as well as the number of units to be earned. Instructions and the Learning Contract forms are available in the Division office. Repeatable to a maximum of 9 units across all disciplines.

Lecture Hours: None Lab Hours: 1.5 - 27 Repeatable: 17 Grading: O

CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None

MUSIC-099 - Introductory Music

This course is designed for the student who wishes to learn the "language" of music, how to read, notate, interpret, perform and create with those symbols which represent the four properties of sound: pitch, duration, amplitude, and timbre. The course includes the study of the fundamentals of Western notated music and how these elements combine to create musical compositions: pitch identification, rhythm and meter, scales key signatures, intervals, chord construction, harmonic progression and texture. Discussion of style analysis, i.e., how the elements of music are organized in various cultures and time periods.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: O

CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: C1 District GE: C1

OCEAN-010 - Descriptive Oceanography

This course provides a description of the ocean environment covering the geological, physical, chemical and biological aspects of the sea. It includes the origin and extent of the oceans, nature of the ocean basins, causes and effects of currents, waves, and tides, and plant and animal life in the sea. It partially fulfills the general education requirement, without laboratory, in physical science.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

Recommended: 3 units of MATH 310 with CR or placement based on math assessment.

CAN: None
Advisory Level: Read: 2 Write: 2 Math: 1
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: B1 District GE: B

PHIL-010 - Introduction to Philosophy:

Metaphysics, Epistemology, and Ethics

This course introduces the basic philosophical disciplines: logic, epistemology, cosmology, metaphysics, ethics, natural theology, and aesthetics. It focuses on selected classical and modern philosophers, their theories on human nature, the nature of knowledge, free will and determinism, and basic ethics within a broad range of readings from Plato to Chardin.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

CAN: PHIL 2
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: C2 District GE: C2

PHIL-011 - Introduction to Philosophy:

Political Philosophy, Aesthetic Philosophy and Religion

This course surveys political theory from its origins to the modern era, the nature and value of the arts, and the philosophical nature and sources of religious experience, all within the context of ancient and modern thought. Selective readings range from Plato and Aristotle to Machiavelli, Locke, Tolilch, and Croce.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: C2 District GE: C2

PHIL-012 - Introduction to Philosophy:

Existentialism: Past, Present, and Future

The focus of this course is on the various forms of existentialism as expressed in philosophy and literature, the spectrum of its meanings, and its relevance to the development of individual and collective human values. Selective readings range from Euripides and Kiekegaard to Camus and Heidegger.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: C2 District GE: C2
PHI L-051 - Asian Philosophy
Units: 3
This is an introductory course in the philosophies of India, China, Japan, and Vietnam. Students will learn the fundamentals ranging from the Vedas, Buddhism, the I-Ching, Confucianism, Kim Van Kieu, and Islamic thoughts.
Lecture Hours: 3 Lab Hours: 0 Repeatable: No Grading: L
Recommended: PHIL 010
Advisory Level: Read: 3 Write: 3 Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: C2 District GE: C2 IGETC: 3B

PHI L-060 - Logic: Critical Reasoning
Units: 3
This is an introductory course in informal logic and critical reasoning. Students are instructed in the practical application of inferential, inductive and deductive reasoning, problem analysis/resolution, the logic systems entailed by language, word-functions, definition, and common fallacies of relevance and ambiguity. There is a strong emphasis on written expression and the application of critical thinking skills in a series of composition assignments.
Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L
CAN: PHIL 6
Advisory Level: Read: 3 Write: None Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: A3 District GE: A3 IGETC: None

PHI L-065 - Introduction to Ethics
Units: 3
This course explores some of the major ethical theories and problems of the past and present. Students learn the application of concepts of good and evil, right and wrong, to current ethical and social issues, and to the processes of formulating and making actual ethics-based decisions. Utilitarian and rule-based systems are studied and through critical reasoning are applied in analyses, discussions, and in written assignments. Emphasis is on the real, the practical, and the application in everyday ethical situations.
Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L
CAN: PHIL 4
Advisory Level: Read: 3 Write: None Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: C2 District GE: C2 IGETC: 3B

PHI L-070 - Religion: The Live Hypothesis
Units: 3
This is an introductory philosophical survey of living religions (Hinduism, Buddhism, Confucianism, Taoism, Islam, Judaism, and Christianity, Native American and African) using comparative study that focuses on the meaning of religious experience, the forms its expression may take and what it may offer humanity.
Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L
CAN: None
Advisory Level: Read: 3 Write: 3 Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: C2 District GE: C2 IGETC: 3B

PHOTO-038A - Hand Coloring - Water Colors
Units: 1
This course meets as a six-week module or for a total of 36 hours. Hand coloring black and white prints offers countless creative possibilities. Hand coloring black and white prints offers countless creative possibilities. Hand coloring back to almost the beginning of photography. These images have a look that is unique and quite distinguishable from images composed on color film. Regaining popularity in recent years, hand coloring gives one complete control over every color in a print. Photos to be hand colored should be printed on matte surface paper.
Lecture Hours: 2 Lab Hours: 4 Repeatable: No Grading: O
Prerequisite: PHOTO 62

PHOTO-038B - Hand Coloring - Oils
Units: 1
Hand coloring black and white prints offers countless creative possibilities. Hand coloring back to almost the beginning of photography. These images have a look that is unique and quite distinguishable from images composed on color film. Regaining popularity in recent years, hand coloring gives one complete control over every color in a print. Photos to be hand colored should be printed on matte surface paper.
Lecture Hours: 2 Lab Hours: 4 Repeatable: No Grading: O
Prerequisite: PHOTO 62

PHOTO-038C - Hand Coloring - Colored Pencils
Units: 1
This course is offered as a six-week module or for 36 hours. Hand coloring black and white prints offers countless creative possibilities. Hand coloring back to almost the beginning of photography. These images have a look that is unique and quite distinguishable from images composed on color film. Regaining popularity in recent years, hand coloring gives one complete control over every color in a print. Photos to be hand colored should be printed on matte surface paper.
Lecture Hours: 2 Lab Hours: 4 Repeatable: No Grading: O
Prerequisite: PHOTO 70

CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None
### PHOTO-038D - Toning Photos

**Units:** 1

This course meets as a six-week module or for a total of 36 hours. Chemical toning is a method of adding color to black and white photographs. Toning photographs will extend the archival permanence of a print and can also alter the image to produce unusual and striking visual effects. The chemical toning of prints works by converting the black silver image into a color. You can tone the entire print at one time or use selective toning in stages to add multiple colors.

**Lecture Hours:** 2  
**Lab Hours:** 4  
**Repeatable:** No  
**Grading:** O  
**Prerequisite:** PHOTO 70

**CAN:** None  
**Advisory Level:**  
**Transfer Status:** CSU  
**Degree Applicable:** AA/AS  
**CSU GE:** None  
**District GE:** None  
**IGETC:** None

### PHOTO-062 - Intermediate Photography

**Units:** 3

This course continues the application of principles and practice of photography as studied in Beginning Photography, Photo 22. A major focus will be on advanced black and white film printing and processing. An exploration of a variety of techniques and materials including toning, handcoloring and high contrast printing may be included. The emphasis of the course will be on individual modes of creative expression and development of a personal style.

**Lecture Hours:** 2  
**Lab Hours:** 4  
**Repeatable:** No  
**Grading:** O  
**Prerequisite:** PHOTO 022

**CAN:** None  
**Advisory Level:**  
**Transfer Status:** CSU/UC  
**Degree Applicable:** AA/AS  
**CSU GE:** None  
**District GE:** None  
**IGETC:** None

### PHOTO-070 - Beginning Color Photography

**Units:** 3

Beginning Color Photography is an introduction to color seeing with emphasis placed on the psychology of color, color theory and design. The course is based on printing from color negatives using current state of the art/industry enlargers and processing equipment. Specific assignments will be given which direct the students toward problem-solving in color. Assignments may include color design, portraits, advertising, landscapes, abstractions. Individual projects and portfolios will be started as time permits. Visits to art galleries and field trips will be required for this course.

**Lecture Hours:** 2  
**Lab Hours:** 4  
**Repeatable:** No  
**Grading:** O  
**Prerequisite:** PHOTO 062

**CAN:** None  
**Advisory Level:**  
**Transfer Status:** CSU/UC  
**Degree Applicable:** AA/AS  
**CSU GE:** None  
**District GE:** None  
**IGETC:** None

### PHOTO-071 - Intermediate Color Photography

**Units:** 3

Intermediate Color Photography is designed to expand and enrich one’s color awareness and technical skill. Topics will be selected to give students a wide range of expressive and practical photographic problems with both natural and artificial light. Color negatives are the main source of printing, although some alternative processes may be included. Students should be thoroughly familiar with printing color negatives and dichroic enlargers. Coursework requires a 35mm camera.

**Lecture Hours:** 2  
**Lab Hours:** 4  
**Repeatable:** No  
**Grading:** O  
**Prerequisite:** PHOTO 70

**CAN:** None  
**Advisory Level:**  
**Transfer Status:** CSU  
**Degree Applicable:** AA/AS  
**CSU GE:** None  
**District GE:** None  
**IGETC:** None

### PHOTO-075 - Beginning Digital Imaging

**Units:** 3

The course introduces new technologies and digital imagery, featuring the Internet via the World Wide Web & introduces the use of digital cameras, computers, scanning, storage media, printers, photographic editing programs, portfolio editing and Kodak Photo CD. General issues in digital photography will be covered.

**Lecture Hours:** 2  
**Lab Hours:** 4  
**Repeatable:** No  
**Grading:** O  
**Recommended:** PHOTO 022 and PHOTO 070 and knowledge of Windows or Mac operating systems

**CAN:** None  
**Advisory Level:**  
**Transfer Status:** CSU/UC  
**Degree Applicable:** AA/AS  
**CSU GE:** None  
**District GE:** None  
**IGETC:** None

### PHOTO-076 - Photoshop 1

**Units:** 3

This course introduces the technology of digital electronic photography with instruction in beginning digital image processing for fine arts and commercial applications using Photoshop software.

**Lecture Hours:** 2  
**Lab Hours:** 4  
**Repeatable:** No  
**Grading:** L  
**CAN:** None  
**Advisory Level:**  
**Transfer Status:** CSU  
**Degree Applicable:** AA/AS  
**CSU GE:** None  
**District GE:** None  
**IGETC:** None

### PHOTO-076L - Photoshop Laboratory

**Units:** 1

This laboratory course is subsequent and supplementary to Photo 076, Photoshop 1, and provides hands-on computer experience using Photoshop Digital Imaging software to augment and demonstrate concepts presented in the Photo 076 course. Repeatable to a maximum of 4 units.

**Lecture Hours:**  
**Lab Hours:** 3  
**Repeatable:** 3  
**Grading:** O  
**Prerequisite:** PHOTO 76

**CAN:** None  
**Advisory Level:**  
**Transfer Status:** CSU  
**Degree Applicable:** AA/AS  
**CSU GE:** None  
**District GE:** None  
**IGETC:** None

### PHOTO-077 - Photoshop 2

**Units:** 3

This course continues study in digital image processing for fine art and commercial applications using Photoshop software. More advanced topics in digital imaging will be covered, including prepress issues and in-depth color correcting.

**Lecture Hours:** 2  
**Lab Hours:** 4  
**Repeatable:** No  
**Grading:** L  
**Prerequisite:** PHOTO 076

**CAN:** None  
**Advisory Level:**  
**Transfer Status:** CSU  
**Degree Applicable:** AA/AS  
**CSU GE:** None  
**District GE:** None  
**IGETC:** None
PHOTO-077L - Photoshopp 2 Laboratory  Units: 1

Photo 077L, the lab course is subsequent and supplementary to Photo 077 and provides hands on computer experience using Photoshop Digital Imaging software to augment and demonstrate concepts presented in the Photo 077 course. Repeatable to a maximum of 4 units.

Lecture Hours: None  Lab Hours: 3  Repeatable: 3  Grading: O
Prerequisite: PHOTO 077
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

PHOTO-079 - Digital Photography 1  Units: 3

This course introduces to the world of digital photography and multimedia applications using digital and traditional cameras. Activities of the class will include photographing and altering images both with digital cameras on Power PC and Macintosh computers for artistic and commercial applications. Adobe PhotoDeluxe, Photoshop and other software will be used as part of an electronic darkroom to output to laser, inkjet, and dye sublimation printers.

Lecture Hours: 2  Lab Hours: 4  Repeatable: No  Grading: O
Prerequisite: PHOTO 075 or PHOTO 076 with C or better
Corequisite: Or concurrent enrollment in PHOTO 075
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

PHOTO-079L - Digital Photography 1 Laboratory  Units: 1

Photo 079L is subsequent and supplementary to Photo 079 and provides hands on computer experience using digital photography and multimedia applications to augment and demonstrate concepts presented in the Photo 79, Digital Photography I course.

Lecture Hours: None  Lab Hours: 3  Repeatable: 3  Grading: O
Prerequisite: PHOTO 079
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

PHOTO-089A - Special Problems  Units: 3

Designed to enable the student to expand knowledge and understanding of photographic processes. Individual projects are planned with instructor. Advanced individual projects in black and white photography are pursued.

Lecture Hours: 2  Lab Hours: 4  Repeatable: No  Grading: O
Prerequisite: PHOTO 062
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

PHOTO-098 - Directed Study in Photography  Units: 0.5 - 9

Individual or small groups of students who would benefit from Independent Study under the direction of faculty members in specific or related disciplines may develop individualized learning contracts designed to enhance their individual instructional programs. The students and the faculty member will consult with the Division Dean to determine appropriate learning objectives and activities as well as the number of units to be earned. Instructions and the Learning Contract forms are available in the Division office. Repeatable to a maximum of 9 units across all disciplines.

Lecture Hours: None  Lab Hours: 1.5 - 27  Repeatable: 17  Grading: O
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

PHOTO-136 - Photography Occupational Work Experience-Parallel Plan  Units: 1 - 4

Occupational Work Experience is designed for students who work or volunteer in a field related to their vocational major. Students are required to provide evidence that they are enrolled in a vocational program (e.g., educational plan or coursework in a vocational subject area). The Parallel Plan is designed for students who wish to take classes and work during the same semester. A maximum of 4 units of Occupational Work Experience credit may be earned during any one semester, to a maximum of 16 units total. Students must be enrolled in at least 7 units including Work Experience units. Enrollment in an accredited secondary program is not guaranteed.

Lecture Hours: None  Lab Hours: 3 - 12  Repeatable: 15  Grading: O
Corequisite: 1) Be enrolled during the regular semester in a minimum of 7 units at any accredited college, including Work Experience units or; 2) During a summer session, be enrolled in at least one other class in addition to Work Experience; and 3) Be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.
CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

PHOTO-138 - Photography Occupational Work Experience-Alts Plan  Units: 1 - 8

Occupational Work Experience is designed for students who work or volunteer in a field related to their vocational major. Students are required to provide evidence that they are enrolled in a vocational program (e.g., educational plan or coursework in a vocational subject area). The Alternate Plan is designed to allow students attend school one semester and work the next. A maximum of 8 units of Occupational Work Experience credit may be earned during any one semester, to a maximum of 16 units total. Students may only take one (if any) class in addition to work experience. Internship/job placement is not guaranteed.

Lecture Hours: None  Lab Hours: 3 - 24  Repeatable: 15  Grading: O
Corequisite: 1) Need not be enrolled in any other class during the semester besides Work Experience. 2) May be enrolled in at most one other class in addition to Work Experience. 3) Must be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.
CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None
PED-001 - Dr Excuse Units: None
Doctor's excuse must be presented to division dean for waiver consideration.
Lecture Hours: None Lab Hours: None Repeatable: 19 Grading: O
Open Curriculum: No prerequisite, corequisite or levels
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: E2 District GE: E2 IGETC: None

PED-003 - Theory and Technique of Defensive Football Units: 3
This course is designed to teach students the various approaches to intercollegiate defensive football as related to offensive football. Several aspects of defensive football such as kickoff, punt return, and definition the PAT/FG will be included. Repeatable to a maximum of 9 units.
Lecture Hours: 3 Lab Hours: None Repeatable: 1 Grading: O
Open Curriculum: No prerequisite, corequisite or levels
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: None Degree Applicable: NAA
CSU GE: None District GE: None IGETC: None

PED-004 - Theory and Technique of Offensive Football Units: 3
This class is designed to teach students various approaches to intercollegiate offensive football. Several aspects of offensive football such as punt, point after touchdowns, and field goal kicking will be included. Repeatable to a maximum of 9 units.
Lecture Hours: 3 Lab Hours: None Repeatable: 1 Grading: O
Open Curriculum: No prerequisite, corequisite or levels
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: None Degree Applicable: NAA
CSU GE: None District GE: None IGETC: None

PED-008 - Archery Units: 0.5 - 1
This course is designed to instruct students in the fundamental skills of archery as a target shooting sport. Safe use and proper care of tackle, along with range safety are included.
Lecture Hours: None Lab Hours: 2 - 3 Repeatable: 7 Grading: O
Open Curriculum: No prerequisite, corequisite or levels
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: E2 District GE: E2 IGETC: None

PED-009 - Badminton Units: 1
This is a physical activity class for men and women, designed to teach the skills and knowledge relative to badminton. This class may be offered at the beginning, intermediate or advanced skill level.
Lecture Hours: None Lab Hours: 3 Repeatable: 3 Grading: O
CAN: None
Advisory Level: Read: 3 Write: 3 Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: E2 District GE: E2 IGETC: None

PED-010 - Baseball Hitting Units: 0.5 - 1
Through this course, students are provided the opportunity to develop the physical and mental skills involved in hitting a baseball. Addressed are all the fundamentals involved in stroke, hitting strategy and role of hitting in our offensive scheme. The player must have participated in high school varsity baseball or equivalent to take this course. Repeatable to a maximum of 4 units.
Lecture Hours: None Lab Hours: 2 - 3 Repeatable: 7 Grading: O
Open Curriculum: No prerequisite, corequisite or levels
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: E2 District GE: E2 IGETC: None

