Contra Costa
Community College District

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Senior Dean, Instruction ............................................ Richard Livingston
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Office of Instruction Supervisor ......................... Eileen Valenzuela
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EOPS Program Manager ................................. Newin Orante
Student Outreach Coordinator ......................... Jorge Cea
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Director of College Advancement ................. Ruth Goodin
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Building and Grounds Manager ...................... Jim Taylor
Custodial Manager ..................................................... Glenn Wilson
Police Services Manager ........................................... Lieutenant Esther Skeen
2008-2009 Catalog
and Announcement of Courses

Accreditation
Los Medanos College is accredited by the Accrediting Commission for Community and Junior Colleges of the Western Association of Schools and Colleges, 10 Commercial Blvd., Suite 204 Novato, CA. 94949 (415) 506-0234, an institutional accrediting body recognized by the Commission on Recognition of Postsecondary Accreditation and the U.S. Department of Education.

Approved by
California State Board of Community Colleges
California Department of Education, Bureau of School Approvals for the enrollment of veterans and eligible persons under Title 38 of the U.S. Code.
State Board of Registered Nursing
State Board of Vocational Nursing
University of California
California State Colleges and Universities
Commission on Peace Officer Standards and Training
Small Business Administration
Contra Costa County Emergency Medical Services Office

Telephone
Pittsburg Area (925) 439-2181
Concord / Pleasant Hill / Walnut Creek (925) 798-3500
Brentwood / Oakley (925) 754-9011
Bookstore (925) 439-2056
TDD (925) 439-5709

Mission Statement
Los Medanos College is a public community college that provides quality educational opportunities for those within the changing and diverse communities it serves. By focusing on student learning and success as our first priorities, we aim to help students build their abilities and competencies as life-long learners. We create educational excellence through continually assessing our students’ learning and our performance as an institution. To that end, we commit our resources and design our policies and procedures to support this mission.

Non-Discrimination Policy
The Contra Costa Community College District and Los Medanos College are committed to equal opportunity in educational programs and campus life. The college does not discriminate, nor support discrimination, on the basis of ethnic group identification, age, gender, physical or mental disability, color, national origin, religion, sexual orientation, veteran status, or medical condition in any access to and treatment in college programs or activities. The lack of English language skills will not be a barrier to admission and participation in the college’s vocational education programs.

This policy is in compliance with Title VI of the Civil Rights Act of 1964, pertaining to race, color, and national origin discrimination; Title IX of the Education Amendments of 1972, pertaining to sex discrimination; Section 504 of the Rehabilitation Act of 1973, pertaining to disability discrimination; the Age Discrimination Act of 1975, pertaining to age discrimination, and applicable District policy.

Alternative Media
This publication is available in alternate media. For information, contact the High Technology Center at (925) 439-2181, extension 3279. TDD (925) 439-5709.
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College Calendar

Summer Intersession
Instruction Begins ........................................... May 27
Independence Day—Legal Holiday ................................ July 4
End of Summer Intersession ...................................... Aug 9

Fall Semester 2008
Begin accepting applications for Fall Semester .................. March 3
Course Enrollment ............................................. See Fall Schedule of Courses
Instruction Begins .............................................. Aug 18
Labor Day—Legal Holiday ...................................... Sept 1
Last day to file drop for semester-length courses to avoid “W” on transcript .... Sept 12
Last day to petition for credit/no credit option (SC) for semester-length courses .... Sept 12
Native American Day - Holiday ................................ Sept 26
Veteran’s Day—Legal Holiday .................................. Nov 10
Last day to file drop for semester-length courses ................ Nov 14
Thanksgiving—Legal and Board Holiday ....................... Nov 27–Nov 30
Last day of instruction and final exams .......................... Dec 20

Spring Semester 2009
Begin accepting applications for Spring Semester ................ Oct 1
Course Enrollment ............................................. See Spring Schedule of Courses
Instruction Begins ............................................. Jan 15
Martin Luther King Jr.’s Birthday—Board Holiday ............... Jan 19
Lincoln’s Birthday—Legal Holiday .............................. Feb 6
Last day to file drop for semester-length courses to avoid “W” on transcript .... Feb 9
Last day to petition for credit/no credit option (SC) for semester-length courses .... Feb 9
Washington’s Birthday—Legal Holiday ........................ Feb 16
Spring Recess ....................................................... April 11 - 17
Last day to file drop for semester-length courses ................ April 24
Last day of instruction—Graduation ............................. May 22
Memorial Day—Legal Holiday .................................. May 25
About the College

Contra Costa Community College District

A Brief History

The Contra Costa Community College District was established by a vote of the people on December 14, 1948. With boundaries roughly equal to those of Contra Costa County, the district covers 686 square miles, making it the eighth largest community college district in California. It serves and is supported by approximately 879,200 residents of Contra Costa County. Contra Costa College, in San Pablo, was the founding college in the district. Diablo Valley College was constructed in 1951 and now includes the main campus in Pleasant Hill and a College in San Ramon. In the spring semester of 1974, Los Medanos College opened its doors to students from Antioch Unified School district, Liberty Union High School District, Mt. Diablo Unified School District and Pittsburg Unified School District, as well as to adults of all ages from central and eastern Contra Costa County.