PED-011 - Baseball Fundamentals Units: 0.5 - 1
Baseball Fundamentals emphasizes team defensive concepts. Players must have participated in high school varsity baseball or equivalent to take this course. Repeatable to a maximum of 4 units.
Lecture Hours: None Lab Hours: 2 - 3 Repeatable: 7 Grading: O
Open Curriculum: No prerequisite, corequisite or levels
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

PED-012 - Basketball, Beginning and Intermediate Units: 0.5 - 1
This is a physical activity course designed to teach basic individual skills and team play with emphasis on beginning and intermediate basketball. Repeatable to a maximum of 4 units.
Lecture Hours: None Lab Hours: 2 - 3 Repeatable: 7 Grading: O
Open Curriculum: No prerequisite, corequisite or levels
CAN: None
Advisory Level: Read: None Write: None Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: E2 District GE: E2 IGETC: None
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<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
<th>Description</th>
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<tbody>
<tr>
<td>PED-013</td>
<td>Advanced Football</td>
<td>0.5 - 1</td>
<td>This course is designed to provide instruction in the activities relevant to the fundamentals of football. Related skills and group participation are emphasized. Repeatable to a maximum of 4 units.</td>
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<tr>
<td>PED-014</td>
<td>Bowling</td>
<td>0.5 - 1</td>
<td>The student will learn the basic fundamentals and techniques of beginning bowling.</td>
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<tr>
<td>PED-017</td>
<td>Self Defense</td>
<td>0.5 - 1</td>
<td>This course is an introduction to personal self-defense. It includes preventive and precautionary measures, assault awareness information, and the most commonly needed self-defense skills and techniques for personal safety. Repeatable to a maximum of 4 units.</td>
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<tr>
<td>PED-018</td>
<td>Karate</td>
<td>0.5 - 1</td>
<td>This course is designed to teach students the various skills and techniques of the art of karate and other Japanese martial art forms. Analysis and application of movement, individual and group interaction, and uses of karate will be studied. Repeatable to a maximum of 4 units.</td>
</tr>
<tr>
<td>PED-020</td>
<td>Fencing</td>
<td>0.5 - 1</td>
<td>This is a physical activity course for men and women, designed to teach basic individual fencing skills and, when appropriate, to teach team play. Repeatable to a maximum of 4 units.</td>
</tr>
<tr>
<td>PED-023</td>
<td>Cardio Kickboxing</td>
<td>1</td>
<td>An aerobic exercise program utilizing non-contact kickboxing. The class format includes warm-up, pre-aerobics, peak aerobics and aerobic cool down as determined by musical beats per minutes (BPM). Hand weights and step boxes may be used for additional lower and upper body strength and conditioning. A cool-down will conclude the exercise session.</td>
</tr>
<tr>
<td>PED-024</td>
<td>Beginning Golf</td>
<td>1</td>
<td>This course is designed to teach the fundamentals of a golf swing using irons, fairway woods, and driver. Putting, chipping, and pitching skills will also be covered. Information on rules, scoring, etiquette, and course play will be included. Students will be required to pay for range balls and green fees.</td>
</tr>
<tr>
<td>PED-024A</td>
<td>Intermediate Golf</td>
<td>1</td>
<td>This course is designed to teach the development of intermediate golf skills through instruction, practice, and golf play on local golf courses. The student will learn advanced swing techniques, practice strategies, strategies for positive mental skills, shot selection, and course management skills. Students will be required to pay for range balls and green fees.</td>
</tr>
</tbody>
</table>

**Advisory Level:**
- Record: None
- Write: None
- Math: None

**Open Curriculum:** No prerequisite, corequisite or levels

**CAN:** None

**Transfer Status:**
- CSU/UC Degree Applicable: AA/AS

**IGETC:** None

**CSU GE:**
- E2

**District GE:**
- E2

**IGETC:** None

**Repeatable:**
- 3

**CSU GE:**
- E

**District GE:**
- E2

**IGETC:** None
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<th>Course Code</th>
<th>Course Title</th>
<th>Units:</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>PED-030</td>
<td>- Fit For Life</td>
<td>0.5 - 1</td>
<td>This is a physical activity course designed toward the development of fitness of the student. A variety of activities will be used to develop cardiorespiratory endurance, flexibility, muscle endurance and strength. Other topics will be body composition, weight control, diet and nutrition. This class may be offered to any student interested in the improvement of his/her fitness. Repeatable to a maximum of 4 units.</td>
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<td>Lecture Hours: None  Lab Hours: 2 - 3  Repeatable: 7  Grading: O</td>
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<td>Open Curriculum: No prerequisite, corequisite or levels</td>
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<td>IGETC:  None</td>
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<tr>
<td>PED-034</td>
<td>- Racquetball</td>
<td>1</td>
<td>This is a physical activity course designed to help students increase their knowledge and physical skills required for playing racquetball successfully. This course may be offered at the beginning, intermediate, or advanced skill levels.</td>
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<td>Lecture Hours: None  Lab Hours: 3  Repeatable: 3  Grading: O</td>
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<td>IGETC:  None</td>
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<tr>
<td>PED-038</td>
<td>- Soccer-Recreational</td>
<td>0.5 - 1</td>
<td>This is a physical activity course designed to help students increase their knowledge and physical skills required for playing soccer successfully. This class may be offered at the beginning, intermediate or advanced levels.</td>
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<td>IGETC:  None</td>
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<tr>
<td>PED-039</td>
<td>- Hatha Yoga</td>
<td>1</td>
<td>Hatha Yoga focuses on understanding and controlling the body, breath and mind through exercises, hosannas, breathing techniques (pranayamas) and meditation training. The techniques are designed to increase strength, flexibility, endurance, balance and coordination; release stress and muscle tension; and enhance the ability to concentrate.</td>
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<tr>
<td>PED-040</td>
<td>- Softball</td>
<td>1</td>
<td>This physical activity course is designed to teach softball skills of pitching, hitting, fielding, catching, base running, throwing, sliding, and team offense and defense.</td>
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<td>IGETC:  None</td>
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<tr>
<td>PED-041</td>
<td>- Pilates Mat Workout</td>
<td>1</td>
<td>Pilates is a world-renowned method of conditioning and strengthening which emphasizes developing a sustained strength of the spine and torso to have a leaner, more defined and supportive musculature. This Pilates mat work course is designed to develop strength, flexibility, coordination and balance of participants of all ages, through a safe progression of challenging and functional exercises. Focus will be on quality, not quantity, This method of body conditioning is a unique system of stretching and strengthening exercises. Mat work is defined as exercises performed in a group setting, on mats, in the aerobics room. The only equipment necessary for this class is an exercise mat.</td>
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<td>IGETC:  None</td>
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<tr>
<td>PED-042</td>
<td>- Swimming</td>
<td>0.5 - 1</td>
<td>This is an activity course which assists students in learning selected swimming strokes and skills and in applying these skills to increase physical fitness and provide for safety in, on and around the water. This class may be offered at the beginning, intermediate or advanced level. (Lap Swimming). Repeatable to a maximum of 4 units.</td>
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<td>CSU GE:  E2  District GE:  E2</td>
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<td>IGETC:  None</td>
</tr>
<tr>
<td>PED-046</td>
<td>- Tennis</td>
<td>1</td>
<td>Students learn basic tennis skills with emphasis on forehand, backhand, serve, volley, lob, overhead, and strategies for singles and doubles play. Students learn rules, scoring, and etiquette of tennis.</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>Lecture Hours: None  Lab Hours: 3  Repeatable: 3  Grading: O</td>
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<td></td>
<td></td>
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<td>CAN: None</td>
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<td></td>
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<td></td>
<td>Advisory Level:  Read:  3  Write:  3  Math:  None</td>
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<td>Transfer Status: CSU/UC  Degree Applicable: AA/AS</td>
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<td>CSU GE:  E2  District GE:  E2</td>
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<td>IGETC:  None</td>
</tr>
</tbody>
</table>
**PED-048 - Track and Field**  **Units: 0.5 - 1**
This is a physical education activity class which emphasizes the running, jumping, and throwing events of track and field. An analysis of the theory precedes the activity in each event. Repeatable to a maximum of 4 units.
Lecture Hours: None  Lab Hours: 2 - 3  Repeatable: 7  Grading: O
Open Curriculum: No prerequisite, corequisite or levels
CAN: None
Advisory Level: Read: None  Write: None  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: E2  District GE: E2  IGETC: None

**PED-052 - Volleyball**  **Units: 1**
An activity class with emphasis on individual skills of passing, setting, spiking, serving, blocking, and team offense and defense. The class combines all skill levels.
Lecture Hours: None  Lab Hours: 3  Repeatable: 3  Grading: O
CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: E2  District GE: E2  IGETC: None

**PED-055 - Aerobics with Music**  **Units: 1**
Students learn principles and concepts of cardiovascular fitness through the activity of moving with music. Principles such as training heart rate and frequency, intensity, and duration of activity will be emphasized.
Lecture Hours: None  Lab Hours: 3  Repeatable: 3  Grading: O
CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: E2  District GE: E2  IGETC: None

**PED-056 - Weight Training**  **Units: 1**
This physical activity course is designed to help students learn to use progressive weight resistance as a means for body toning and general strength development. Both weight machines and free weights are used. This class may be offered at the beginning.
Lecture Hours: None  Lab Hours: 3  Repeatable: 3  Grading: O
CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: E2  District GE: E2  IGETC: None

**PED-094 - Individualized Skills Laboratory**  **Units: 0.5 - 6**
The course provides a framework for any of the disciplines listed in the catalog to offer transferable Individualized Instructional courses and modules which are designed to enrich or broaden the students' experiences beyond that which is available through the regular curriculum.
Lecture Hours: 0.5 - 6  Lab Hours: 2 - 18  Repeatable: 11  Grading: O
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

**PED-098 - Directed Study in Physical Education**  **Units: 0.5 - 9**
Individual or small groups of students who would benefit from Independent Study under the direction of faculty members in specific or related disciplines may develop individualized learning contracts designed to enhance their individual instructional programs. Students and the faculty member in consultation with the Division Dean will determine appropriate learning objectives and activities as well as the number of units to be earned. Instructions and the Learning Contract forms are available in the Division office. Repeatable to a maximum of 9 units across all disciplines.
Lecture Hours: None  Lab Hours: 1.5 - 27  Repeatable: 17  Grading: O
Open Curriculum: No prerequisite, corequisite or levels
CAN: None
Advisory Level: Read: None  Write: None  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

**PEC-060 - Introduction to Physical Education**  **Units: 2**
This is a theory course which reviews the foundations and principles of physical education, the organization of physical education programs, and preparation necessary for employment in the physical education and related fields. Repeatable to a maximum of 6 units.
Lecture Hours: 2  Lab Hours: None  Repeatable: No  Grading: L
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

**PHYS-040 - Introduction to Physical Science**  **Units: 4**
This is an introductory physical science laboratory course. It is a descriptive course illustrating basic chemistry and physics principles using everyday examples. Course focus is on developing a broad range appreciation for physical science to increase effectiveness in teaching these courses at the elementary grade level. The course is divided into two parts, a chemistry section and a physics section.
Lecture Hours: 3  Lab Hours: 3  Repeatable: No  Grading: L
CAN: None
Advisory Level: Read: 3  Write: 2  Math: 2
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: BL  IGETC: None
PHYS-002A - General Physics  Units: 4
This is the first of a two-semester course in general physics for students not needing calculus based physics. The course begins with basic principles: vectors, Newton's Laws of Motion, work, and the conservation principles of energy, linear, and angular momentum. These principles are applied to topics in gravitation, fluids, waves, simple harmonic motion, elasticity, and thermodynamics.
Lecture Hours: 3 Lab Hours: 3 Repeatable: No Grading: L
Prerequisite: MATH 013 with C or better
CAN: PHYS 2; PHYS SEQ A = PHYS 2A+2B
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: B1,B3 District GE: B1, BL IGETC: 5A

PHYS-002B - General Physics  Units: 4
This is the second of a two-semester course in general physics for students not needing calculus based physics. The basic principles of vectors, Newton's Laws of Motion, work, and the conservation principles of energy, linear, and angular momentum have been introduced in Physics 2A. In Physics 2B, these principles are applied to topics in electrodynamics, optics, and modern physics.
Lecture Hours: 3 Lab Hours: 3 Repeatable: No Grading: L
Prerequisite: PHYS 002A
CAN: PHYS 4; PHYS SEQ A = PHYS 2B+2A
Advisory Level: Read: 2 Write: 2 Math: 3
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

PHYS-003 - General Physics  Units: 4
This is a one-semester course in general physics without calculus. A brief introduction to vectors, forces, and the conservation principles of energy and momentum is given. Then these concepts are applied to interactions of electric charges with electric and magnetic fields, and the flow of current in simple electric circuits. The ray model of light is introduced and the focussing properties of lenses and mirrors in simple optical systems are discussed. The wave model of light is introduced, along with principles of interference, diffraction, and polarization. Finally, the photon model of light is motivated through discussion of several important experimental results. The concepts of atomic energy levels, and stimulated emission of radiation in lasers are introduced.
Lecture Hours: 3 Lab Hours: 3 Repeatable: No Grading: L
Prerequisite: MATH 013 with C or better
CAN: None
Advisory Level: Read: 3 Write: 3 Math: None
Transfer Status: CSU/UC Degree Applicable: AS
CSU GE: B1,B3 District GE: B1 IGETC: 5A

PHYS-004A - General Physics  Units: 5
This course is the first in a four semester sequence of General Physics for majors in physics, chemistry, engineering, mathematics or other sciences. The general principles of mechanics are introduced at an elementary but calculus-based level. Specific topics include kinematics, Newton's laws of motion, work and energy, momentum, rotation, simple harmonic motion, universal gravitation and fluids. Elementary applications of these principles are introduced using a problem solving approach.
Lecture Hours: 4 Lab Hours: 3 Repeatable: No Grading: L
Prerequisite: MATH 072 with C or better
Corequisite: Or MATH 071 with C or better and concurrent enrollment in MATH 072
CAN: PHYS 8; PHYS SEQ B = PHYS 4A+4B+4C
Advisory Level: Read: 3 Write: 3 Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: B1,B3 District GE: B1, BL IGETC: 5A

PHYS-004B - General Physics  Units: 5
This course is the second in the physics sequence for majors in physics, chemistry, engineering, mathematics or other physical sciences. The general principles of electricity and magnetism are introduced at an elementary, but calculus-based level. Several technological applications of these principles are discussed. Topics include the electric field, Gauss' Law, electric potential, DC circuits, the magnetic field, electromagnetic induction, AC circuits, Maxwell's equations, and electromagnetic waves. A problem solving approach is used, emphasizing both conceptual understanding and basic mathematical techniques.
Lecture Hours: 4 Lab Hours: 3 Repeatable: No Grading: L
Prerequisite: PHYS 004A and MATH 073, both with C or better
Corequisite: Or PHYS 004A with C or better and concurrent enrollment in MATH 073.
CAN: PHYS 12; PHYS SEQ B = PHYS 4B+4C+4A
Advisory Level: Read: 2 Write: 2 Math: 6
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: B1,B3 District GE: B1, BL IGETC: 5A

PHYS-004C - General Physics  Units: 5
This course is the third in the physics sequence for majors in physics, chemistry, engineering, mathematics or other physical sciences. The general principles of optics, thermodynamics, and modern physics are introduced at an elementary, but calculus-based level. Several technological applications of these principles are discussed. Topics include waves, geometric optics, wave optics (including interference, diffraction, and polarization), heat, thermal properties of matter, thermodynamics and its laws. Optional topics include special relativity and modern physics. A problem solving approach is used, emphasizing both conceptual understanding and basic mathematical techniques.
Lecture Hours: 4 Lab Hours: 3 Repeatable: No Grading: L
Prerequisite: PHYSICS 004A and MATH 073, both with C or better
Corequisite: Or PHYS 004A with C or better and concurrent enrollment in MATH 073.
CAN: PHYS 14
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: B1,B3 District GE: B1, BL IGETC: 5A

PHYS-004D - General Physics  Units: 5
This is the fourth in a four-semester sequence of general physics for majors in chemistry, engineering, mathematics, physics, or other sciences. The principles of relativity and modern physics are introduced at an elementary, but calculus-based level. The topics are modifications of Newton's Laws of Motion at speeds near the speed of light, the wave nature of particles, wave functions, energy levels and spin of the electrons in atoms, behavior of electrons in solids, properties of atomic nuclei, nuclear fission and fusion, properties of elementary particles, and applications in cosmology and astrophysics.
Lecture Hours: 4 Lab Hours: 3 Repeatable: No Grading: L
Prerequisite: PHYS 004A and MATH 073, both with C or better
Corequisite: Or PHYS 004A with C or better and concurrent enrollment in MATH 073.
CAN: None
Advisory Level: Read: 3 Write: 3 Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None
### Physics

**PHYS-098 - Directed Study in Physics**  
Units: 0.5 - 3  
Individual or small groups of students who would benefit from Independent Study under the direction of faculty members in specific or related disciplines may develop individualized learning contracts designed to enhance their individual instructional programs. The students and the faculty member in consultation with the Division Dean will determine appropriate learning objectives and activities as well as the number of units to be earned. Instructions and the Learning Contract forms are available in the Division office. Repeatable to a maximum of 9 units across all disciplines.

<table>
<thead>
<tr>
<th>Lecture Hours</th>
<th>Lab Hours: 1.5 - 9</th>
<th>Repeatable: 17</th>
<th>Grading: O</th>
</tr>
</thead>
</table>

CAN: None  
Advisory Level: Read: 2, Write: 2, Math: None  
Transfer Status: CSU Degree Applicable: AA/AS  
CSU GE: None, District GE: None, IGETC: None

### Physiology

**PHYS-060 - Human Physiology**  
Units: 5  
This course is intended to provide a broad understanding of the living process, addresses topics including cellular metabolism, neural and endocrine control and integration, and homeostatic mechanisms of organ/system function. The course is designed for bachelor degree nursing, physical therapy, and certain science and pre-professional majors.

<table>
<thead>
<tr>
<th>Lecture Hours: 3</th>
<th>Lab Hours: 6</th>
<th>Repeatable: No</th>
<th>Grading: L</th>
</tr>
</thead>
</table>

Prerequisite: (ANAT 001 or AP 003) and (CHEM 001A or CHEM 011A or CHEM 015 or CHEM 030A or CHEM 032A or CHEM 065 or CHEM 089)  
CAN: BIOL 12; BIOL SEQ B = PHYSYO 60+ANAT 1  
Advisory Level: Read: 3, Write: 3, Math: None  
Transfer Status: CSU/UC Degree Applicable: AA/AS  
CSU GE: None, District GE: None, IGETC: None

### Political Science

**POLSC-001 - Politics and Government in America**  
Units: 3  
This course is a study of national, state and local governments and politics with emphasis on the U.S. Constitution and the national government. This course along with History 1 meets the State requirement in the Constitution of the U.S. and state and local governments and satisfies the State requirement for the California Teachers Credential.

<table>
<thead>
<tr>
<th>Lecture Hours: 3</th>
<th>Lab Hours: None</th>
<th>Repeatable: No</th>
<th>Grading: L</th>
</tr>
</thead>
</table>

CAN: GOVT 2  
Advisory Level: Read: 3, Write: 3, Math: None  
Transfer Status: CSU/UC Degree Applicable: AA/AS  
CSU GE: D8, F2, District GE: 4H

**POLSC-002 - Comparative Politics**  
Units: 3  
This course offers an introduction to the comparative study of politics by looking at the government, politics and public policies of other nations. Similarities and differences are explored. Emphasis will be placed on contemporary political problems and how various nations confront and attempt to solve them.

<table>
<thead>
<tr>
<th>Lecture Hours: 3</th>
<th>Lab Hours: None</th>
<th>Repeatable: No</th>
<th>Grading: O</th>
</tr>
</thead>
</table>

CAN: None  
Advisory Level: Read: 3, Write: 3, Math: None  
Transfer Status: CSU/UC Degree Applicable: AA/AS  
CSU GE: D8, District GE: D, IGETC: 4H

**POLSC-004 - International Relations**  
Units: 3  
This course introduces the beginning student to the study of world politics. The class is designed to provide students with both a framework and the analytical skills for better understanding the causes and effects of world events and the broader dynamics of the relations among nations. Emphasis will vary depending on the foreign policy process both within the United States and abroad.

<table>
<thead>
<tr>
<th>Lecture Hours: 3</th>
<th>Lab Hours: None</th>
<th>Repeatable: No</th>
<th>Grading: O</th>
</tr>
</thead>
</table>

CAN: None  
Advisory Level: Read: 3, Write: 3, Math: None  
Transfer Status: CSU/UC Degree Applicable: AA/AS  
CSU GE: D8, District GE: D, IGETC: 4H

### Psychology

**PSYCH-010 - General Psychology**  
Units: 3  
This course is a general introduction to scientific and applied psychology using scientific methodology and historical perspective to study and understand human nature.

<table>
<thead>
<tr>
<th>Lecture Hours: 3</th>
<th>Lab Hours: None</th>
<th>Repeatable: No</th>
<th>Grading: O</th>
</tr>
</thead>
</table>

CAN: PSY 2  
Advisory Level: Read: 2, Write: 2, Math: None  
Transfer Status: CSU/UC Degree Applicable: AA/AS  
CSU GE: D9, District GE: D, IGETC: 4I

**PSYCH-012 - Introduction to Social Psychology**  
Units: 3  
This course is the study of how people think about, influence, and relate to one another. Topics include conformity, prejudice, liking, attitude change, first impressions, aggression, conflict, peacemaking, and service to others.

<table>
<thead>
<tr>
<th>Lecture Hours: 3</th>
<th>Lab Hours: None</th>
<th>Repeatable: No</th>
<th>Grading: L</th>
</tr>
</thead>
</table>

CAN: None  
Advisory Level: Read: 2, Write: 2, Math: None  
Transfer Status: CSU/UC Degree Applicable: AA/AS  
CSU GE: D9, District GE: D,E1, IGETC: 4I
PSYCH-020  -  The Psychology of Stress Reduction
Units: 3

This course presents a comprehensive approach to stress and stress reduction from a psychological perspective. A psychophysiological model of stress will be presented and analyzed. A variety of reliable stress reduction methods will be taught in the contexts of student and work life settings.

Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: O

CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: D9, E1  District GE: D,E1  IGETC: None

PSYCH-060  -  Personal Growth and Adjustment
Units: 3

A survey of the humanistic, behavioral, cognitive, and psychodynamic principles involved in psychological coping with life challenges. This course includes exploration of learning styles, personality, values clarification, intimacy, and interpersonal communication skills.

Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: O

CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: D9, E1  District GE: D,E1  IGETC: None

PSYCH-092  -  Developmental Psychology
Units: 3

This course is an introduction to developmental psychology. Human development is traced from conception through death. The biological, intellectual, emotional and social factors affecting human development and potential and the interaction of these factors throughout the lifespan will be studied. The dynamic nature of biological, societal and cultural influences on individual development will be considered. Developmental tasks and potential developmental crises in contemporary multicultural society are identified for each age group.

Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: L

Recommended: PSYCH 001 or PSYCH 010

CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: D9, E1  District GE: D,E1  IGETC: 4I

PSYCH-096  -  Marriage and Family
Units: 3

Students will study the family as an institution from historical and intercultural perspectives in relation to other aspects of society. The study of dating and courtship, the family and personality development, marriage, relationships, child rearing, and elements of family unity will be included. Students will also discuss disorganization, divorce, and restructuring of new relationships.

Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: O

CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: D9, E1  District GE: D,E1  IGETC: 4I

PSYCH-098  -  Directed Study in Psychology
Units: 0.5 - 9

Individual or small groups of students who would benefit from Independent Study under the direction of faculty members in specific or related disciplines may develop individualized learning contracts designed to enhance their individual instructional programs. The students and the faculty member in consultation with the Division Dean will determine appropriate learning objectives and activities as well as the number of units to be earned. Instructions and the Learning Contract forms are available in the Division office. Repeatable to a maximum of 9 units across all disciplines.

Lecture Hours: None  Lab Hours: 1.5 - 27  Repeatable: 17  Grading: O

CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

PSYCH-099  -  Abnormal Psychology
Units: 3

This course covers the application of psychological principles to the diagnosis, understanding, and treatment of abnormal patterns of behavior. Also included is a synthesis of both the practical and theoretical aspects of pathological behavior, diagnostic techniques, and systems of remediation.

Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: O

CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: D9  District GE: D  IGETC: None

PSYCH-100  -  Human Sexuality
Units: 3

This course is designed to offer factual information on human sexuality functioning. It will include the basic questions regarding sexual behavior, learning of sexual roles, anatomy and physiology of sexual response, social patterns of sexual behavior, sexual adjustment and maladjustment. The course will also include areas dealing with the treatment of sexual dysfunction, sex variance, and legal and cultural aspects of sexual behavior.

Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: O

CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: D9, E1  District GE: D,E1  IGETC: 4I

READ-101  -  Analytical Reading
Units: 4

In this course students will read a variety of text, fiction, and non-fiction materials found in college-level courses while strengthening their critical and analytical reasoning abilities, vocabulary, and study strategies. Students will read, discuss, and write about a piece of fiction and perform research using library materials and the Internet. Students will be required to enroll in Read 200. Students will take a board graded common final. This is the third course in a sequence of three preparatory reading courses.

Lecture Hours: 4  Lab Hours: 0  Repeatable: No  Grading: L

Prerequisite: ENGL 322 or READ 301 or READ 301S and ENGL 330 or ENGL 335; all with CR or placement based on assessment.
Corequisite: READ 200

CAN: None
Advisory Level: Read: None  Write: None  Math: None
Transfer Status: None  Degree Applicable: AS
CSU GE: None  District GE: None  IGETC: None
**Reading**

**READ-101S - Analytical Reading-Self Paced**  
Units: 1 - 4  
In this course students will read a variety of text, fiction, and non-fiction materials found in college-level courses while strengthening their critical and analytical reasoning abilities, vocabulary, and study strategies. Students will read, discuss, and write about a piece of fiction and perform research using library materials and the Internet. Students will work at their own pace in the Reading Center to complete assignments. Students will take a board graded common final which will represent 40% of their course grade.  
Lecture Hours: None  
Lab Hours: None  
Repeatable: 3  
Grading: L  
Prerequisite: READ 301 or READ 301S or ENGL 322 and ENGL 330 or ENGL 335; all with CR or placement based on assessment  
CAN: None  
Advisory Level: Read: None  
Write: None  
Math: None  
Transfer Status: None  
Degree Applicable: AS  
CSU GE: None  
District GE: None  
IGETC: None  

**READ-200 - Reading Supervised Skills**  
Units: None  
Laboratory  
Supplemental practice and/or instruction is offered students in a specific discipline. Projects are assigned in courses of concurrent enrollment. General consultation and supervision are provided by the faculty members in charge.  
Lecture Hours: 0  
Lab Hours: 0  
Repeatable: 19  
Grading: N  
Corequisite: READ 101 or READ 301 or READ 350  
CAN: None  
Advisory Level: Read: None  
Write: None  
Math: None  
Transfer Status: None  
Degree Applicable: NC  
CSU GE: None  
District GE: None  
IGETC: None  

**READ-301 - Essentials of Reading**  
Units: 4  
In this course, students will read a variety of text, fiction, and fiction materials while practicing comprehension, vocabulary, and study strategies to prepare for college course work. A broad range of materials, including the Internet, software, and library materials, will be incorporated. Students will be required to sign-up for Read 200. This is the second course in a sequence of three preparatory reading courses.  
Lecture Hours: 4  
Lab Hours: None  
Repeatable: No  
Grading: K  
Prerequisite: (3 units of ENGL 321 and ENGL 341) or (6 units of READ 350 or ENGL 340S) or (ESL 312 and ESL 313); all with CR or placement based on assessment  
Corequisite: READ 200  
CAN: None  
Advisory Level: Read: None  
Write: None  
Math: None  
Transfer Status: None  
Degree Applicable: NAA  
CSU GE: None  
District GE: None  
IGETC: None  

**READ-301S - Essentials of Reading-Self Paced**  
Units: 1 - 4  
In this course students will actively read text, non-fiction, and fiction to strengthen vocabulary, comprehension, and study skills in preparation for college course work. A broad range of materials, including the Internet, software, and library materials, will be incorporated. Students will work at their own pace in the Reading Center to complete assignments.  
Lecture Hours: 0  
Lab Hours: 3 - 12  
Repeatable: 3  
Grading: K  
Prerequisite: (3 units of ENGL 321 and ENGL 341) or 6 units of READ 350 or 6 units of ENGL 340S or (ESL 312 and ESL 313); all with CR or placement based on assessment  
CAN: None  
Advisory Level: Read: None  
Write: None  
Math: None  
Transfer Status: None  
Degree Applicable: NAA  
CSU GE: None  
District GE: None  
IGETC: None  

**READ-350 - Practical Reading**  
Units: 1 - 6  
In this course, students who need to build or review practical reading skills will work with vocabulary and comprehension as well as related writing and study strategies typical of those needed for success in college. A broad range of materials, including fiction, non-fiction, journals, the Internet, software, and library materials will be included. Students will be required to sign-up for READ 200 and spend at least 1 hour per week in the Reading Center. This course is repeatable for a maximum of 6 units. This is the first course in a sequence of 3 preparatory reading courses.  
Lecture Hours: 6  
Lab Hours: 0  
Repeatable: 4  
Grading: K  
Corequisite: READ 200  
Open Curriculum: An assessment test is required prior to first day of class  
CAN: None  
Advisory Level: Read: None  
Write: None  
Math: None  
Transfer Status: None  
Degree Applicable: NAA  
CSU GE: None  
District GE: None  
IGETC: None  

**Real Estate**

**REST-120 - Pretest for California Real Estate License Exam**  
Units: 1  
A practical applications course on the theory and mechanics of current California real estate examination techniques. This course is directed toward real estate salesperson license applicants who have successfully passed a Real Estate Principles course with a "C" or better, and are looking for additional testing procedure training prior to the State exam.  
Lecture Hours: 1  
Lab Hours: None  
Repeatable: 1  
Grading: K  
Credit by Exam: Yes  
Prerequisite: REST 122 with C or better  
Corequisite: Or concurrent enrollment in REST 122  
Recommended: 3 units of MATH 310 with CR or placement based on assessment  
CAN: None  
Advisory Level: Read: 2  
Write: 2  
Math: 1  
Transfer Status: None  
Degree Applicable: AS  
CSU GE: None  
District GE: None  
IGETC: None  

**REST-122 - Principles of Real Estate**  
Units: 3  
This course is an overview of the principles and economics of real property ownership and transfer, review of forms, terminology, and processes involved. Real Estate 122 provides an awareness of land use history, social and political issues related to real property. The course is recommended for home buyers, property managers and those involved in the variety of housing related industries. This course is an approved elective for the Real Estate Broker's examination, is required for the Real Estate Salesperson examination, and is a prerequisite for all other real estate courses.  
Lecture Hours: 3  
Lab Hours: None  
Repeatable: No  
Grading: O  
CAN: None  
Advisory Level: Read: 2  
Write: 2  
Math: None  
Transfer Status: CSU  
Degree Applicable: AA/AS  
CSU GE: None  
District GE: None  
IGETC: None  

**REST-123 - Real Estate Appraisal**  
Units: 3  
This course, a study in the determination of residential real property valuation, investigates topics of cost, market and income approaches to determine value, comparable sales analysis, appraisal techniques and methodology trends. Evaluation of single family dwellings, residential income property, and raw land are covered as well as appraisal professionalism and ethics. This course is required for the Real Estate Broker's examination, and approved elective for the Real Estate Salesperson's license, and fulfills 54 hours toward the OREA Appraiser's examination.  
Lecture Hours: 3  
Lab Hours: None  
Repeatable: No  
Grading: O  
Recommended: REST 122  
CAN: None  
Advisory Level: Read: 2  
Write: 2  
Math: None  
Transfer Status: CSU  
Degree Applicable: AA/AS  
CSU GE: None  
District GE: None  
IGETC: None
REST-124 - Legal Aspects of Real Estate Units: 3
This course emphasizes the practical application of California real property laws. Topics include titles, community property, liens, restrictions, transfers, brokerage, listings, escrow, contracts, commissions, tax sales, legal instruments, land title development, probate proceedings, and encumbrances. This course is required for the Real Estate Broker's examination, and is an approved elective for the Real Estate Salesperson's license. Not offered every semester.
Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: O
Prerequisite: REST 122 or BUS 122, both with C or better
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

REST-125 - Real Estate Practice Units: 3
Real Estate Practice is an overview of the operational methods of a real estate business. Emphasis is placed on the marketing activities of Broker and salespeople. Agent/client and buyer/seller transactions are used to detail all aspects of the merchandising of real property. This course is an optional course for the Real Estate Salesperson and required for the Broker applicant. Not offered every semester.
Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: O
Prerequisite: REST 122 or BUS 122, both with C or better
CAN: None
Advisory Level: Read: 2 Write: 2 Math: 1
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

REST-126 - Real Estate Finance Units: 3
This course presents an overview of the principles and forces that have a definitive effect on both interest rates and home values. Discussion includes a review of the Federal Reserve System, the secondary market, the appraisal process, the application and approval process for both conventional and government loans, the fluctuation of interest rates, the relation of present value, the nominal versus real interest rate and the overall history of related documents as is relevant to the study of real estate finance in California. This course is required for the Real Estate Broker's examination, and is an approved elective for the Real Estate Salesperson's license.
Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: O
Recommended: REST 122
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

REST-127 - Real Estate Property Management Units: 3
This course covers managing residential, apartment, commercial and industrial properties, including land conversion, financing, maintenance, taxes, insurance, furnishing, tenant relations, and investment evaluations. This course is an elective course for the Real Estate Salesperson's and Broker's examination. Not offered every semester.
Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: O
Recommended: REST 122 or BUS 122 previous or concurrent
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

REST-128 - Real Estate Economics Units: 3
This course provides students the means to interpret local, state and national economic factors and their relationship to the forces directly affecting real estate values. Such interpretive knowledge serves to enhance the students' understanding of the many facets of real estate. Forces such as business and real estate cycles, regional and community economic development, taxes, land use controls and real estate investments and their effect on the real estate economy are addressed. This course is an alternative requirement (in lieu of Accounting) for the Real Estate Broker's examination, and is an approved elective for the Real Estate Salesperson's license. Not offered every semester.
Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: O
Prerequisite: REST 122 or BUS 122 both with C or better
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

REST-133 - Advanced Real Estate Appraisal Units: 3
This is an advanced course devoted to the income approach to value. Methods and techniques of converting net income into an indication of value will be thoroughly analyzed. Case problems will be used to help students develop working familiarity with the mechanics of net income capitalization. Emphasis will be placed on the selection of alternative available approaches to the evaluation of different types of income streams. Not offered every semester.
Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: O
Prerequisite: REST 123 with C or better
CAN: None
Advisory Level: Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

REST-136 - Real Estate Occupational Work Experience-Parallel Plan Units: 1 - 4
Occupational Work Experience is designed for students who work or volunteer in a field related to their vocational major. Students are required to provide evidence that they are enrolled in a vocational program (e.g., educational plan or coursework in a vocational subject area). The Parallel Plan is designed for students who wish to take classes and work during the same semester. A maximum of 4 units of Occupational Work Experience credit may be earned during any one semester, to a maximum of 16 units total. Students must be enrolled in at least 7 units including Work Experience units. Courses taken at other accredited colleges or equivalent course work may meet this requirement. Internship/job placement is not guaranteed.
Lecture Hours: None Lab Hours: 3 - 12 Repeatable: 15 Grading: O
Corequisite: 1) Be enrolled during the regular semester in a minimum of 7 units at any accredited college, including Work Experience units or; 2) During a summer session, be enrolled in at least one other class in addition to Work Experience; and 3) Be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.
CAN: None
Advisory Level: Read: 3 Write: 3 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None
REST-138 - Real Estate Occupational Work Experience-AIternate Plan

Occupational Work Experience is designed for students who work or volunteer in a field related to their vocational major. Students are required to provide evidence that they are enrolled in a vocational program (e.g., educational plan or coursework in a vocational subject area). The Alternate Plan is designed to allow students to attend school one semester and work the next. A maximum of 8 units of Occupational Work Experience credit can be earned during any one semester, to a maximum of 16 units total. Students may only take one (if any) class in addition to work experience. Internship/job placement is not guaranteed.