Los Medanos College

The college is located on a 120-acre site near the boundary between the cities of Pittsburg and Antioch. The name of the college derives from the 8,000-acre Rancho Los Medanos, which was one of the last land grants made by the Mexican Government when California was still a territory of Mexico. Rancho Los Medanos covered almost all of both Pittsburg and Antioch, including the current site of the college. Translated into English, the name of the college refers to sand dunes or sand hills, which may be a reference to the sandy terrain that characterizes eastern Contra Costa County with its long history of sand mining.

Today Los Medanos College is a thriving center of higher education activity. The college offers courses leading to transfer credit at senior colleges and universities, general education courses leading to an Associate in Arts degree and occupational education courses leading to Certificate of Achievement or an Associate in Science degree. The college is also the leading force in the economic development of eastern Contra Costa County. Short-term and Saturday courses are increasingly offered in a variety of technical and business-oriented subjects to enhance job skills training, technology training, and workforce preparation. To further meet the needs of local residents and businesses in far East County, the college has opened an educational center in Brentwood. Los Medanos College offers high quality instruction supported by the latest technology while still maintaining the personal touch and family-orientation for which the college is known.

Mission Statement

Los Medanos College is a public community college that provides quality educational opportunities for those within the changing and diverse communities it serves. By focusing on student learning and success as our first priorities, we aim to help students build their abilities and competencies as lifelong learners. We create educational excellence through continually assessing our students’ learning and our performance as an institution. To that end, we commit our resources and design our policies and procedures to support this mission.

Our Vision

Los Medanos College provides the premier educational opportunity for East County residents, where learning matters most.

Our Values

Values remind us of what matters most. Los Medanos College is an educational community that cares deeply about learning, collaboration, effective communication, and engagement with our surrounding community.

Learning

Student learning and student success are the focal points of our college. We strive to create a dynamic environment that encourages life-long engagement with academic and societal challenges. We value the importance of critical thinking, effective communication, ethical behavior and diversity. We engage in on-going assessment to measure and improve student achievement and institutional effectiveness.

Collaboration

While we value the contributions of the individual, most of our endeavors require collaboration, communication, and cooperation. It is in working together that we spark creative and innovative approaches, build on each other’s ideas, and give mutual support. It is in collaboration that we learn to value multiple perspectives and resolve conflict in constructive ways.

Communication

Communicating clearly and effectively is critical to both student success and organizational effectiveness. We want our students to read critically and write clearly. We also want them to compose oral presentations that demonstrate poise, competence, and an understanding of new technologies. We want an organization that has clear decision-making processes that embody these same competencies and expresses them in consistent, unambiguous policies and procedures.

Engagement

Our mission is to provide educational opportunities for the people that live in our surrounding communities. We must be responsive to changing needs and seek partnerships that promote the well-being of our diverse and growing communities.
Los Medanos College Foundation

The Mission of the Los Medanos College Foundation is to provide the community the opportunity to invest in the development of comprehensive resources for Los Medanos College, which will support educational excellence. Since incorporation in September, 1997, the Los Medanos College Foundation has been instrumental in providing scholarships and funding for educational programs and services at Los Medanos College.

The LMC Foundation is supported by generous and forward-thinking community members through their donations, participation in our special events, and membership in the LMC President’s Circle program. The commitment from our Corporate Sponsors further demonstrates the perceived value of our efforts to assist Los Medanos College in providing educational excellence to the community.

Gifts to the LMC Foundation are tax deductible to the extent provided by law. The Foundation is a non-profit 501 (c)(3) charitable organization operating exclusively for charitable and educational purposes. For further information, visit the Foundation Office in room CC4-480, or call (925) 439-2181 ext. 3215.

Accreditation Review

Any interested person may review the College’s accreditation, licenses, and other approvals by contacting the President’s Office.

Admission and Course Enrollment

Who Is Eligible for College Admission

Admission to Los Medanos College is open to the following:

1) Applicants who are 18 years of age or older.
2) High school graduates.
3) Applicants who have passed the GED (General Educational Development) test or the California High School Proficiency Exam.
4) Applicants who are concurrently enrolled in the K-12 system, or are approved for home study, based on the following guidelines:
   • Student is 14 years of age or older or has completed the eighth grade or higher.
   • Los Medanos College may accept special admission students for enrollment in advanced academic and vocational degree applicable credit courses provided they have (1) obtained written parental consent*, (2) acquired a written recommendation of the principal or have an affidavit of home schooling, (3) demonstrated adequate preparation in the discipline to be studied, and (4) availed themselves of all opportunities to enroll in equivalent courses through their school of attendance.
   • Special admit students are limited to enrolling in no more than seven units in fall and spring terms and five units during summer sessions.
   • Special admit students 14-15 years of age or those wishing to appeal the unit limit must complete an on-line orientation program and request approach from an instructional dean.
   • Special admission students shall conform to all LMC academic policies and regulations, as well as the code of conduct expected of all students.
   • Los Medanos College reserves the right to exclude or limit enrollment into impacted programs and in other programs or courses where health, safety, instructional methodology, facility constraints, or legal requirements are deemed inappropriate for these special admission students.
   • Important Note: By giving consent, parents of concurrently enrolled students agree they understand that the college is an adult learning environment and students are expected to behave accordingly. Additionally, they understand that classes will be taught at the college level and the curriculum and college procedures will not be modified nor will other accommodations be made.

Applications for admission to the college must be filed with the Admissions and Records Office, prior to course enrollment. Once an application is submitted for new and returning students, a registration appointment time and date will be issued for course enrollment. All new and returning students must complete and submit a college application. Continuing students need not reapply.

Student Status

New Student: The applicant has never been enrolled at any college.

New Transfer: The applicant has attended another college, but has never been enrolled at LMC.

Returning Student: The applicant has previously been enrolled at LMC, but has been away for two consecutive semesters or longer.

Returning Transfer: The applicant has previously been enrolled at LMC and is now returning after attending another college.

Continuing Student: The student has been enrolled at LMC within the past two semesters.

Resident Status

For purposes of establishing tuition fees, students are identified as either residents or non-residents.

Residents: Those who have lived in California as legal residents for at least one year and one day prior to the first day of a new semester or term and who can demonstrate intent to remain a California resident. Evidence of intent may include at least two of the following: 1) payment of California State income taxes; 2) registering and voting in California elections; 3) obtaining a California driver’s license; 4) owning and registering a car in California. The burden of proof to establish residency is on the student.

Non-citizens who meet residency requirements and who desire to enroll as a California resident must provide documentation from the Immigration and Naturalization Service.
Non-residents (out-of-state and international students): Those who do not meet the California resident requirements as stated above.

All questions concerning residence requirements and status should be directed to the Admissions and Records Office, at (925) 439-2181, extension 7500.

International Students
Los Medanos College welcomes international students to our campus. Students from a variety of cultures contribute to the diverse student population at LMC.

Applications for international student admission must be submitted by July 1 for the Fall semester and December 1 for the Spring semester. There is no deadline for international students who are transferring from another college within the United States. Applications and information packets are available in the LMC Admissions Office. For information, call (925) 439-2181, extension 7500.

In order to qualify for admission, the following is required:

1) English proficiency with a minimum TOEFL score of 480, or successful completion of the Los Medanos College ESL Program, or successful completion of the Berlitz On Campus Language Institute.
2) A statement of health, to be verified by the student’s physician.
3) Sufficient funds to cover the payment of tuition, fees, and living expenses.

International students must pay a nonresident tuition fee, in addition to other college fees at the time of registration.

No housing facilities or dormitories are available to students on campus. Rental referral listings are available through the LMC Student Affairs Center.

Matriculation and Course Enrollment
Matriculation is a state mandated process which promotes a mutual commitment by faculty, staff, and students to work together to help students develop clear educational goals and an academic plan to be successful in reaching those goals. At Los Medanos College the required steps to enrollment consistent with Title 5 regulations are:

1) All students new to Los Medanos College, as well as those who have missed two or more consecutive semesters, must submit a completed application to the Admissions Office. Applications for the Fall semester are accepted beginning March 1 and for the Spring semester beginning October 1.
2) New students applying to Los Medanos College are strongly advised to take the college assessment tests and attend a “New Student Workshop” which includes a counseling component prior to registration. Students choosing not to participate in assessment and orientation must complete a “Matriculation Exemption Request”, available at the Admissions window or Information Center. Students who have taken assessment tests at another college must bring results to the Assessment Center, room CC3-524 or the Information Center.
3) Registration is set up on a priority system (see Course Enrollment Priority System) and may be completed online, by the automated telephone system, or in the Admissions Office.
4) Enroll in courses and pay appropriate fees (see FEES section). Students are considered officially enrolled when all fees have been paid in full.
5) Auditing or “sitting-in” classes is not allowed. All students who attend a class must complete the enrollment process for that class. Students are considered officially enrolled when all fees have been paid in full. Grades and/or credit will not be given to students who are not officially enrolled.

Registering Online or by Phone
All early and most open registration takes place online, on WebAdvisor, or on the district’s automated telephone registration system. Detailed instructions for the use of these systems can be found on the college web site at www.losmedanos.edu or in the Schedule of Classes. Students may choose to use telephone registration in English or in Spanish, by calling the system number at (925) 370-9000.