Lecture Hours: 0 Lab Hours: 3 - 24 Repeatable: 15 Grading: O

Corequisite: 1. Need not be enrolled in any other class during the semester besides Work Experience. 2. May be enrolled in at most one other class in addition to Work Experience. 3. Must be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.

CAN: None Advisory Level:  
Read: 3 Write: 3 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

Recreation

REC-074 - Introduction to Corrective and Rehabilitation Physical Education

This course is designed to provide practical experience and formal training to students who are interested in pursuing a career in physical education, corrective and rehabilitative physical education, therapeutic recreation, corrective therapy, social education, physical therapy or any other area which involves working with physically handicapped students. Repeatable to a maximum of 9 units.

Lecture Hours: 2 Lab Hours: 3 Repeatable: 2 Grading: O

CAN: None Advisory Level:  
Read: 2 Write: 2 Math: None
Transfer Status: CSU Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None

Sign Language

SL-001A - Introduction to American Sign Language

This is a language course providing beginning American Sign language instruction in both expressive and receptive signing. The student will learn vocabulary, grammar, cultural behaviors, Deaf culture, the American manual alphabet, and the manual number system. Emphasis will be on a visual learning through practice activities and classroom activities. This course can satisfy foreign language requirements and can lead to bi-lingual employment certification.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: O

Credit by Exam: Yes Corequisite: SL 200

CAN: None Advisory Level:  
Read: 2 Write: 2 Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: C2 District GE: C2 IGETC: 6A

SL-001B - Intermediate American Sign Language

This course is designed to enable second semester students of American Sign language to become more fluent in their language acquisition. The student will continue learning vocabulary, grammar, cultural behaviors, Deaf culture, the American manual alphabet, and the manual number system. Students are challenged to sign longer expressive dialogues, to comprehend more complicated dialogues, and self-generated short stories which will help develop intermediate conversational skills.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: O

Credit by Exam: Yes Prerequisite: SL 001A Corequisite: SL 200

CAN: None Advisory Level:  
Read: 2 Write: 2 Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: C2 District GE: C2 IGETC: None

SL-002A - Advanced American Sign Language

This course is designed to enable intermediate students of American Sign Language to review and expand their fluency in receptive and expressive conversational skills. Their vocabulary, fingerspelling, grammatical and cultural understanding will be advanced through the use of medium-length prepared and self-generated dialogues and stories.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: O

Prerequisite: SL 001B Corequisite: SL 200

CAN: None Advisory Level:  
Read: 2 Write: 2 Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: C2 District GE: C2 IGETC: 3B

SL-002B - Advanced American Sign Language

This course is a continuation of Sign Language 002A. This course will help the advanced American Sign language students review and expand their fluency in receptive and expressive conversational skills. It includes practice in receiving and expressing vocabulary, grammar, non manual behaviors, fingerspelling, and numbers through longer prepared and self-generated dialogues and stories. Emphasis will be on describing and identifying things as well as discussing activities and plans. Students who complete this course could qualify for bi-lingual certification and should consider entering an interpreter training or Deaf studies program.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: O

Prerequisite: SL 002A Corequisite: SL 200

CAN: None Advisory Level:  
Read: 2 Write: 2 Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: C2 District GE: C2 IGETC: 3B

SL-003 - Conversational Sign Language

This course is designed for intermediate sign language students to improve fluency in receptive and expressive signing. Emphasis will be placed on American Sign Language grammar, vocabulary, semantics, idioms and fingerspelling used in everyday situations.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: O

Prerequisite: SL 001B Corequisite: SL 200

CAN: None Advisory Level:  
Read: 2 Write: 2 Math: None
Transfer Status: CSU/UC Degree Applicable: AA/AS
CSU GE: None District GE: None IGETC: None
SL-015 - Deaf Culture
Units: 3
This course is an introductory overview for all students interested in the American deaf community and the relationship of its language, American Sign Language, to its culture. The material will be presented through a psychosocial approach emphasizing past, recent, and evolving dynamics of deaf peoples' language, arts, folklore, heritage, education, family and community structure, employment and values in home and society. Comparisons will be made between deaf culture and other cultures in America.
Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

SL-098 - Directed Study in Sign Language
Units: 0.5 - 9
Individual or small groups of students who would benefit from independent study under the direction of faculty members in specific or related disciplines may develop individualized learning contracts designed to enhance their individual instructional programs. The students and the faculty member in consultation with the Division Dean will determine appropriate learning objectives and activities as well as the number of units to be earned. Instructions and the Learning Contract forms are available in the Division office. Repeatable to a maximum of 9 units across all disciplines.
Lecture Hours: 0 Lab Hours: 1.5 - 27 Repeatable: 17 Grading: O
CAN: None Advisory Level: Read: 2 Write: 2 Math: None Transfer Status: CSU Degree Applicable: AA/AS CSU GE: None District GE: None IGETC: None

SL-200 - Sign Language Supervised Skills
Units: None Lab
This course offers supplemental practice for sign language students to allow them the opportunity to improve their receptive and expressive signing skills during open lab hours. Projects are assigned in courses of concurrent enrollment. General consultations are provided by the faculty member in charge.
Lecture Hours: None Lab Hours: None Repeatable: 19 Grading: N Corequisite: SL 001A or SL 001B or SL 002A or SL 002B or SL 003 or SL 004 CAN: None Advisory Level: Read: None Write: None Math: None Transfer Status: None Degree Applicable: NC CSU GE: None District GE: None IGETC: None

SSCI-030 - Mexican American Culture
Units: 3
This course critically explores the experience of people of Mexican descent from the pre-Columbian era to contemporary U.S. society. The history of Chicanos culture and identity is analyzed by looking at sociocultural changes in race, class, gender, music, art, language, literature and other cultural elements. Emphasis is also placed on the diversity within the Chicoano community and the various characteristics that distinguish the Mexican American from other distinctive groups in American society.
Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: O
CAN: None Advisory Level: Read: 2 Write: 2 Math: None Transfer Status: CSU/UC Degree Applicable: AA/AS CSU GE: D1,D3 District GE: D,ES IGETC: 4G

SSCI-031 - Contemporary Issues in the Mexican American Community
Units: 3
This course is intended for students interested in investigating current political, economic and social issues facing Mexican American Communities in the United States. Using a problem-solving and "student-centered" approach students will select a specific issue to focus on (i.e. education, health care, gangs, immigration, domestic violence, economic development, etc.). Through class readings, discussions, videos, guest speakers and individual/group research, students will be able to think critically about various issues facing the Mexican American community today. An emphasis will also be placed on developing concrete steps needed to address current problems.
Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L
CAN: None Advisory Level: Read: 2 Write: 2 Math: None Transfer Status: CSU/UC Degree Applicable: AA/AS CSU GE: D3 District GE: D,ES IGETC: None

SSCI-032 - Japanese People, Behavior and Culture
Units: 3
This course will present a profile of Japanese culture manifested in the people's behavior. It will discuss the origins of the Japanese people, their religions, language, education, contemporary customs, and values in home and society. It will also pursue the influence of Japanese culture on Japanese Americans.
Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: O
CAN: None Advisory Level: Read: 2 Write: 2 Math: None Transfer Status: CSU/UC Degree Applicable: AA/AS CSU GE: D3 District GE: D,ES IGETC: 4G

SSCI-040 - Vietnamese American Culture
Units: 3
This is a survey course designed to provide information about Vietnamese and her culture, which includes historical background, social structure, language, religion, education, literature, customs and traditions. Emphasis is placed on the differences between American and Vietnamese thoughts and values in home and society. The course will consider race relations between Vietnamese and Americans.
Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: O
CAN: None Advisory Level: Read: 2 Write: 2 Math: None Transfer Status: CSU/UC Degree Applicable: AA/AS CSU GE: D1,D3 District GE: D,ES IGETC: 4G

Social Science

SSCI-020 - African American Culture
Units: 3
This is a survey course of the cultural experience of African people in the United States. The course content will examine the political, economic, religious, social and creative experience of this population.
Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L
CAN: None Advisory Level: Read: 2 Write: 2 Math: None Transfer Status: CSU/UC Degree Applicable: AA/AS CSU GE: D1,D3 District GE: D,ES IGETC: 4G
### SJCC Course Catalog

#### Social Science

**SSCI-098 - Directed Study in Social Science**  
Units: 0.5 - 9  
Individual or small groups of students who would benefit from Independent Study under the direction of faculty members in specific or related disciplines may develop individualized learning contracts designed to enhance their individual instructional programs. The students and the faculty member in consultation with the Division Dean will determine appropriate learning objectives and activities as well as the number of units to be earned. Instructions and the Learning Contract forms are available in the Division office. Repeatable to a maximum of 9 units across all disciplines.  
Lecture Hours: None  
Lab Hours: 1.5 - 27  
Repeatable: 17  
Grading: O

**CAN:** None  
**Advisory Level:** Read: 2  
Write: 2  
Math: None  
**Transfer Status:** CSU  
Degree Applicable: AA/AS  
**CSU GE:** None  
**District GE:** None  
**IGETC:** None

### Sociology

**SOC-010 - Introduction to Sociology**  
Units: 3  
Sociology 10 is a survey of the principles and basic concepts of sociology. This course includes the analysis of American culture, social organization, group behavior, social stratification, racial and ethnic groups, and the dynamics of social change and other social processes affecting life in the real world.  
Lecture Hours: 3  
Lab Hours: None  
Repeatable: No  
Grading: L

**CAN:** SOC 2  
**Advisory Level:** Read: 2  
Write: 2  
Math: None  
**Transfer Status:** CSU/UC  
Degree Applicable: AA/AS  
**CSU GE:** D0  
**District GE:** D  
**IGETC:** 4J

**SOC-011 - Social Problems**  
Units: 3  
Selected contemporary American social problems are analyzed along with descriptions of efforts undertaken to solve these problems. The relationship between social problems and social change is emphasized. Topics may include the study of the family, education, crime, class, poverty, race, population, work, income distribution, sexual inequality, health care, aging, as well as social and personal pathology.  
Lecture Hours: 3  
Lab Hours: None  
Repeatable: No  
Grading: O

**CAN:** SOC 4  
**Advisory Level:** Read: 2  
Write: 2  
Math: None  
**Transfer Status:** CSU/UC  
Degree Applicable: AA/AS  
**CSU GE:** D0  
**District GE:** D  
**IGETC:** 4J

### Spanish

**SPAN-001A - Elementary Spanish**  
Units: 5  
This is the first of two courses designed to develop the basic ability to understand, speak, read, and write the Spanish language. It includes aspects of the culture of Latin America and Spain. Not recommended for native speakers of Spanish.  
Lecture Hours: 5  
Lab Hours: None  
Repeatable: No  
Grading: O

**CAN:** SPAN 2; SPAN SEQ A = SPAN 1A+1B  
**Advisory Level:** Read: 3  
Write: 3  
Math: None  
**Transfer Status:** CSU/UC  
Degree Applicable: AA/AS  
**CSU GE:** C2  
**District GE:** C2  
**IGETC:** 6A

**SPAN-001B - Elementary Spanish**  
Units: 5  
This is the second of two courses designed to develop the basic ability to understand, speak, read, and write the Spanish language. It includes aspects of the culture of Latin America and Spain.  
Lecture Hours: 5  
Lab Hours: None  
Repeatable: No  
Grading: L

**Prerequisite:** SPAN 001A  
**CAN:** SPAN 4; SPAN SEQ A = SPAN 1B+1A  
**Advisory Level:** Read: 2  
Write: 2  
Math: None  
**Transfer Status:** CSU/UC  
Degree Applicable: AA/AS  
**CSU GE:** C2  
**District GE:** C2  
**IGETC:** None

**SPAN-001L - Foreign Language Lab**  
Units: 0.5  
The Foreign Language Laboratory supplements classroom instruction for Spanish 001A and Spanish 001B. The students will use audio cassette tapes, video tapes, and computer programs in conjunction with in-class assignments. This course must be taken concurrently with Spanish 1A or Spanish 001B. Repeatable to a maximum of 1 unit.  
Lecture Hours: None  
Lab Hours: 1.5  
Repeatable: 1  
Grading: K

**Corequisite:** SPAN 001A or SPAN 001B  
**CAN:** None  
**Advisory Level:** Read: None  
Write: None  
Math: None  
**Transfer Status:** CSU/UC  
Degree Applicable: AA/AS  
**CSU GE:** None  
**District GE:** None  
**IGETC:** None

**SPAN-002A - Intermediate Spanish**  
Units: 5  
Conversation, composition, review of structure of the Spanish language, oral and written expression, readings in Spanish literature, and cultural understanding are included.  
Lecture Hours: 5  
Lab Hours: None  
Repeatable: No  
Grading: O

**Prerequisite:** SPAN 001B  
**CAN:** SPAN 8; SPAN SEQ B = SPAN 2A+2B  
**Advisory Level:** Read: 2  
Write: 2  
Math: None  
**Transfer Status:** CSU/UC  
Degree Applicable: AA/AS  
**CSU GE:** C2  
**District GE:** C2  
**IGETC:** 3B

**SPAN-002B - Intensive Intermediate Spanish**  
Units: 5  
Further development of conversation, completion, review of structure of the Spanish language, oral and written expression, readings in Spanish literature, and cultural understanding.  
Lecture Hours: 5  
Lab Hours: None  
Repeatable: No  
Grading: O

**Prerequisite:** SPAN 002A with C or better  
**CAN:** SPAN 10; SPAN SEQ B = SPAN 2B+2A  
**Advisory Level:** Read: 2  
Write: 2  
Math: None  
**Transfer Status:** CSU/UC  
Degree Applicable: AA/AS  
**CSU GE:** C2  
**District GE:** C2  
**IGETC:** 3B
SPAN-002L - Foreign Language Lab  
Units: 0.5
The Foreign Language Laboratory supplements classroom instruction for Spanish 002A and Spanish 002B. The students will use audio cassette tapes, video tapes, and computer programs in conjunction with in-class assignments. This course must be taken concurrently with Spanish 002A or Spanish 002B. Repeatable to a maximum of 1 unit.
Lecture Hours: None  Lab Hours: 1.5  Repeatable: 1  Grading: K
Corequisite: SPAN 002A or SPAN 002B
CAN: None
Advisory Level: Read: None  Write: None  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

SPAN-091A - Conversational Spanish  
Units: 3
This course deals with the essentials of Spanish conversation leading to the development of an ability to use the language in everyday situations. It is designed for students without previous experience in Spanish.
Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: O
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

SPAN-091B - Conversational Spanish  
Units: 3
This course is a continuation of Spanish 091A. It deals with the essentials of Spanish conversation leading to the development of an ability to use the language in everyday situations
Lecture Hours: 3  Lab Hours: None  Repeatable: No  Grading: O
Prerequisite: SPAN 091A
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

SPAN-098 - Directed Study-Spanish  
Units: 0.5 - 9
Individual or small groups of students who would benefit from independent study under the direction of faculty members in specific or related disciplines may develop individualized learning contracts designed to enhance their individual instructional programs. The students and the faculty member in consultation with the Division Dean will determine appropriate learning objectives and activities as well as the number of units to be earned. Instructions and the Learning Contract forms are available in the Division Office. Repeatable to a maximum of 9 units across all disciplines.
Lecture Hours: None  Lab Hours: 1.5 - 27  Repeatable: 17  Grading: O
CAN: None
Advisory Level: Read: 2  Write: 2  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

Telecommunications

TLCOM-001 - Broadband Cabling Techniques  
Units: 2.5
This telecommunications course teaches the proper procedures for performing aerial, underground and interior broadband cable installations at the customer premises. The course begins with a comprehensive overview of broadband cable system, providing the student with working knowledge of the system from the signal sources to the customer's premises devices. In addition, the course includes lessons on tool usage and maintenance, signal level meter and digital multimeter operation and measurements, and basic TV signal quality troubleshooting procedures.
Lecture Hours: 1.5  Lab Hours: 3.5  Repeatable: No  Grading: L
Credit by Exam: Yes
CAN: None
Advisory Level: Read: None  Write: None  Math: None
Transfer Status: None  Degree Applicable: AS
CSU GE: None  District GE: None  IGETC: None

TLCOM-003 - Cabling Techniques for the Telecommunications Industry  
Units: 2.5
This telecommunication course provides the student with basic understanding of voice and data Local Area Network (LAN) cabling. The student will learn basic color codes and their connecting arrangements. Coaxial cables, twisted and untwisted pairs, and their specific applications are covered. The student will also learn to recognize the different LAN and associated hardware systems. LAN hardware and basic troubleshooting skills will be covered. Cable handling, routing, dressing and general safety practices will be subjects of discussion. The history of Fiber Optics, its theory of operation, its advantages and disadvantages also will be covered.
Lecture Hours: 1.5  Lab Hours: 3.5  Repeatable: No  Grading: L
Credit by Exam: Yes
CAN: None
Advisory Level: Read: None  Write: None  Math: None
Transfer Status: None  Degree Applicable: AS
CSU GE: None  District GE: None  IGETC: None