Open walk-in registration is available on scheduled days prior to the start of the term at the Admissions & Records Office on the main campus and at the Brentwood Center. It is also available for students who need to have prerequisites cleared, those who are in the Cosmetology and Nursing programs and for special admit high school students, who must register in person.

Students must pay enrollment fees at the time of course enrollment.

Course Enrollment Priority
Enrollment is based on Title 5 mandates and policy established in a college-wide position paper. Earliest registration is available for students in the Disabled Student Program (DSPS), students participating in the Extended Opportunity Program (EOPS), and veterans of the U.S. armed forces discharged within the past two years who notify the Office of Admissions and Records. Second priority is for continuing students, based on units accumulated at Los Medanos College. New, returning, and transfer students may then register according to established timelines.

Prerequisites/Advisories
In the Schedule of Classes and in the course descriptions in this catalog, prerequisites and advisories are listed for certain courses and special information notes are included. This is a guide to assist students in selection of appropriate course levels for their maximum success.

Important: To ensure proper placement, prerequisites for all classes will be checked at the time of registration. If you have taken a prerequisite course at an institution other than LMC, including high school, please bring transcripts or report cards with you when you register so prerequisites can be verified. References to “successful completion” implies with a grade of “CR” or “C” or better. Advisories are recommendations only and need not be verified. Prerequisites may be challenged through the end of the first week of instruction for semester-length classes or through the last date to add for short-term classes.
Duplicate or Conflicting Courses

Students are not permitted to enroll in more than one section of the same course and may not enroll in courses that have scheduled meeting times which conflict.

Course Load

A full-time course load is 12 semester units or more. A minimum of twelve units is considered full-time for benefit purposes through the Veterans Administration and through Social Security. Athletes, financial aid students, etc., should note there is a unit load and unit completion requirement. Eighteen units is the maximum load without approval from the Director of Admissions. Students should discuss the appropriate course load with a counselor.

Open Course Policy

It is the policy of the Contra Costa Community College District that, unless specifically exempted by statute or regulation, every course, course section or class reported for state 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 and who meets such prerequisites as may be established pursuant to regulations contained in Article 2.5 of Subchapter 1 of Chapter 6 of Division 6 of Title 5 of the California Administrative Code, commencing with Section 55200.

Remedial Coursework Limitation

By state law, students are only allowed a maximum of 30 units of “remedial” course work. Remedial courses refers to pre-collegiate basic skills courses, defined as courses in reading, writing, computation, learning skills and English-as-a-Second Language and are designated as non-degree applicable (NDA) in the college catalog. The 30 unit limit applies to units of credit in remedial courses taken at any of the three colleges within the Contra Costa Community College District. Exemptions to the 30 unit limit apply to the following: 1) students currently enrolled in one or more courses of English as a Second Language or 2) students identified by the College Disabled Student Program as having a learning disability.

Day, Evening and Weekend Courses

In addition to the courses beginning early, Monday through Friday, courses are also presented in the evening. Weekend offerings are also available, as well as many short-term classes which are scheduled throughout the semester. On-line options are available in some subject areas.

Opportunities are available for those who may want to broaden their general education, wish to learn or improve a vocational skill, and those who are working toward a college degree, and/or transfer.

Instructional Materials

Board Policy 5017 states that each college of the Contra Costa Community College District may require students enrolled in credit or noncredit courses and programs to provide certain instructional and other materials including, but not limited to textbooks, tools, equipment and clothing if:

The instructional and other materials are used in the production of an “end product” that has continuing value to the student outside of the classroom setting.

Eligible students unable to buy their books may request assistance through the Financial Aid Office.

Course Information

In each course, students are entitled to a course information sheet. The information about the course includes:

1) Title and catalog number;
2) Instructor's name, office, phone extension, and office hours;
3) Course overview, including instructional methods and goals;
4) Course meetings and a tentative calendar of tests and special assignments;
5) Textbooks and special materials required and information about appropriate audio-visual or “on reserve” materials in the Learning Center;
6) Policy on attendance; and
7) Evaluation criteria for grades.

Cancellation of Courses

The College reserves the right to cancel before or after the first day of instruction any planned or scheduled courses due to insufficient enrollment or inability to secure a qualified instructor.

First Day Drop Policy

If a student is enrolled in a class but does not attend the first class meeting, they are at risk of being dropped from the course. If the student is unable to attend the first class meeting, every effort must be made to contact the instructor prior to the class. Instructors have the right to drop “no-show” students from lecture and lab/activity classes, given full classes and existing wait lists of other students who are interested in adding the class.

Non-Discrimination

The Contra Costa College District and Los Medanos College are committed to equal opportunity in educational programs and campus life. The college does not discriminate, nor support, on the basis of ethnic group, age, gender, physical or mental, color, national origin, religion, sexual orientation, veteran status, or medical in any access to and treatment in college programs or activities. The lack of English language skills will not be a barrier to admission and participation in the college’s vocational education programs.

This policy is in compliance with Title VI of the Civil Rights Act of 1964, pertaining to race, color, and national origin; Title IX of the Education of 1972, pertaining to sex discrimination; Section 504 of the Rehabilitation Act of 1973, to disability; the Age Discrimination Act of 1975, pertaining to age, and applicable policy.
Consensual Relationships

Romantic or sexual relationships between supervisor and employees, or between administrators, faculty or staff members and students are discouraged. There is an inherent imbalance of power and potential for exploitation in such relationships. A conflict of interest may arise if the administrator, faculty or staff member must evaluate the student’s or employee's work or make decisions affecting the employee or student. The relationship may create an appearance of impropriety and lead to charges of favoritism by other students or employees. A consensual sexual relationship may change, with the result that sexual conduct that was once welcome becomes unwelcome and harassing. In the event that relationships do occur, the District has the authority to transfer an involved employee, where feasible and permitted under the applicable collective bargaining agreements, to eliminate or attenuate the supervisorial authority of one over the other, or of a teacher over a student. Such action by the District is a proactive and preventive measure to avoid possible charges of harassment and does not constitute discipline against any affected employee.

Importance of Communicating That the Conduct Is Unwelcome

The District further encourages students and staff, where appropriate, to let a person know immediately and firmly if conduct or behavior is unwelcome, offensive, in poor taste and/or inappropriate.

Inquiries Regarding Complaints

Informal Procedures

Students who have questions about the procedures to file a complaint of unlawful discrimination or feel they have been discriminated against, may contact the Senior Dean of Student Services by calling 439-2181, extension 3372. The Senior Dean will work with the student-complainant, respondent, and other appropriate college personnel to attempt an informal resolution. The President, or designee, will monitor the informal complaint process and any proposed resolution. The process will be completed within 30 calendar days of receiving the complaint. A record of the complaint and resolution will be kept.

Formal Procedures

If the complaint cannot be resolved informally, the Senior Dean shall advise the student regarding his/her right to file a formal unlawful discrimination complaint. The Senior Dean will provide students with the District complaint form and forward the completed form to the District Vice Chancellor Human Resources.

Upon receipt of a formal complaint, the District will immediately notify the California Community Colleges System Office in Sacramento. Within 10 calendar days of receipt, the District shall commence an investigation of the complaint and notify the complainant. The District has 90 calendar days in which to investigate the complaint and report the administrative findings to the complainant and the California Community Colleges System Office. The complainant may appeal the administrative determination to the District Governing Board within 15 calendar days of notice of such determination. The District Governing Board has 45 calendar days in which to act on the appeal. Failure of the Board to act within the 45 days denotes approval of the administrative determination. The complainant has the right to file a written appeal with the California Community Colleges System Office within 30 calendar days after the Governing Board issues the final District decision or permits the administrative decision to become final pursuant to the above. The Chancellor has discretion to accept or reject any such petition for review in employment discrimination cases.

Inquiries/Complaints on Basis of Disability

Inquiries regarding access, treatment, or employment on the basis of disability, should be directed to the Senior Dean of Student Services, Los Medanos College, 2700 East Leland Rd., Pittsburg, CA 94565, (925) 439-2181, ext.3372, or TDD (925) 439-5709.

Reglamento de no Discriminación

El Distrito de Colegios de la Comunidad del Condado de Contra Costa y el Colegio Los Medanos están comprometidos a ofrecer una oportunidad de igualdad en programas educacionales y vida colegial. El colegio no discrimina o apoya discriminación fundamentada en identificación de grupo étnico, edad, sexo, incapacidad física o mental, color, origen nacional, religión, orientación sexual, status de veteranos o condición médica, en cualquier acceso a/y trato en programas o actividades colegiales. La falta de inglés no es impedimento para admisión o participación en los programas de tecnología vocacional de este colegio.

Este reglamento cumple con la exigencia de la ley de Derechos Civiles de 1964 Titulo VI perteneciente a la raza, color y origen nacional discriminación; Titulo IX de la enmienda educacional de 1972 perteneciente al sexo discriminación; la Sección 504 de la Ley de Rehabilitación de 1973 perteneciente a incapacidad discriminación; La Ley de Discriminación de Edad de 1975 perteneciente a edad discriminación y reglamentos apropiados del Distrito de Colegios de la Comunidad de Contra Costa.

A menos que en otros respectos sea indicado, “días” serán definidos como “días de calendario”.