TLCOM-005 - Fiber Optics Cabling Techniques  
Units: 2.5
This telecommunications course provides the student with basic understanding of Fiber Optics Cabling. The student will learn basic color codes, Single mode and Multimode fibers, Indoor and Outdoor fibers and their specific usages. The history of Fiber Optics, its theory of operation, its advantages and disadvantages will be reviewed. Hands-on Labs will cover such topics as Fiber Optics Cable manufacturing, various Connectorization techniques (PC and APC), epoxy curing, cleaving, polishing, inspection testing and packaging. Splices/splicing and testing with OTDR will be introduced. Cable handling, routing, dressing and general safety practices will also be subjects of discussion and will be practiced.
Lecture Hours: 1.5  Lab Hours: 3.5  Repeatable: No  Grading: L
Credit by Exam: Yes
CAN: None
Advisory Level: Read: 2  Write: 2  Math: 1
Transfer Status: None  Degree Applicable: AS
CSU GE: None  District GE: None  IGETC: None
Telecommunications

TLCOM-007 - Advanced Fiber Optics Cabling Techniques
Units: 2.5
This telecommunications course provides the student with an understanding of advanced Fiber Optic Cabling. The student will learn the process of Fusion splicing of Single mode and Multimode fibers. The students will learn about various interfaces, various standards and specifications, installation, testing maintenance and restoration. Devices such as Photodiodes, LEDs & LASERS, Detectors, Repeaters, System Design and documentation, Fiber Optic in Cable TV, voice and data communication.
Lecture Hours: 1.5 Lab Hours: 3.5 Repeatable: No Grading: L
Prerequisite: TLCOM 003 and TLCOM 005, both with C or better

TLCOM-011 - Telecommunications
Units: 4
This course places emphasis on the technical aspects of the telecommunications industry. The student is introduced to the telephone system, the hierarchy of switching, and the methods used in routing calls throughout the Public Switched Telephone Network (PSTN). A touch-tone telephone is constructed as a student project and is used to perform measurements on the telephone system. Other topics include Serial protocols: RS232, RS422, RS423, RS449. Modems and various modulation techniques employed to achieve low and high speed communications; T1 carrier Transmission; Modulation techniques; PAM, PCM, PWM, PDM, and PPM; North American FDM and TDM Hierarchy. Synchronous vs. Asynchronous transmission.
Lecture Hours: 2 Lab Hours: 6 Repeatable: No Grading: L
Prerequisite: CT 079 and (ELECT 063 AND ELECT 122), all with C or better
Recommended: Concurrent enrollment in TLCOM 012 and/or ELECT 168

TLCOM-012 - Data Acquisition Systems
Units: 4
This course is designed to introduce the student to data acquisition techniques commonly employed in today's communications systems. This includes sample-and-hold amplifiers, analog-to-digital converters, digital-to-analog converters, phase-locked loop technology, and an introduction to operational amplifier design. Various methods used to implement these operations will be defined, studied, and constructed in laboratory experiments. The advantages and disadvantages of each method will be weighted against each other. The subject of noise and its effects upon the analog and digital signal will also be covered. Frequency spectral content, signal-to-noise ratio, noise factor, and noise figure will be analyzed in the laboratory.
Lecture Hours: 2 Lab Hours: 6 Repeatable: No Grading: L
Prerequisite: CT 079 and (ELECT 063 and ELECT 122), all with C or better
Recommended: Concurrent enrollment in TLCOM 012 and/or ELECT 168

TLCOM-013 - Advanced Telecommunications
Units: 4
This advanced course in telecommunications offers a continuation of subject matter supporting the latest trends in the telecommunications industry. Various standards organizations are studied, including the ISO/OSI 7-Layer Model. Primary subjects include LAN systems with emphasis on the IEEE 802.3 Ethernet standard; LAN topology with access control techniques; synchronous protocols: BISYNC, HDLC, SDLC, DDPCM; Error detection and correction; Hamming codes; Cyclic codes; the UART interface; Programming the UART for serial communications; Fiber optic theory and technology; Time domain reflectometry; and Data compression.
Lecture Hours: 2 Lab Hours: 6 Repeatable: No Grading: L
Prerequisite: TLCOM 011 or CT 082, with C or better
Recommended: Concurrent enrollment in TLCOM 012 and/or ELECT 168 with C or better

Theater Arts

THEAT-002 - Beginning Acting
Units: 3
Students learn and practice the basic skills of acting: observation; concentration; physical, emotional and psychological resources for acting.
Lecture Hours: 2 Lab Hours: 3 Repeatable: 3 Grading: L

THEAT-003 - Intermediate Acting
Units: 3
Students practice the elements of acting in scenes from a variety of classic and modern plays, developing their ability to create character, to move and speak effectively on stage, to understand and interpret scripts, and to work in an ensemble with other actors.
Lecture Hours: 2 Lab Hours: 3 Repeatable: No Grading: L
Prerequisite: THEAT 002 or DRAMA 013A

THEAT-005 - Voice Skills
Units: 3
Students learn vocal skills for performing and public speaking. Class exercises and presentations focus on alleviating performance anxiety, relaxation, the vocal anatomy, vocal tone, projection, articulation, variety and expressiveness. The coordination of the voice with the body and emotion is emphasized.
Lecture Hours: 2 Lab Hours: 3 Repeatable: No Grading: L
THEAT-020 - Introduction to Theatre Arts  Units: 3
Students study the history and aesthetics of theatre arts from their origin in primitive cultures through modern theatre practice in western and non-western theatre. Play writing, theatrical design, acting, and directing styles, theatre architecture, and dramatic genres are examined.
Lecture Hours: 3  Lab Hours: 0  Repeatable: No  Grading: L
CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: C1  District GE: C1  IGETC: 3A

THEAT-022 - Script Analysis  Units: 3
Students read plays, watch movies, and study plot construction, characterization, thematic content, and technical considerations in preparation for play writing, screen writing, directing plays, and designing for the theatre and films.
Lecture Hours: 3  Lab Hours: 0  Repeatable: No  Grading: L
CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: C1  District GE: C1  IGETC: 3A

THEAT-030 - Studio Production Workshop  Units: 0.5 - 2
Students participate in rehearsals and public performances as an actor in a studio theatre production. A studio production features intimate staging, naturalistic acting styles.
Lecture Hours: 0  Lab Hours: 1.5 - 6  Repeatable: 15  Grading: L
Prerequisite: Audition
Recommended: THEAT 002 or DRAMA 013A or the equivalent
CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

THEAT-031 - Play Production Workshop  Units: 0.5 - 2
Students participate in rehearsals and public performances as an actor in a large-scale theatre production featuring complex staging, distant audience, large house visual and acoustical circumstances.
Lecture Hours: 0  Lab Hours: 1.5 - 6  Repeatable: 15  Grading: O
Prerequisite: Audition
Recommended: THEAT 002 or DRAMA 013A or the equivalent
CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

THEAT-032 - Film Production Workshop  Units: 0.5 - 2
Students participate in rehearsals and production of a film as actors, managers and technicians.
Lecture Hours: 0  Lab Hours: 1.5 - 6  Repeatable: 8  Grading: L
CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

THEAT-033 - Technical Theatre Workshop  Units: 0.5 - 2
Students learn practical applications of technical theater techniques by serving as apprentices during the design, construction, and running of a live theatre performance.
Lecture Hours: 0  Lab Hours: 0.5 - 30  Repeatable: 15  Grading: O
CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU/UC  Degree Applicable: AA/AS
CSU GE: None  District GE: None  IGETC: None

VIET-001A - Elementary Vietnamese  Units: 5
With intensive practice students will learn the elementary skills for oral and written communication in Vietnamese language. Essential components include pronunciation, vocabulary, grammar and syntax, cultural backgrounds and an introduction to Vietnamese literature and culture.
Lecture Hours: 5  Lab Hours: 0  Repeatable: No  Grading: L
CAN: None
Advisory Level: Read: 3  Write: 3  Math: None
Transfer Status: CSU  Degree Applicable: AA/AS
CSU GE: None  District GE: C2  IGETC: None
**VIET-001B - Elementary Vietnamese**

Units: 5

Further development in a more intensive practice of the elementary skills of reading, oral, and written communication in Vietnamese language. Essential components include spelling, pronunciation, intonation, vocabulary, grammar, and syntax structure. The continuation of an introduction to Vietnamese literature and culture will also be examined.

Lecture Hours: 5  Lab Hours: 0  Repeatable: No  Grading: L

Prerequisite: VIET 001A with C or better

CAN: None

Advisory Level:
- Read: 3
- Write: 3
- Math: None

Transfer Status: CSU Degree Applicable: AA/AS

CSU GE: None  District GE: C2  IGETC: None

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**Work Experience**

**WE-088A - General Work Experience - Alternate Plan**

Units: 1 - 6

The Cooperative Work Experience program is designed to help students expand their career options and develop new job skills. Alternate Plan Work Experience allows the student to work and earn college credit without additional coursework. A maximum of 6 units of Work Experience credit may be earned. Students may be enrolled in no more than one additional course. Internship/job placement is not guaranteed.

Lecture Hours: None  Lab Hours: 3 - 18  Repeatable: 4  Grading: O

Corequisite:
1. Need not be enrolled in any other class during the semester besides Work Experience.
2. May be enrolled in at most one other class in addition to Work Experience.
3. Be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.

CAN: None

Advisory Level:
- Read: 3
- Write: 3
- Math: None

Transfer Status: CSU Degree Applicable: AA/AS

CSU GE: None  District GE: None  IGETC: None

**WE-088P - General Work Experience - Parallel Plan**

Units: 1 - 3

The Cooperative Work Experience program is designed to help students expand their career options and develop new job skills. Parallel Plan Work Experience allows students to attend college classes and work during the same semester. A maximum of 3 units of General Work Experience credit may be earned during any single semester, to a maximum of 6 units total. Students must be enrolled in at least 7 units during the semester, including Work Experience units and courses taken at other accredited colleges. Internship/job placement is not guaranteed.

Lecture Hours: None  Lab Hours: 3 - 9  Repeatable: 4  Grading: O

Corequisite:
1) Be enrolled during the regular semester in a minimum of 7 units at any accredited college, including Work Experience units or;
2) During a summer session, be enrolled in at least one other class in addition to Work Experience; and
3) Be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status. Each unit requires 75 paid or 60 unpaid hours of work.

CAN: None

Advisory Level:
- Read: 3
- Write: 3
- Math: None

Transfer Status: CSU Degree Applicable: AA/AS

CSU GE: None  District GE: None  IGETC: None
CHAPTER 9 — THE STUDENT’S RIGHT TO KNOW!

ACADEMIC FREEDOM

INSTRUCTORS

Instructors have the right to study and investigate, interpret their findings and express resulting conclusions to students. Instructors have the responsibility to be thorough in their investigations and to draw conclusions supported by the findings. Because human knowledge is limited and changeable, the instructor may present views which are controversial and evaluate opinions held by others while simultaneously respecting the right of their free expression. (Board Policy 6080.401)

STUDENTS

The students have the freedom to express and defend their views and to question or differ without suffering repression or scholastic penalty. Students have the same responsibilities as instructors to seek and weigh evidence, express supportable conclusions, identify bias and evaluate opinions held by others while respecting the right of their own free expression. (Board Policy 6080.402)

ACADEMIC RENEWAL BY REPETITION

Students may repeat any course, one time, in which they have received a “D” or “F” grade at this or another institution. The highest grade attained shall be used in the computation of their grade point average.

No student may repeat a course in which a final grade of “C” or “CR” or better has been received unless the catalog entry with the course title indicates that credit may be earned more than once. Students’ transcripts will show the grades for all courses taken.

ACTION GATHERING

Action gatherings on campus shall be confined to places, times and manner consistent with the orderly conduct of the college and the free flow of traffic. Requests for approval of such gatherings shall be made to the Director of Campus Life. Costs may be assessed to the sponsoring group for any additional services needed.

AUDITING

Auditing of classes is not permitted. All students must be registered, and all fees paid prior to attending any class.

CRIME POLICY

The Student Right-to-Know and Campus Security Act of 1990 requires all colleges to publish an annual Campus Crime and Security Report and to make this report available by September 1st of each year to all current students, employees and to prospective students and employees. The reports will report/disclose information on campus-based crimes and campus safety policies and procedures.
Methods of Disclosing to Current Students and Employees:

A direct mailing of the report via U.S. Postal Service or placing the report in campus mailboxes.

Methods of Disclosing to Prospective Students and Employees:

The report will be available at the Campus Police Office and various other offices on campus. Prospective students and employees may request a copy by contacting Campus Police at (408) 288-3735, 1st floor, Student Center. Access to the report is also available online at www.sjeccd.org/srtk/security.pdf.

DISABLED STUDENTS PROGRAM

BACKGROUND

The Americans with Disabilities Act (ADA) is a civil rights statute that prohibits discrimination against people with disabilities. This protection is similar to that given to women, minorities, and others through the Civil Rights Act of 1964. Protected are an estimated 43 million Americans with disabilities that substantially limit activities such as working, walking, talking, seeing, hearing, or caring for oneself. People who have a record of such an impairment and those regarded as having an impairment are also protected. This federal legislation prohibits discrimination based on disability, with the intent that our nation benefit from the skills and abilities of all individuals and increase their opportunities for self-sufficiency.

STUDENT RIGHTS

Students have the following rights under Section 504 of the 1973 Rehabilitation Act, as revised (29 U.S.C. 794), The American Disabilities Act 28 CFR 35.102-35.104, CA Assembly Bill 803 Government Code Section 11135 et. seq., and Title V, section 56008 of CA Education Code.

- Right to voluntary participation in the Disabled Students Program & Services (DSP&S).
- Right to confidentiality and protected disclosure of student records.
- Right to access to college classes, programs, activities, services and facilities to facilitate learning. The college will make every reasonable effort to provide access.
- Right to access information in the student’s preferred mode, i.e. Braille, verbal transcription, sign language, etc.
- Deaf students have the right to an interpreter with whom they have clear communication.
- Right to an integrated setting to be with other students who are not disabled.
- A right to request an appropriate accommodation to facilitate participation in class and campus activities.
- Right to protection against discrimination based on association with a person with a disability. As a friend or companion of a student with a disability, a student should not be treated differently from other students who are non-disabled.
- Right to safety requirements based on actual risks, not speculation or stereotype.
- A right to participate in campus activities, class demonstrations, or laboratory experiments to the extent that a disability does not pose a risk to the student or to other students.
- Right to request academic adjustments to facilitate student participation in class work and campus activities.
- Right to modification in policies unless the modification fundamentally alters the nature of the services or activities. The student has the right to request changes in class or campus policies to facilitate the student participation in class and campus activities. Request will be evaluated in terms of how the modification might affect course standards.
- Right to protection against discrimination and harassment. Students have the right to participate in class and campus activities without being harassed or discriminated against.

If a student feels that he/she is the target of discriminatory treatment, the student can file a complaint with the section 504/Americans with Disabilities Act Coordinator.

Contact Person: Arturo Ocampo
Phone: (408) 223-6797
Location: Human Resources, District Office
Hours: Monday – Friday, 8 a.m. – 5 p.m.

STUDENT RESPONSIBILITIES

- To provide DSP&S documentation of disability.
- To request accommodations and access to college classes, programs, activities, services, and facilities in a timely manner.
- To use accommodations appropriately.
- To notify DSP&S approximately 24 hours in advance for planned absences from classes where services are being provided, i.e. interpreters, readers. Failure to notify DSP&S may result in discontinued services.

DETERMINING NEED

Students who need academic adjustments must meet with Disabled Students Program and Services staff members to complete an application form, determine educational limitations and services needed, and complete a student educational contract. The DSP&S Student Handbook names the accommodations the college can arrange and specifies the process for requesting them.

CONTACT THE DSP&S OFFICE

The faculty and staff of the Disabled Students Program and Services Office are available for consultation on any questions you may have related to accommodation for a disability. The highest standard of confidentiality is maintained. The ADA coordinator is also available to answer questions about the Americans with Disabilities Act.

TTY Phone Numbers

- Adjunct ASL Instructors 292-0988
- Admissions and Records 275-8056
- Applied Science and Physical Education 295-6579
- Campus Store 298-2836
- Child Development Center 287-7240
- Cosmetology/Dental Asst. 293-0237
- Counselor for the Deaf 294-3447
- Counseling-General 993-0532
- Disabled Student Program 294-3447
- District Police 238-7613
- Drama Building 292-0988
- Financial Aid 993-0517
- G.E. Building 298-2558
- Interpreter Coordinator 995-5594
- Library 993-0534
- Reading/Writing Lab 292-0377
- Student Health Services 293-0165
- W-Building 971-4620
DISTRIBUTION OF NON-COLLEGE PUBLICATIONS

No bulletin, circular, advertisement, film or publication of any character shall be distributed, sold or displayed on the San Jose/Evergreen Community College District campuses by any person, group or organization not directly under the jurisdiction of the college administration, unless prior written approval has been granted by the Dean of Counseling and Matriculation. Approval will be contingent upon availability of bulletin board space and/or adequate facilities and compliance with applicable educational codes and civil statutes.

Student organizations wishing to engage in the above listed activities must have the consent of a faculty advisor and the Dean of Counseling and Matriculation.

DRUG FREE WORK PLACE

San Jose/Evergreen Community College District (SJ/ECCD) maintains standards of conduct that clearly prohibit the unlawful possession, use or distribution of illicit drugs and alcohol by students and employees at the District or at any District activity. The standards of conduct are more fully set forth in the following:

- Board Policy 1530, Drug Free Work Place
- Board Policy 5040.3, Standards of Student Conduct
- Education Code Sections 87732, 87735 and 87736

San Jose/Evergreen Community College District will seek sanctions on students and employees, up to and including recommendations for expulsion or dismissal from employment and referral for prosecution, for violations of the standards of conduct.