Procedimientos De Quejas

Procedimiento Informal

Los estudiantes que sienten que han sido discriminados pueden notificar la Senior Dean of Student Services. Llame al número 439.2181, extensión 3372.La Senior Dean trabajará con los estudiantes y otro personal apropiado del colegio para tratar de llegar a una solución informal. El Presidente o la persona asignada controlará el proceso de la queja informal y propondrá una solución. El proceso no deberá de extenderse mas de 30 días, después que el Presidente o la persona asignada reciba la notificación de la queja. Se guardará un expediente sobre el acuerdo informal acordado entre las partes interesadas.
Procedimiento Formal

Si la queja no puede ser resuelta informalmente, el Presidente o la persona asignada deberá notificar al estudiante de sus derechos para presentar una queja formal de discriminación ilegal completando la forma de quejas de el distrito y enviarla al Vice Canciller de Relaciones Humanas De El Distrito.

Una vez recibida la queja formalmente, el distrito notificará (inmediatamente) a la oficina del Canciller Del Estado. Dentro de 10 días después de recibir la queja, el Distrito deberá comenzar una investigación y notificar al estudiante. El Distrito tiene 90 días para investigar la queja y reportar los resultados administrativos al estudiante y a la oficina del Canciller del Estado. El estudiante podrá apelar la determinación administrativa al Consejo Gubernamental Del Distrito dentro de los 15 días de la notificación de dicha determinación. El Consejo Gubernamental Del Distrito tendrá 45 días para actuar sobre la apelación. La falta de actuación del Consejo dentro de los 45 días, indicará la aprobación de la determinación administrativa. El estudiante tendrá el derecho de someter una apelación por escrito a la oficina del Canciller del Estado dentro de 30 días después que el Consejo Gubernamental emita la decisión final del Distrito o permita que la decisión administrativa sea final conforme a lo anterior. El Canciller tendrá la discreción de aceptar o rechazar cualquiera petición semejante para revisar casos de discriminación de empleo.

Preguntas Quejas a Base De Incapacidad


Standards of Scholarship

These regulations pertain to Los Medanos College as permitted under Governing Board Policy 4001 and Title 5 of the California Administrative Code. A full text of these policies are on file in each of the college administrative offices.

Attendance

Students are expected to be punctual and attend all courses in which they are enrolled. Students may be dropped by the instructor for failure to attend class in the following circumstances:

1) Failure to attend first class meeting.
2) Absence from three consecutive weeks of instruction.
3) At any point when it is concluded that absences have irretrievably affected the student's progress.

Grades should not be used as punishment for absences. However, academic grades may be lowered to the degree that instructors can estimate the loss of cognitive, affective, or skills learning due to student absences.

Equally, students can expect the instructors also to be punctual in their attendance. Instructors have a professional obligation to enforce this institutional policy within the dictates of their particular courses and within the bounds of professional discretion.

If a cancellation notice for that meeting has not been posted and the instructor has not arrived, students are automatically dismissed without penalty 15 minutes after the scheduled course starting time. If a course session started late, the instructor should still dismiss as scheduled.

To protect student rights against instructor error and opportunity and to explain mitigating circumstances, the due process of appeal will follow this order:

1) To the instructor;
2) If necessary, to the instructor and appropriate Dean;
3) In unusual cases, to the instructor, appropriate Dean and the President.

All courses have a final examination appropriate to the type of course.

Grading

The evaluation in college-level courses is a prime responsibility of the instructor. Such evaluation involves the measurements of achievement against the objectives of the course and the assignment of a grade to denote the student's degree of success.

The grade, as submitted by the instructor, shall be considered final and permanent. Grades cannot be changed by submitting additional course work or taking examinations after the semester (or term) is completed. Under state law, the instructor's determination is final unless the grade given was the result of 1) mistake, 2) fraud, 3) bad faith, or 4) incompetency. (Ed Code Section 76224.)

No grade may be challenged more than one year after the end of the session in which the grade was assigned. For infor-
mation on the Policy regarding grade challenges, contact the Student Affairs Center, Room CC3-800A, Ext. 3199.

Final Grades
Final grades can be accessed at the end of instruction, immediately following instructor grade entry on-line. Students can learn about their final grades in three ways:

1) Call the phone registration system at (925) 370-9000.
2) Visit the district web site at www.collegeoffcc.cc.ca.us or the college web site at www.lommedanos.edu, or
3) Request a printed transcript of your academic record from the college Admissions & Records Office.

Honors Status
Full-time students who achieve a term grade point average of 3.0 or better in 12 or more units of graded courses are recognized with honors status. Notation of this academic achievement is printed on the student’s permanent record.

Alpha Gamma Sigma Alpha Gamma Sigma (AGS) is the California Community College Honor Scholarship Society. As a statewide community college organization, it has the purpose of fostering, promoting, maintaining, and recognizing scholastic achievement.

For information on eligibility requirements and benefits available for members in good standing, contact the Chapter Advisor.

Evaluative Symbols/Grading Scale

<table>
<thead>
<tr>
<th>Symbol and Definition</th>
<th>Grade Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Excellent</td>
<td>4</td>
</tr>
<tr>
<td>B Good</td>
<td>3</td>
</tr>
<tr>
<td>C Satisfactory</td>
<td>2</td>
</tr>
<tr>
<td>D Passing, less than satisfactory</td>
<td>1</td>
</tr>
<tr>
<td>F Failing</td>
<td>0</td>
</tr>
<tr>
<td>P Passing (at least satisfactory — C or better — units awarded not counted in GPA). Equivalent to CR as defined through 2007-08.</td>
<td></td>
</tr>
<tr>
<td>NP No Pass (less than satisfactory or failing — units not counted in GPA). Equivalent to NC as defined through 2007-08.</td>
<td></td>
</tr>
</tbody>
</table>

Pass/No Pass Grade Option
The purpose of the pass/no-pass (P/NP) option is to allow students to take challenging courses while avoiding undue concern for their grade point averages. Students who select this option are, however, expected to complete the course, comply with attendance requirements, and comply with all other requirements of the course.

Selected courses have been labeled with “SC” to indicate student choice for the P/NP option. If students do not choose the P/NP option before the deadline, they will be issued a letter grade for the course. It is often best to discuss this choice with a counselor.

In order to exercise this option, a petition must be filed with the Admissions and Records Office at the time of registration or no later than the end of the fifth week of the semester for a full-semester class. Petitions for summer session and short-term courses must be filed within the first thirty percent of the course. After the deadline has passed, the grading choice may not be reversed.

Important information related to the P/NP option:
- A P grade represents a letter grade of A, B, or C.
- A NP grade represents a D or F letter grade.
- Units earned on a P/NP basis will not be used to calculate grade point averages.
- Units attempted for which NP is recorded will be considered in factoring probation and dismissal status.
- Units earned on a P/NP basis will apply to the 60 units required for an associate degree.
- Students should be aware that other colleges and universities may or may not limit the number of P units that will be accepted from transfer students.

Los Medanos College offers:
1) Some courses solely for a pass/no-pass (P/NP) grade.
2) Some courses solely for a standard letter grade.
3) Some courses in which the student may choose to complete the course for either a credit/no credit (P/NP) grade OR a standard letter grade (SC).

Courses offered as “P/NP” or “SC” are identified in the course description section of the catalog.

Non-Evaluative Symbols
I Incomplete: Incompletes will be given only in the event of an unforeseeable emergency and justifiable reasons at the end of a term; student must be passing course to be eligible for incomplete; student cannot re-enroll in the course to complete pending assignments, projects or exams. A final grade is assigned when the work has been completed or after one year, unless a petition for time extension has been approved by the Director of Admissions and Records and the instructor.
IP In Progress: The course extends beyond the end of the academic term. The grade and credit is assigned on the student’s record for the term in which the course is completed.
RD Report Delayed: A temporary notation to be replaced by a permanent symbol. This notation is used in the event of a delay in grade reporting at the end of a term.
W Withdrawal: A withdrawal reported to the Admissions Office during the first four weeks of instruction (or 30 per cent of instruction in summer intercession and short-term classes) is recorded as a “W” but is not printed on the student’s official academic record.

A written withdrawal notice filed in the Admissions Office between the end of the fourth week of instruction and the end of the fourteenth week of instruction (or 31-75 per cent of instruction in summer intercession and short-term classes) is noted on the student’s permanent academic record as a “W”.

The printed academic record of a student who has not officially withdrawn from a class within the time described above must reflect an authorized symbol other than a
Withdrawal and Drop Policy

Upon entering Los Medanos College students assume the responsibility of completing each course in which they are enrolled. Students are responsible for officially withdrawing from any classes in which they no longer wish to attend; it should not be assumed that an instructor will process the drop when a student quits attending. Nonattendance and non-payment of fees does not release the student from this responsibility and may result in a failing grade and a debt on their record.

Students may drop classes through the telephone registration system, online (on WebAdvisor) or in-person at the main campus or at the Brentwood Center, prior to the designated deadline for dropping classes.

Probation and Dismissal

Definition of Terms

Units Attempted: A, B, C, D, and F (for calculation of GPA).
Consecutive Semester: The order shown on academic record including summer session.

Note: Non degree applicable course grades are not included in calculating the GPA for a degree.

Academic

Academic Probation: Cumulative GPA under 2.0 with 12 or more cumulative units attempted.
Removal from Academic Probation: Cumulative GPA 2.0 or better.
Academic Dismissal Status: Three consecutive semesters of Academic Probation unless most recent semester GPA is 2.00 or higher.

Progress

Progress Probation: With 12 cumulative units attempted, 50 per cent or more are W, I, and/or NP.
Removal from Progress Probation: Cumulative units completed are more than 50 per cent of cumulative units attempted.
Progress Dismissal Status: Three consecutive semesters of Progress Probation unless most recent semester student completes 50 per cent or more of attempted units.

Notification of Probation and Dismissal

Students on probation or dismissal are notified as soon as possible but not later than the end of the following term.