Criminal sanctions for the unlawful possession or distribution of illicit drugs and alcohol include the following:

- Imprisonment in a State prison for possession of specified controlled substances, including opium derivatives and cocaine (Health and Safety Code Section 11350).
- Imprisonment in a State prison for two to four years for possession for sale of specified controlled substances, including opium derivatives and cocaine (Health and Safety Code Section 11351).
- Imprisonment in a State prison for three to five years for possession for sale of cocaine base (Health and Safety Code Section 11351.5).
- A fine of not more than $100 for possession of less than 28.5 grams of marijuana; imprisonment in a county jail and/or fine of $500 for possession of more than 28.5 grams of marijuana; imprisonment in a county jail and/or fine of not more than $500 or imprisonment in a state prison for possession of concentrated cannabis (Health and Safety Code Section 11359).
- Imprisonment in a state prison for possession for sale of marijuana (Health and Safety Code Section 11359).
- Misdemeanor penalties for possession, sale or distribution of alcoholic beverages on school property (Business and Professions Code Section 25608).
- Misdemeanor penalties for sale or furnishing alcoholic beverages to minors (Business and Professions Code Section 25658).
- Fines for attempt to purchase alcoholic beverages by persons under the age of 21 (Business and Professions Code Section 25658.5).

MATRICULATION

DEFINITION

Matriculation is a state-mandated program designed to assist students in accomplishing their educational goals. It is an agreement between the college and the student.

San José City College agrees to provide an organized process of admission, orientation, assessment, counseling and student progress follow-up. The students agree to declare a specific educational objective, attend class regularly, complete assigned course work and maintain satisfactory progress toward the achievement of their educational plans.

GOAL

The primary goal of matriculation is to increase student success through institutional effectiveness. Success is measured by the attainment of student educational objectives. Matriculation is a coordinated process:

1. Assisting students to make wise educational choices concerning the programs and courses to pursue based upon clear and sensitive appraisals of their skills, interest and aptitudes in relation to the programs and courses offered.
2. Enabling students to complete with satisfactory grades the units they attempt and to persist from semester to semester.
3. Identifying the support services that students need to succeed and referring students to college and community resources to meet those needs.
4. Strengthening student motivation to succeed through the above and providing frequent feedback and encouragement.

ACTIVITIES

Admission: Students utilize online, mail-in, walk-in or in-class registration to expedite the entry process.

Orientation: Students obtain current materials on SJCC’s programs, policies, procedures, locations and facilities through semester schedules, career and transfer planning guides, catalogs, mailings, brochures, Web sites, and newsletters.

Assessment: Students are evaluated for current skill levels in reading, writing and math. District-approved, no-cost assessment instruments are used, and feedback is provided. Various assessment times and locations are available for accessibility. Career interest inventories and other specialized testing tools are available in the Career/Transfer Center.

Counseling: Students meet with educational counselors through walk-in and personalized appointments. Students learn about educational options including transfer requirements, associate degrees, certificate programs, enrichment courses and weekend offerings. Counselors assist students in identifying their educational goals and in developing individualized plans to achieve them.

Student Progress follow-up: Students excelling in their course work are notified of honor lists and scholarships. Students encountering academic difficulties are referred to appropriate college services by counselors, instructors and staff members. Students having special needs are directed to additional follow-up resources within the college and community.
SUMMARY

Students who participate in matriculation have an increased potential for success. They are more motivated, knowledgeable and prepared to achieve their educational goals. For further information on matriculation, please call the Counseling Office at (408) 288-3750.

EXEMPTION CRITERIA

All students entering San José City College are expected to participate fully in matriculation services. They are also expected to meet course skill level requirements and prerequisites. Students may be exempted from assessment, orientation and/or counseling on the basis of the following criteria:

- Students who have earned an associate degree or higher from an accredited institution.
- New students transferring from a community college or a four-year institution.
- Students who, in the opinion of the Dean of Counseling and Matriculation, or designee, would not directly benefit from participating in orientation, assessment and/or counseling.

PROCESS

Students who have earned an associate degree or higher from an accredited institution or are transferring from another community college or a four-year institution will need to provide the Office of Admissions and Records with written documentation.

Students who believe that they would not directly benefit from participating in orientation, assessment and/or counseling and have never attended a previous accredited institution must file a Matriculation Waiver form available in the Office of Admissions and Records.

ASSESSMENT FOR ENTRY PLACEMENT

Assessment for entry placement in reading, writing and mathematics is expected of all first-time matriculating students, except for those students who have completed required English and mathematics skill courses. New matriculating students who have earned an associate degree or higher from an accredited institution are not required to take the assessment.

Students are strongly encouraged to complete the no-cost assessment as the scores are used for advisory purposes during counseling sessions. Scheduled dates and times are available through the Office of Admissions and Records. The results are available immediately or shortly after completing the assessment. Assessed students are directed to speak with a counselor or faculty advisor, in the related academic discipline, to determine course placements which are based upon multiple measures. Multiple assessment measures for entry placement and counseling decisions may include, but are not limited to, the following factors: assessment results, prior coursework or experience, goal definition, motivation, academic status, self-assessment and study skills.

PREREQUISITES, COREQUISITES AND OTHER LIMITATIONS ON ENROLLMENT

All prerequisites or corequisites identified in San José City College's catalog and class schedule were established according to state laws as outlined in the District's Model Plan. The following information is provided in compliance with those laws.

Except for district priority registration procedures for continuing students and courses or programs with prerequisites or corequisites, all San José City College classes are open to enrollment on a "first come first served" basis until they are filled to maximum capacity.

DEFINITIONS:

- "Prerequisite" means a condition of enrollment that a student is required to meet in order to demonstrate current readiness for enrollment in a course or educational program.
- "Corequisite" means a condition of enrollment consisting of a course that a student is required to simultaneously take in order to enroll in another course.
- "Advisory" means a condition of enrollment that a student is advised, but not required, to meet before or in conjunction with enrollment in a course or educational program.

PREREQUISITES, COREQUISITES, AND ADVISORIES ON RECOMMENDED PREPARATION CHALLENGE

The San Jose/Evergreen Community College District adopts the following in order to provide for the establishing, reviewing, and challenging of prerequisites, corequisites, advisories on recommended preparation and certain limitations on enrollment in a manner consistent with law and good practice.

A student may challenge any prerequisite or corequisite on one or more of the grounds listed below. The student shall bear the initial burden of showing that grounds exist for the challenge. Challenges shall be resolved in a timely manner and, if the challenge is upheld, the student shall be permitted to enroll in the course or program in question. Grounds for challenge are:

- The prerequisite or corequisite has not been established in accordance with the district's process for establishing prerequisites and corequisites;
- The prerequisite or corequisite is in violation of Title 5;
- The prerequisite or corequisite is either unlawfully discriminatory or is being applied in an unlawfully discriminatory manner;
- The student has the knowledge or ability to succeed in the course or program despite not meeting the prerequisite or corequisite;
- The student will be subject to undue delay in attaining the goal of his or her educational plan because the prerequisite or corequisite course has not been made reasonably available.

PROCESS:

Students who believe that they have completed the prerequisite(s) or corequisite(s) for a course listed in the schedule of classes or catalog for any of the reasons should do the following:

- Complete a Prerequisite Challenge form available at the Counseling Office;
- Make an appointment to see a counselor to help you review your experience and guide you in the challenge process. If the counselor cannot make a determination about your experience, he or she will refer you to the instructional dean who supervises the area in which you wish to take the course;
- If there are any unresolved issues after you meet with the instructional dean, you may present your case to the Dean of Counseling and Matriculation;
- When space is available in a course when a student files a challenge to the prerequisite or corequisite, the college shall reserve a seat for the student and allow the student to enroll in the course if the challenge is successful.
**Nondiscrimination Statement**

It is the policy of this District that, unless specifically exempted by statute, every course, course section or class, the Full Time Equivalent Students (FTES) of which is to be reported for state aid, wherever offered and maintained by the District, shall be fully open to enrollment and participation by any person who has been admitted to the College(s) and who meets such prerequisites as may be established pursuant to Title 5 of the California Administrative Code, commencing with section 58100.

*San Jose/Evergreen Community College District* does not discriminate on the basis of race, religion, color, ethnic group identification, gender, national origin, age, marital status, sexual orientation, organizational affiliation, political beliefs, veteran status, language, accent, immigration status, ancestry, transgender, or physical or mental disability. The lack of English language skills will not be a barrier to admission to or participation in vocational education programs. SJ/ECCD is subject to Title IX of the Education Amendments of 1972, Title VII of the Civil Rights Act of 1964 as amended, Sections 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. For further information, please contact the Equal Employment Opportunity Officer at either San José City College or Evergreen Valley College.

Students who believe that they have been discriminated against should contact one of the following offices for specific information:

**Campus Diversity and Americans with Disabilities Act Coordinator:**

Arturo Ocampo  
Telephone: (408) 223-6797

**Title IX and Gender Equity Coordinator:**

Claudia Consigny  
Dean of Counseling and Matriculation  
Counseling Office, Student Center  
Telephone: (408) 288-3772

**Disabled Students Program:**

Zeke Garcia  
Dean of Special Programs  
OR  
Karen Pullen  
Coordinator, Disabled Students Program  
Student Center  
Telephone: (408) 288-3747

**Non-Smoking Policy**

San Jose/Evergreen Community College District prohibits the smoking of cigarettes, pipes, cigars and other combustible substances in all District buildings, facilities and District vehicles.

**Release of Student Information**

All official records of the College are held as confidential, and no information regarding a student will be released without prior written authorization from the student. Parents and legal guardians of unmarried minors must also obtain written consent from the student. Federal and State laws do make exceptions, giving certain persons the right of access to records without prior written consent, provided there is sufficient reason to see those records. The exceptions are:

1. College officials, including teachers, counselors, and counseling interns, if that person has a legitimate educational interest to inspect a record.

2. Authorized representatives of the Comptroller General of the United States, the Secretary of the Department of Education, the administrative head of an education agency, State Education officials or their respective designees or the U.S. Office of Civil Rights.

3. Officials authorized to review records in conjunction with a student’s application for, or receipt of, Financial Aid.

4. Officials of schools in which the student may plan to enroll, provided that the student receives a copy of this record if desired.

5. Officials of government authorized to subpoena records, provided that there is a reasonable attempt to notify the student when such records are subpoenaed.

A record of access of all persons in categories 2, 3, 4 and 5 is maintained in the student’s file folder. No other person may obtain information about a student without the student’s written consent.

Statistical information concerning the student body which contains no personally identifiable data is made available to the public in various forms. The College also makes available to the public the names of students who are graduating, the names of students who are placed on the “Honor’s List,” and participants in athletic events unless students request, in writing to the Director of Admissions and Records, that their names be withheld from any such list. Such requests must be submitted prior to the opening day of each semester.

Students who wish copies of documents in their files must request this service in writing through the Office of Admissions and Records. A cost of $1 per page copied (exclusive of the San José City College transcript for which there is a separate charge) is assessed the student for this service. Copies of transcripts from other colleges will not be supplied. No copies of any kind will be made if the student has any indebtedness to the College or District.

**Sexual Harassment/Discrimination**

The San Jose/Evergreen Community College District is committed to maintaining an environment free of sexual harassment and all forms of sexual intimidation and exploitation. All students, staff, and faculty should be aware that the district is concerned and prepared to take action to prevent and correct such behavior, and that individuals who engage in such behavior are subject to discipline. The district is committed to following the provisions of federal and state laws prohibiting sexual harassment or discrimination in employment and educational programs and services, without regard to race, religious creed, color, national origin, ancestry, disability, medical condition, marital status, political beliefs, organizational affiliation, sexual orientation, gender, or age.
**DEFINITION**

Unwelcome sexual advances, requests for sexual favors, and other verbal comments or conduct of a sexual nature shall constitute sexual harassment when:

- Submission to or rejection of such conduct by an individual is used as the basis for academic or employment decisions affecting that student or employee, including, but not limited to, the individual’s academic or work evaluation; or
- Such conduct has the purpose or effect of unreasonably interfering with an individual’s academic or work performance by creating an intimidating, hostile, or offensive academic or work environment.

(Title IX of the Education Amendments of 1972).

**Sexual harassment and discrimination may consist of verbal, written or physical contact of a sexual nature which:**

- Is conditioned upon an employment benefit or an educational outcome
- Unreasonably interferes with an individual’s work performance, educational objectives, academic or other educational performance
- Unreasonably interferes with employment practices including but not limited to hiring or any other term, condition, or privilege of employment or academic performance; is used as a basis for educational decisions affecting the individual’s submitting to or rejecting the harassment or discrimination
- Creates an intimidating, hostile, or offensive working or learning environment (CA Education Code 212.5, Title IX)

**Forms of Harassment include the following:**

- Derogatory posters, notices, or other forms of written materials, such as letters, photographs, or drawings
- Repeated leering or sexually aggressive gestures which the alleged perpetrator knows are unwanted by the person(s) at whom they are directed
- Unwelcome sexual advances (CA Education Code, 212.5, Title IX)
- Requests for sexual favors (CA Education Code, 212.5 Title IX)
- Any behavior, standards, criteria, or methods that limit, segregate, or classify any individual because of gender, sexual orientation, or physical appearance (CA Education Code, 230)
- Barriers that impede accessibility to programs, services, or facilities (CA Education Code, 230)

The District recognizes that confidentiality is important to all parties involved in a sexual harassment/discrimination investigation. To the extent possible, the confidentiality of the complainant, respondent and witnesses shall be protected. Individuals interviewed in accordance with these policies are directed to assist in maintaining such confidentiality.

The District shall not tolerate retaliation against any individual for initiation, pursuit or assistance with a complaint of sexual harassment/discrimination. Any individual who retaliates against any District employee and/or student in violation of the policy may be subject to disciplinary action. Any individual who believes that she/he has been a victim of sexual harassment/discrimination may file a complaint under the District’s Procedure for Resolution of Discrimination/Harassment Complaints within one year of the alleged unlawful discrimination or within one year of the date on which the complainant knew or should have known of the facts of the sexual harassment/discrimination incident.

Each campus is responsible for identifying a Title IX officer. An individual may file a sexual harassment or sexual discrimination complaint with the campus Title IX officer, who will notify the District Affirmative Action Officer of all claims of sexual harassment or discrimination at the time the complaint is received. An individual may also file a complaint of illegal harassment or discrimination with the Office of Civil Rights, United States Department of Education, 1275 Market Street, 14th Floor, San Francisco, CA 94103, at the time of filing a complaint with the campus Title IX officer, during, or after use of the campus sexual harassment or discrimination complaint process, or without using the campus sexual harassment or discrimination complaint process at all. A complaint filed with the Office for Civil Rights must be put in writing no later than 180 days after the occurrence of the possible harassment or discrimination.

The District shall notify employees, students and the public of this sexual harassment and sexual discrimination policy and of the procedure for investigation of complaints.

**SOLICITING FUNDS OR BUSINESS ON CAMPUS**

Requests by on-campus student groups to solicit funds shall be approved by the student government, as well as by the Dean of Counseling and Matriculation. Representatives of colleges, representatives of the armed forces and representatives of business firms or governmental agencies offering employment or opportunity for services may be granted time and appropriate space for recruitment of students upon approval of the Dean of Counseling and Matriculation.

Regardless of affiliation, any group selling items or services on campus will be considered a vendor and will be required to follow vendor policy.

Nothing in this policy shall be interpreted as restricting normal business transactions with the bookstore, cafeteria, school newspaper, or District business office or with book company representatives.

**STANDARDS OF STUDENT CONDUCT**

Students and visitors to San José City College and Evergreen Community College are expected to adhere to academic and behavioral Standards of Student Conduct.

**Academic standards** include honesty, satisfactory academic performance, and regular attendance.

**Behavioral standards** include showing mutual respect to students and college staff and adherence to District/College rules and regulations and State/Federal laws.

By following these standards, students will conduct themselves in a manner that fosters a positive learning and working environment for students and staff, maintains order on the campus, and protects the rights of the individual and the interests of the District. Violation of these standards on District-owned or controlled property, or at a District-sponsored activity, could result in the consequences outlines in this section. Decisions will be made based on factual information in accordance with due process procedures as outlined by the College and the California Education Code.
ACADEMIC STANDARDS

Violations
• Altering grades
• Altering or forging college documents, records, or identification
• Copying from someone’s test or allowing someone to copy your test
• Copying from an author’s work without giving credit (plagiarism)
• Doing an assignment (e.g., a term paper or essay) for another student or asking, paying, bribing, or black mailing someone to do an assignment for you
• Sitting in for someone in class or on a test or having someone sit in class for you if not authorized by the instructor
• Submitting work previously presented in another class if not authorized by the instructor
• During an exam, using or consulting other test or course material not authorized by the instructor
• Possession of an examination or materials not authorized by the instructor
• During an exam, using or consulting other test or course material not authorized by the instructor

Standards and Consequences
• Receiving a failing grade on the test, paper, or exam
• Course grade lowered, possibly resulting in course failure
• Verbal or written reprimand/warning
• Suspension for a longer specified time
• Expulsion from college

ACADEMIC PERFORMANCE

Standards and Consequences
• Cumulative GPA below 2.0 after attempting at least 12 semester units of letter grades
  Consequence: Academic Probation
• 50% or more of 12 or more semester units attempted recorded as “I”, “W”, or “NC”
  Consequence: Progress Probation
• Cumulative GPA of less than 2.0 in the next two subsequent terms of enrollment after being placed on Academic Probation
  Consequence: Academic Dismissal
• 50% or more of units attempted recorded as “I”, “W”, or “NC” in the next two subsequent terms of enrollment after being placed on Probation
  Consequence: Progress Dismissal
• Consistent failure to submit or perform assigned work
  Consequence: Dismissal from the class or college

ATTENDANCE

Standards and Consequences
• At the discretion of the instructor, a student may be dropped from a class if the number of times absent exceeds the number of times the class meets in a week during 16-week semester.
• Students should also be aware, they may be dropped from a class if they do not attend the first class meeting.

BEHAVIORAL STANDARDS

Violations
• Behavior on district property or at district-sponsored functions which is in violation of district/college rules/ regulations or state/federal laws/regulations, including but not limited to:

1. Behavior that interferes with the normal operations of the college, including obstruction or disruption of the teaching, learning, and administrative process.
2. Applying undue pressure on an instructor to alter a grade.
3. Threat or act of physical harm directed against a student, visitor or college employee.
4. Willful damage to or theft of district property.
5. Threat or act of stalking, sexual assault, or rape.
6. Possession of an object used as a weapon to threaten bodily harm.
7. Use of fraudulent identification.
8. Unauthorized possession, duplication, or use of keys to any district premises, or unauthorized entry to or use of college or district premises.
9. Unauthorized copying or an attempt to copy computer software; an unauthorized entry or attempt to enter a system; or intentionally introducing a virus.
10. Unlawful possession, sale, use of or under the apparent influence of illegal drugs or alcohol.
11. Willful defiance of college officials, faculty, staff, or police officers who are giving lawful direction.
12. Disorderly, lewd, indecent, or obscene conduct or expressions (including willful profanity and/or vulgarity with intention to threaten, intimidate, or offend).
13. Gambling (money or its equivalent exchanged and not part of an approved campus activity/event).
14. Harassment or discrimination based on gender, race, religion, culture, disability, sexual orientation or age.
15. Failure to comply with the terms of any disciplinary sanction imposed in accordance with the Code of Student Conduct.

Consequences may include one or more of the following actions:

1. Verbal Reprimand/Warning: Verbally reprimanding students for inappropriate behavior and warning the continuation of the conduct will cause disciplinary action.
2. Written Reprimand/Warning: Written notification of inappropriate behavior and written warning that continuation of the conduct will cause disciplinary action, noted in student’s file.
3. Suspension: Exclusion from classes, privileges, activities, or the college for a specified period of time, noted in student’s file (instructors may suspend a student for the remainder of a class period and the next class period; Administrators or President may suspend a student for a longer specified time).
4. Expulsion: Termination of student’s right and privileges, noted in student’s file.

PARKING OF VEHICLES

Any violation or violations of law, ordinance, regulation, or rule regulating or pertaining to the parking of vehicles in District parking lots shall not be cause for the suspension or expulsion of a student, excepting violations which are disruptive to the educational programs of the district.

DUE PROCESS PROCEDURES

Any district official who suspends a student for more than one entire class or day of instruction must provide his or her immediate supervisor and the College President a written report which includes:
• The name of violating student
• A statement of the alleged violation(s) with date, time and place
• Names of witnesses (if any)
• Sanction(s) to be imposed
CHAPTER 9 — THE STUDENT’S RIGHT TO KNOW!

Within three working days of receiving the report, the President must notify the student by certified mail of the following:
- Reason or reasons for suspension or dismissal
- Length of suspension or dismissal
- Conditions for removal of suspension or dismissal
- The right to appeal the suspension or dismissal through the college grievance process

When it appears likely that the grievance process will proceed for a period beyond that of the suspension, the student may request immediate reinstatement from the instructor or District official who imposed the suspension. If agreement cannot be reached to reinstate the student during the review process, the student may petition the President for reinstatement. The President may reinstate the student until the review process is completed by informing all involved parties in writing of the reason for reinstatement.

If the grievance process finds in the student’s favor, the student shall be held harmless and will be allowed to make up missed work.

The President shall report all suspension of students to the District Chancellor.

Instructors shall be encouraged to clearly establish and uniformly enforce rules for proper classroom demeanor.

STUDENT GRIEVANCE

The San Jose/Evergreen Community College District is committed to fostering a safe, positive learning environment where students can pursue their educational goals and participate in college-sponsored activities that promote intellectual growth and personal development. To this end, students are provided protection and due process of their individual rights against unfair and improper action by any member of the district community.

If a student believes that he/she has been subjected to unjust action or denial of his/her rights under District/College rules and State/Federal laws, he/she will be given an opportunity to seek resolution through use of the Student Grievance Complaint Procedure. A grievance may be initiated by a student against: a) another student, b) a faculty member, c) an administrator, d) a member of the classified staff or e) board member, for the following reasons:

1. Imposition of a sanction (violation of academic standards, academic performance, and behavior standards along with the consequences outlined) without due process.
2. Violation of student’s rights according to the “Student and College Rights and Responsibilities,” (included in District policy pending board approval).
3. Violation of “Standards of Student Conduct.”
4. Violations of rights as enumerated in State/Federal laws, including but not limited to:
   - Federal and State Constitution
   - California Education Code
   - Title V - Calif. Code of Regulations
   - Title VII of the Civil Rights Act of 1964, and Section 12940 et. seq. of California Government Code, which prohibits discrimination on the basis of sex, race, color, or national origin
   - Title IX of the Education Amendments of 1972, which prohibits discrimination on the basis of sex
   - Section 504 of the Rehabilitation Act of 1973, which prohibits discrimination on the basis of disability
   - Title II of the Americans with Disabilities Act of 1990, which prohibits discrimination on the basis of disability
   - The Age Discrimination Act of 1975, which prohibits discrimination on the basis of age
   - California Labor Code, Section 1102.1, which prohibits discrimination based on actual or perceived sexual orientation

STUDENT GRIEVANCE REVIEW BOARD

A Student Grievance Review Board shall be established to allow a hearing for those students who believe that they have been unjustifiably penalized or suffered grievous personal abuse by actions of any member of the certified or classified staff of San Jose/Evergreen Community College District.

STUDENT ORGANIZATIONS

Student organizations shall comply with the Constitution/Bylaws of the Associated Students, chartering policies of the Governing Board, and the Education Code and are subject to revocation of their charter or other disciplinary action for violation of such policies or regulations.

FINANCIAL RESPONSIBILITIES; STUDENT BODY ASSOCIATIONS AND STUDENT ORGANIZATIONS

In order to assure efficient operation and prudent expenditure of funds under student control, the following policies will govern:

- The student body association shall be responsible for student body association expenses and shall not be responsible for the financial obligations of student organizations not under its sponsorship and/or jurisdiction.
- Approved expenses of staff members assigned to supervise student body association activities may be borne within the college budget. The expenses of staff members assigned to supervise other student sponsored events may be borne by the appropriate student organization.
- The college shall be reimbursed by any student organization for all toll calls made on its behalf.

STUDENT-RIGHT-TO-KNOW COMPLETION AND TRANSFER RATES

In compliance with the Student-Right-to-Know and Campus Security Act of 1990 (Public Law 101-542), it is the policy of the District and San José City College to make available its completion and transfer rates to all current and prospective students. Beginning in Fall 2001, a cohort of all certificate-, degree-, and transfer-seeking first-time students was tracked over a three-year period. Their completion and transfer rates are listed below. These rates do not represent the success rates of the entire student population at SJCC, nor do they account for student outcomes occurring after this three-year tracking period.

Based upon the Fall 2001 cohort defined above, 31.3% completed a certificate or degree program or became “transfer-prepared” during the three-year period from Fall 2001 through Spring 2005. Students who are “transfer-prepared” have completed 56 transferable units with a GPA of 2.0 or better.

Based upon the Fall 2001 cohort defined above, 36% transferred to another post-secondary institution prior to attaining a degree, certificate, or becoming “transfer-prepared” during a five semester period from Spring 2003 through Spring 2005.

For further information, contact the Associate Vice Chancellor, at (408) 274-7900 ext. 6466.
CHAPTER 10 — FACULTY AND ADMINISTRATORS

(Date of original appointment follows names)

Adamczeski, Madeline (1999) – Chemistry
B.S., Ph.D., University of California, Santa Cruz

Ahlberg, David (1991) – Mathematics
B.S., University of Wisconsin; M.S., Carnegie Mellon University

Antila-Suarez, Carina (2005) – Biological Science
B.S., University of Pacific; M.A., Sonoma State University

Antonelli, Sharon (1974) – Child & Family Studies
B.A., M.A., San Jose State University

Bebawi, Sabri (2000) – English as a Second Language
B.A., M.A., Fullerton State University

Behroozi, Bahram (1970) – Art
B.A., M.A., San Jose State University

Bell, Judith (1996) – Music
B.A., M.A., San Jose State University

Berke, Michael (2001) – Foreign Language (French)
B.A., M.A., University of California, Santa Barbara

Black, James D. (1991) – Business/Real Estate
B.S., M.B.A., San Jose State University

Blair, Michelle (2000) – English
B.A., State University of New York at Purchase; M.F.A., Columbia University

Butler, Patrick (1974) – Counseling/Psychology
B.A., M.S., San Jose State University; Licensed Marriage, Family and Child Counselor

Cao, Dongmei (2003) – English/ESL
M.A., University of Texas, Pan-American; M.A., Huan Teaching Institute

Carr, Percy (1975) – Physical Education/Basketball Coach
B.A., M.A., Fresno State University

Castaneda, Susie (1987) – Cosmetology
B.A., M.A., National University

Castilla, Guillermo (2005) – Mathematics
B.S., National University of Mexico; M.A., University of California, Berkeley; Ph.D., University of California, Los Angeles

Chang, Janet C. (1999) – Director, Student Health Services
B.S., M.S., San Jose State University

Chapa, Aurelio (Javier) (2000) – English
B.A., University of California, Berkeley; M.A., Holy Names College

Chiem, Lila (1997) – Extended Opportunity Program
B.A., M.S., San Francisco State University

Chiodo, Christine D. (1977) – Disabled Students Program
(A.B.I. Students) Physical Education
B.A., San Diego State University; M.A., Pepperdine University; Certified Corrective Therapist

Cochran, Graciela (2005) – Mathematics
B.S., Universidad Nacional de Mar del Plata, Argentina; M.S., San Jose State University

Connolly, Kieron (2000) – Air Conditioning & Refrigeration
Electronic Engineering NCEA, Department of Education
Cork Institute of Technology, Ireland

Conroy, Mary (1985) – Child & Family Studies/Psychology
B.A., City College of New York; M.A., University of Minnesota; Ph.D., Stanford University

Consigny, Claudia (2001) – Dean, Counseling and Matriculation
B.A., Bradley University; Ed.M., Temple University

Covarrubias, Jesus (1997) – Social Sciences
B.A., University of California, Berkeley; M.A., Stanford University

Crawford, Marylin (2001) – Counselor/Coordinator, AmeriCorps
B.A., San Jose State University; M.A., University of California, Santa Cruz

Crawford, Philip J. (1974) – Administration of Justice/Sociology
B.A., M.A., San Jose State University; J.D., Santa Clara University

Cruz-Johnson, Celia (2001) – Reading
B.A., M.A., InterAmerican University of Puerto Rico

D’Eliscu, Peter (1996) – Biology
B.S., University of California, Irvine; M.A., San Jose State University; Ph.D., University of Arizona

Divinia, Michael (1986) – Mathematics
A.B., Dickinson College; M.S., Ph.D., University of Rochester

Dodge, Lucy (1999) – English
B.A., University of California, Santa Barbara; M.A., San Jose State University; M.S., National University

Ferrell, Linda (1999) – Accounting
B.A., University of California, Davis; M.B.A., Santa Clara University

Frazier, Christopher (2001) – Mathematics
B.A., B.A., M.A., University of California, Santa Cruz

Frey, Kevin (1990) – Music/Humanities
B.M.E., Iowa State University; M.M., University of Colorado

Frodyma, Marc (1997) – Physics
B.S., Worcester Technical Institute; M.S., University of Idaho; Ph.D., University of Massachusetts

Fukui, Ikuko (1991) – Foreign Language (Japanese)/Social Science
B.F.A., Kobe College, Japan; M.A., Stanford University

Gamez, Rebecca (2005) – Foreign Language (Spanish)
B.A., University of Notre Dame; M.A., University of Texas, Austin

Garcia, Esequiel (1975) – Dean, Special Programs
B.A., San Jose State University

Gaydos, Beth (1993) – Biological Science
B.A., University of California, Santa Cruz; M.A., San Jose State University

Gerster, Patrick (1998) – Dean, Humanities & Social Sciences
B.A., College of St. Thomas; M.A., Ph.D., University of Minnesota

Gibson, Zenolia Anderson (1971) – Counselor, Transfer Center
B.A., M.A., San Jose State University

Gosak, Alice (1980) – English as a Second Language
B.A., Beloit College; M.A., University of California, Los Angeles

Gregor, Michelle (2002) – Art/Ceramics
B.F.A., University of California, Santa Cruz; M.F.A., San Francisco State University

Gressley, Nancy (1980) – Counseling/Guidance
B.S.Ed., Ohio University; M.Ed., Kent State University
CHAPTER 10 — FACULTY AND ADMINISTRATORS

Gutierrez, Suzanne (1986) – Counseling/Guidance/Psychology
B.A., M.A., San Jose State University;
Ph.D., The City University, London, U.K.

Haas, Stephen (1977) – Physical Education/Cross Country and Track & Field Coach
B.A., Occidental College, Los Angeles;
M.S., Los Angeles State University

Hanson, Kathleen (1989) – English as a Second Language
B.A., St. Louis University;
M.A., San Francisco State University

B.A., M.A., University of California, San Diego

Hellwell, Carole LaRae (1991) – Mathematics
B.A., Northwest Nazarene College;
M.S., Eastern Washington State College

Hernandez, Marcos (1997) – Electronics
B.A., University of Guanajuato, Mexico

Ho, Mai Le (2001) – Ethnic Studies
B.A., University of California, Davis;
M.S.W., University of California, Berkeley

Honesto, Sandra (2005) – Cosmetology

Hopkins, Roxie (2003) – Cosmetology
A.S., San José City College;
B.S., University of Phoenix

Hunter, Charles Frederick (1969) – English/Reading
B.A., Lawrence College;
M.S., University of Wisconsin

Huntze-Rooney, Deborah (1991) – Physical Education/Women's Softball Coach
B.A., Chico State University;
M.Ed., Azuza Pacific University

Ibarra, Rufino H. (1985) – Physics
B.S., University of Philippines;
Ph.D., University of Minnesota

Janowski, Lois (1988) – English/Reading
B.A., M.A., San Jose State University

Johnson, Alan (2005) – Administration of Justice
B.S., M.S., San Jose State University;
M.A., Cal Poly Pomona

Kauffman, Jerry (2005) – Construction Technology
A.S., Evergreen Valley College
B.A., San Jose State University

Kendall, Martha (1972) – English/English as a Second Language/Humanities
B.A., University of Michigan;
M.A., Stanford University;
M.A., San Jose State University

Kendrick, Eleanor (1981) – Mathematics
B.S., University of Florida;
M.A., San Jose State University

King, Joseph T. (1991) – Librarian
B.A., University of California, San Diego;
M.L.S., University of California, Los Angeles

Koski, Jill (2001) – Counselor, WIN Program
B.A., M.A. San Jose State University

Kozlowski, Heidi (2002) – English
B.A., Washington State University;
M.A., University of Idaho, Moscow

Lahai, Momoh (1998) – Electronics/Telecommunications
B.A., San Jose State University

Lazik, Iyun (2001) – Chemistry
B.S., Lander University;
Ph.D., Clemson University

Ledesma, Gary (2001) – Counseling
B.A., San Jose State University;
M.A., Santa Clara University

Levesque, Ronald (1990) – English as a Second Language
B.A., University of Connecticut;
M.A., Southern Illinois University

Levinson, Melanie (1999) – English
B.A., University of California, Riverside;
M.A., University of California, Irvine;
Ph.D., Pennsylvania State University

Liem, Henry (1999) – Philosophy
B.S., Oklahoma State University;
M.P.A., University of Texas, Austin;
M.A., San Jose State University;
J.D., University of California, Berkeley

Lipilina, Yesenia (2005) – Cosmetology
B.A., University St. Petersburg, Russia

Lockett, Reginald (1990) – English/Humanities
B.A., M.A., San Francisco State University

Lopez, Ann Aurelia (1969) – Biological Sciences
B.A., University of California, Riverside;
M.A., University of California, Santa Barbara

Lund, Lois (1997) – Dean, Language Arts
B.A., M.A., University of Iowa

Lundie, Clem (2001) – Computer Information Systems
A.S., Community College of the Air Force

MacGowan, Claran (1998) – Multimedia
B.S., The Queen's University of Belfast (Ireland)

Mandalam, Radhika (2003) – Computer Information Systems
M.B.A., Santa Clara University

Manian, Padma (2000) – History/Women's Studies
B.A., University of Madras (India);
M.A., Jawaharlal Nehru University (India);
Ph.D., Miami University – Ohio

Mansfield, Stephen (2003) – Air Conditioning and Refrigeration Certificate, San José City College

Martin, Leandra (1997) – Dean, Mathematics and Science
B.S., Arizona State University;
M.S., Iowa State University

Martinez, Maricela (1998) – Counseling/Puente Program
B.A., Northridge State University;
M.A., San Jose State University

Mathias, Eve B. Page (1992) – Art/Humanities
B.A., Boston University;
M.A., M.F.A., San Jose State University

McCallum, Leslyn (2005) – Communication Studies
B.A., Humboldt State University;
M.A., University of Nevada, Reno

McElroy, Daniel (1985) – Computer Information Systems
B.S., Weber State College

Mellema, Wilbur (1985) – Mathematics
B.A., Calvin College;
M.A., University of California, Los Angeles;
M.A., Michigan State University

Mendoza, Donna (1990) – Drama/Humanities
A.B., University of California, Berkeley;
Ph.D., University of California, Santa Barbara

Muench, Margaret (1980) – Reading/Writing
B.A., University of California, Santa Barbara;
M.A., University of California, Los Angeles

Mullen, Gerald W. (1980) – Electronics
B.S., Fresno State University;
M.A., San Jose State University

Newton, Mark A. (1993) – Biological Science
A.B., University of California, Berkeley;
Ph.D., Arizona State University

Nguyen, Patricia (1980) – English as a Second Language
B.A., M.A., Southern Illinois University
CHAPTER 10 — FACULTY AND ADMINISTRATORS

Nguyen, Teddy (1991) – Computer Technology/Electronics
B.S., University of California, Berkeley;
M.S.E.E., Santa Clara University

Oberg-Hearn, Terri (1989) – Physical Education/Women’s
Basketball Coach
B.S., Fullerton State University;
M.A., San Jose State University

Pawlyshyn, Nancy (2001) – Journalism/English
B.A., M.A., Simmons College

Pio, Wendy (2005) – Dental Assisting
A.A., San José City College

Potterton, James (1980) – Psychology
B.A., Webster College;
M.A., Southern Illinois University;
Ph.D., University of California, Santa Barbara

Price, Ben S. (1966) – Psychology
A.B., M.A., San Jose State University;
Licensed Marriage, Family and Child Counselor

B.A., M.A., Fresno State University

Pullen, Karen (1999) – Counselor/Coordinator, Disabled
Students Program
B.S., Ball State University;
M.A., New York University

Quach, Tin (1996) – Mathematics
B.A., Fresno State University;
M.A., University of California, Riverside

Ramirez-Bost, Carol (1997) – Cosmetology

Reininger, Robert (1978) – Electronics/Computer Technology
B.S., California State Polytechnic University, Pomona

Renzi, Michael J. (2005) – Director of Administration and Fiscal
Operations
B.S., J.D., Santa Clara University

Reyes, Hermosa (1997) – Early Childhood Education
B.S., University of Philippines;
M.S., E.D., Northern Illinois University

Rice, Leslie (2001) – English
B.A., Brigham Young University;
M.A., California State University, Hayward

Robb, Douglas (1997) – Physical Education/Baseball Coach
B.A., M.A., Saint Mary’s College of California

Sanchez, Laura (1996) – Dental Assisting
B.A., John F. Kennedy University

Santos, Priscilla (1990) – Counseling/Guidance
B.A., M.A., San Jose State University;
Ed.D., University of San Francisco

B.A., M.A., San Jose State University;

Schirrmacher, Robert (1987) – Child & Family Studies
B.A., Michigan State University;
M.A., University of Detroit;
Ph.D., University of Illinois

Shelton, Merylee (1988) – Communication Studies
B.A., Creighton University;
M.A., San Francisco State University

Simonson, Novella (1990) – English/English as a Second Language
B.A., M.A., San Jose State University

Sklupe, John (1990) – English/English as a Second
Language/Humanities
B.A., Brooklyn College;
M.A., Ph.D., Indiana University

Solem, Cynthia (1996) – English as a Second Language/English
B.A., University of Wisconsin;
M.A., San Francisco State University

Soman, Anuradha (2000) – Computer Applications
B.S., M.S., Karnatak University, Dharwar, India;
M.A., Stanford University

Song, John (1993) – Chemistry/Physical Science
B.S., Mount Union College;
Ph.D., Michigan State University

Stagnaro, Donald W. (1986) – Physical Education/Golf Coach
B.A., University of the Pacific;
M.B.A., Saint Mary’s College

B.S., University of Arizona;
M.A., Fresno State University;
Ph.D., University of Nevada, Reno

B.A., University of California, Davis;
M.A., San Jose State University

Tran, Angela (2000) – Mathematics
B.A., M.S., San Jose State University

Trieu, Hung (1997) – Economics
B.S., Hayward State University;
M.A., San Francisco State University;
M.A., Ph.D., University of California, Santa Cruz

Tsang, Chui L. (1997) – President, San José City College
B.A., University of California, Berkeley;
Ph.D., Stanford University

Tsih, Stephen (1999) – Marketing/Business
B.S., M.B.A., Golden Gate University

Vujjeni, Kishan (1990) – Dean, Business & Service Careers
M.S., Northern Carolina Agricultural and Technical State
University;
M.S., Jackson State University

Wahler, Dennis (1982) – Business
B.S., Metropolitan Institute, London, England;
M.B.A., University of Phoenix

and Physical Education
B.S., California State University, San Bernardino;
M.S., California State University, Los Angeles;
Ph.D., University of Southern California

Willis, Andre (2004) – History/Social Science
M.A., Harvard University

Wilson, Patricia (1976) – History/Social Science
B.A., Saint Mary’s University

Wing, Robert (1996) – Librarian
B.S., University of California, Davis;
M.L.S., San Jose State University

Witte, Mary Jennifer (1990) – Health Sciences (EMT)
R.N., Mercy Hospital School of Nursing, Cedar Rapids, Iowa

Woodhead, Barry (1985) – Physical Education
B.A., Humboldt State University;
M.A., San Francisco State University

Yancey, David (1981) – Administration of Justice/History/Psychological Science
B.A., Sacramento State University;
M.A., San Jose State University

Young, Carole (1990) – Counseling/Guidance
B.A., M.A., San Jose State University

Youngblood, Sharon (1987) – Business/Accounting/Computer
Applications
B.A., San Jose State University;
M.A., United States International University
## CHAPTER 11 — CLASSIFIED STAFF

### Classified Staff

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ahmed, Adil</td>
<td>Accounting Technician WIN Program</td>
</tr>
<tr>
<td>Aldama, Debra</td>
<td>Admissions and Records Technician Admissions and Records</td>
</tr>
<tr>
<td>Amador, Frank</td>
<td>Admissions and Records Technician Admissions and Records</td>
</tr>
<tr>
<td>Barger, Jo Ann</td>
<td>Program Assistant Counseling and Student Services</td>
</tr>
<tr>
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Matos, Meredith.................................Program Assistant Special Programs
Matsumoto, Dennis.........................Financial Aid Specialist III Financial Aid Office
McElroy II, Daniel.....................Web Services Technician Instructional Technology
Melendez, Laura....................Staff Assistant III, VTEA Applied Science and Technology
Mietich, David...................Instructional Computer Network Technician Business and Service Careers
Miranda, Ingrid....................Program Assistant Admissions and Records
Montgomery, Charles...Web Developer/Marketing Specialist President's Office
Moore, Elizabeth.......................Library Technician Library
Moore, Moraya.....................Instructional Lab Technician I Mathematics and Science
Mosher, Margaret................Instructional Support Assistant, Subject Lead Language Arts
Nakaso, Joanne.............Adaptive Media Technology Specialist I Special Programs
Nguyen, Diep Ngoc.......Admissions and Records Assistant Admissions and Records
Nguyen, Emmy................Staff Assistant II WIN Program
Nguyen, Phuoc.................Instructional Lab Technician III Mathematics and Science
Nishihara, Kevin........Instructional Lab Technician II Athletics and Physical Education
Nolasco, Cres....................Network Technician Technology Services
Paiz, Teresa.............Admissions and Records Coordinator I Admissions and Records
Partida, Sophia............Financial Aid Specialist III Financial Aid Office
Perez, Ruben.............Admissions and Records Technician Admissions and Records
Rico, Marjorie...........Senior Division Administrative Assistant Applied Science, Technology, and Physical Education
Rodarte, Deanna...........Senior Division Administrative Assistant Humanities and Social Science
Rodeo, Ariel......................Network Technician Technology Services
Rodriguez, Yolanda...........Child Development Aide Child Development Center
Rojas, Evelyn..............Instructional Support Assistant, Lab Lead Language Arts
Rose, Bunnie...............Hourly Personnel Services Specialist Office of Academic Support
Salazar, Arnold......................Athletic Trainer Athletics and Physical Education
Santa Cruz, Andrea..........Staff Assistant III Child Development Center
Schmid, Gwendolyn.........Instructional Lab Technician IV Mathematics and Science
Seminar, Linda........Senior Division Administrative Assistant Counseling and Student Services
Thomas, Elizabeth.................Library Technician Library
Thompson, Roi Ann........Senior Division Administrative Assistant Mathematics and Science
Tran, Doriann..................Academic Advising Specialist Counseling and Student Services
Tran, Tuyet..............Financial Aid Specialist I Financial Aid Office
Trigueiro, Maria.........Child Development Specialist I Child Development Center
Truong, Anh............Financial Aid Specialist III Financial Aid Office
Vasquez, Carol............Student Retention Assistant Counseling and Student Services
Vu, Kim Huyen........Child Development Aide Child Development Center
Vu, Oanh Cam........Child Development Aide Child Development Center
Vu, Peter.............Library Technician Library
Vukelich, Anthony........Instructional Lab Technician II Applied Science and Technology
Wilson, Solomon....Athletic Program Support Specialist Athletics
Wright, Mary...............Staff Assistant I Counseling and Student Services
Supervisory Personnel

Brodie, Marilyn...............WIN Supervisor
Canoy, Eugenio................Technology and Media Services Supervisor
Cruz, Octavio....................Financial Aid Supervisor
Dominguez, John.................Maintenance Supervisor
Fuqua, Michele...........Business Services Supervisor
Hood, Sherry....................Reprographics Supervisor
Maxwell, Jared............Custodial Supervisor
Munoz, Priscilla............Learning Resource Lab Supervisor
Short, Patricia............Administrative Services Supervisor
Management Personnel

Clabough, Tom........Maintenance Manager
Gordon, Bruce..............Custodial Manager
Harnden, Laurie........Child Development Center Manager
Parker, David.............Bookstore Director
Petersen, Kimberly......Executive Director of WIN Program
Renteria, Phillip..............Director of Campus Life
Renzi, Michael J.......Director of Finance and Administration
Rodrigues, Henry..........Grounds Manager
 Santos, Carlo............Director of Admissions and Records
Tsang, Chui L...............President
Wolfe, Nancy............Director of Grants and Development
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</table>
## ADVISORY COMMITTEES

### ACCOUNTING

- **Tina Armendariz**  
  Senior Tax Consultant  
  Internal Revenue Service
- **Mary Chambers, CPA**  
  Director of Program Management  
  Yahoo!
- **Louis Coffaro, CPA**  
  Public Accounting
- **Donna Cornejo**  
  Professor Emeritus, Accounting  
  Vice President and Secretary, SpanCom LLC.
- **Julie Filice**  
  Financial Analyst  
  Silicon Valley Bank
- **Karey Lucas**  
  Financial Reporting Manager  
  Vishay Inc.
- **Mallory McWilliams, CPA**  
  Accounting Instructor  
  San José State University

### AIR CONDITIONING / REFRIGERATION AND MAINTENANCE TECHNOLOGY

- **Joseph P. Allan**  
  Sun Microsystems/Johnson Controls
- **Joe Cota**  
  Service, Co.
- **Robert Fritch**  
  Tyco Electronics
- **Evan Grund**  
  Enable Technologies, LLC
- **John Hawk**  
  San José State University
- **Jerry Kissinger**  
  Intel
- **William Kohl**  
  Cushman & Wakefield @ Novell
- **William A. Sherbert**  
  Air Systems Inc.
- **David Struck**  
  Chevron Energy Solutions

### BUSINESS

- **Kari R. Crowley**  
  HR Manager,  
  Organizational Learning & Development  
  Alza Corporation
- **John Pawlyshyn**  
  Chief Information Officer  
  Santa Clara Family Health Plan

### CHILD AND FAMILY STUDIES

- **Doris Fredericks**  
  Choices for Children
- **Robert Freiri**  
  Saint Elizabeth’s Day Home
- **Yolanda Garcia**  
  WestEd- Institute for Early Childhood Professional Development
- **Ernestine Howard**  
  Center for Employment Training
- **Dawn Perry**  
  Community Family Services
- **Deborah Simon**  
  City of San José
- **Anna Trujillo**  
  Santa Clara County Head Start  
  Santa Clara County Office of Education

### COMPUTER APPLICATIONS

- **Andrea Hutchinson**  
  Business Education Chair  
  Milpitas High School
- **Yvonne McDaniels**  
  Administrative Assistant  
  Cisco Systems, Inc.

### COMPUTER INFORMATION SYSTEMS

- **Jose Amezquita**  
  Systems Engineering Manager  
  Hewlett-Packard
- **Bill Cullifer**  
  Executive Director  
  World Organization of Webmasters
- **Larry Gee**  
  IBM Corporation
- **Scott Holmgren**  
  Sales  
  Highsoft, Inc.
- **Tomas Kozlowski**  
  Systems Engineer  
  Hewlett-Packard
Paula Monsef  
*Education Training*  
The George Lucas Educational Foundation

William Nance  
*Professor*  
San José State University

Lisa Rathjens  
*Manager-Development Education*  
Palm Computing, Inc.

Jim Reilly  
*VP, Global Product Services*  
Cisco Systems, Inc.

Val Szymanski  
*Solaris Engineering Manager*  
Sun Microsystems

James Yu  
*Professor*  
San José State University

---

**CONSTRUCTION TECHNOLOGY**

Joe Cota  
*Independent Construction Service Co.*

Steve Demkowski  
*S.J. Demkowski Construction*

David Gill  
*Roth Wood Products*

Ken Maggi  
*Maggi Construction Co.*

Ansehl Pike  
*Amity Furniture Service*

Tom Sanders  
*C.B. Tools & Supply, Inc.*

David S. Thomas  
*Woodwork Institute of California*

---

**COSMETOLOGY**

Denise Aquaristi  
*Special FX*

Rudy Castenada  
*Bob and Louie’s Haircutting Club*

James Craig  
*James Craig Salon*

Monica Foster  
*Sara Jones*

Keri Jordon  
*Hairs Inn*

Norma Varnedell  
*Elegant and Natural Kosmetik*

---

**DENTAL ASSISTING**

Judy Bocks, R.D.A.  

Gina Fleming, R.D.A.E.F.  

Martin Judd, D.D.S.  

Heinz Klein, D.M.D.

---

Linda Kono, D.M.D.  

Stephanie B. Loller, D.D.S.  

Carol McCutcheon, D.D.S.  

Melinda Merino, R.D.A.E.F.  

Ned Nix, D.D.S., O.M.F.S.  

Jennifer Ratzliff, R.D.A.  

Eric Werner, D.D.S.

---

**ELECTRONICS/COMPUTER TECHNOLOGY**

Mario Castaneda  
*Kaiser Hospitals*

Greg Duncan  
*Oakland Children’s Hospital*

Ken Henkelman  
*St. Rose Hospital*

Bruce Hyndman  
*Community Hospital of the Monterey Peninsula*

Paul Kelley  
*Washington Hospital*

Momoh Lahai  
*San José City College*

Elizabeth Laureano  
*Stryker*

Paul Meggers  
*GE Healthcare*

Vicki Running  
*Stanford University Medical Center*

David Smith  
*Medical Repair Services*

Janice Toyoshima  
*Evergreen College*

Kathy Werle  
*San José City College*

Jennifer Witte  
*San José City College*

---

**HEALTH SCIENCE (EMT)**

Ali G. Bassiri, MD  
Pulmonary, Critical Care, and Sleep Medicine  
*SleepMed*

Michael Case, RPSGT  
*Central Coast Sleep Disorders Center*

Janet C. Chang, R.N., M.S.  
*Director, Student Health Services*  
*San José City College*

Andrew M. Hyslop  
*Certified Orthopaedic Technologist*

Jason Lacerda  
*Technical Manager Bay Area*  
*SleepMed*
CHAPTER 12 — ADVISORY COMMITTEES

Arden Lawson, D.C.
Palmer College of Chiropractic West

Akira J. McCravy
Manager, Sterile Processing
Santa Clara Valley Medical Center

Jim McPhersen
Santa Clara Emergency Medical Services

David G. Mohler, MD
Orthopaedic Surgical Oncology

Aaron B. Morse, MD, FCCP
Central Coast Sleep Disorders Center

Chakravaph Policherla, RPSGT
Central Coast Sleep Disorders Center

LABOR STUDIES

Tony Alexander
A. Philip Randolph Institute

Bob Blanchet
Business Agent, Teamsters Local 287

Bob Brownstein
Working Partnership USA

Teresa Castellanos
Coordinator, Santa Clara County Citizen and Immigration Program

Phaedra Ellis-Lamkin
Executive Officer, South Bay Labor Council

Mai Le Ho
Ethics Instructor, San José City College

Barbara Hanfling
Executive Director, American Federation of Teachers #6157

Richard Hobbs
Director, Santa Clara County Human Relations Commission

Carol Koenig
Law Professor, Santa Clara University

Ronald Lind
President, United Food & Commercial Workers Local 428

Yira Milirides
Labor Studies Instructor, former Area Director for CWA

Jim Potterton
Instructor, San José City College

Louis Rocha
President, Communications Workers of America Local #9423

Salvador Ventura
Dispatcher, International Brotherhood of Electrical Workers #332

Richard Wright
Field Representative, United Brotherhood of Carpenters #405

LASER TECHNOLOGY

Allen Carey
Photon, Inc.

Sarah and Scott Diggs
Bolt Systems

Richard Duesbury
Coherent

Ken Gee
Agilent

Frances Goodman
KLA-Tencor

Joel Harrington
JDS Uniphase

Jean-Marie Hertier
Coherent

Breck Hitz
LEOMA

Norman Hodson
Coherent

Hanna Hoffman
Spectra-Physics

Steve Jarrett
Coherent

Bert Johnson
Consultant

Larry Johnson
Light Brigade

Mark Kiersted
JDSU

Mike Leitner
KLA-Tencor

Alex Marien
Newport Corporation

Banmali Rawat
University of Nevada, Reno

Jim Richards
JDS Uniphase

Fred Schumacher
Spectra Physics

Eric Takeuchi
Melles Griot

Jim Vargas
Spectra Physics

Yvonne Wagner
Lightwave

Alan Willner
University of Southern California
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<tr>
<td>John Barnes</td>
<td>Sandra Amundsen, Instructor</td>
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<td>Instructor, Machine Technology</td>
<td>San José City College</td>
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<td>San José City College</td>
<td>Joann Bartley, Instructor</td>
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<td>Seth Bates</td>
<td>Nancy Gressley, Counselor</td>
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<td>John Branlund III</td>
<td>Shelley Lawrence, Interpreting Instructor</td>
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<td>Rodney Broome</td>
<td>Carol Chen McLaggan, Interpreter</td>
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<td>Dave Licata</td>
<td>Richard Lucero</td>
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<td>Lockheed Missiles &amp; Space Company, Inc.</td>
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<tr>
<td>Robert Hall</td>
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<td>Owner</td>
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<td>Almaden Oaks Realty</td>
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