A registration hold will be placed on a student’s record in the event that the student has been dismissed from the college due to poor academic standing. The student may request reinstatement by meeting with a counselor and developing a plan for improvement of his/her grades.

Reinstatement for Academic or Progress Dismissal

A student may appeal his/her dismissal status by making an appointment to see a counselor prior to the deadline date that is stated in the letter of notification. The Director of Enrollment Management will review all appeals for possible reinstatement. If reinstated, a student is subject to continued probation and dismissal policies.

Credit Accepted at Los Medanos College

Other College

Lower-division credit from any educational institution accredited by the United States Regional Accrediting Association, as listed in the American Association of Collegiate Registrars and Admissions Officers Publication may be accepted.

Military Experience

1) Applicable lower-division credit for verified completion of special military schools, as recommended by Guide to the Evaluation of Educational Experiences in the Armed Services, published by American Council on Education.
2) Six elective semester units will be granted toward the associate degree for honorably discharged veterans, provided the elective credit applies toward the student’s educational objective. The credit will be granted upon verification of completion of a basic or recruit training program with the United States Armed Forces.

Credit by Examination

Credit by examination may be granted to eligible students, as authorized by California Administrative Code, Title V, Sections 55750 and 55752, and Board Policy 4001. The credit by examination process provides an alternate means of receiving credit for designated courses offered at Los Medanos College (LMC). Exams may be taken during the first three weeks of the semester.

Eligibility:

1) The student must be currently enrolled at LMC.
2) The student must have completed a minimum of six units in good standing (overall 2.0 GPA) at LMC.
3) The student may make only one attempt of credit by examination, per course.
4) The student may be approved for no more than 30 units of credit by examination.
5) Courses that may be challenged will only be those that are on the approved credit by examination list, available in the Admissions Office or on the LMC website. An example of a challenge course is Spanish 505.

Credit and Grades:

1) Units for which credit is granted will not apply toward a student’s unit “load” for purposes of eligibility for VA benefits, financial aid, athletics, or residency units, required for an associate degree.
2) The amount of credit granted will be consistent with units posted for the designated courses in the college catalog.
## Advanced Placement

### Advanced Placement Examination Program

<table>
<thead>
<tr>
<th>Examination</th>
<th>Score</th>
<th>Los Medanos College Credit Allowed Toward Degree in Semester Units</th>
<th>Los Medanos College Course Equivalents</th>
<th>CSU GE/Breadth Credit Allowed in Semester Units</th>
<th>Los Medanos College Associate Degree Requirements Satisfied</th>
<th>IGETC Area Credit Allowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art History</td>
<td>3, 4, 5</td>
<td>N/A</td>
<td>N/A</td>
<td>3 units toward Area C1</td>
<td>N/A</td>
<td>3A or 3B</td>
</tr>
<tr>
<td>Biology</td>
<td>3, 4, 5</td>
<td>4 units</td>
<td>BIOSC 10</td>
<td>3 units toward Area B2</td>
<td>Science</td>
<td>5B with lab</td>
</tr>
<tr>
<td>Chemistry</td>
<td>3</td>
<td>N/A</td>
<td>CHEM 25</td>
<td>6 units toward Area B1&amp;B3</td>
<td>N/A</td>
<td>Science</td>
</tr>
<tr>
<td>Chinese Language &amp; Culture</td>
<td>3, 4, 5</td>
<td>N/A</td>
<td>No equivalent</td>
<td>Proposed toward Area C2</td>
<td>N/A</td>
<td>3B &amp; 6A</td>
</tr>
<tr>
<td>Computer Science A</td>
<td>3, 4, 5</td>
<td>N/A</td>
<td>N/A</td>
<td>3 units toward Area D2</td>
<td>N/A</td>
<td>4B</td>
</tr>
<tr>
<td>Computer Science AB</td>
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<td>N/A</td>
<td>3 units toward Area D2</td>
<td>N/A</td>
<td>4B</td>
</tr>
<tr>
<td>Economics: Macro</td>
<td>3, 4, 5</td>
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<td>N/A</td>
<td>3 units toward Area D2</td>
<td>N/A</td>
<td>4B</td>
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<tr>
<td>Mathematics: English: Language and Composition</td>
<td>3</td>
<td>N/A</td>
<td>N/A</td>
<td>3 units toward Area A2</td>
<td>N/A</td>
<td>1A</td>
</tr>
<tr>
<td>Language and Composition</td>
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<td>3 units</td>
<td>ENGL 100</td>
<td>3 units toward Area A2</td>
<td>Reading-Writing</td>
<td>1A</td>
</tr>
<tr>
<td>Literature and Composition</td>
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<td>N/A</td>
<td>6 units toward Area A2&amp;C2</td>
<td>N/A</td>
<td>1A or 3B</td>
</tr>
<tr>
<td>Environmental Science</td>
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<td>N/A</td>
<td>N/A</td>
<td>Proposed toward Area B1 &amp; B3</td>
<td>N/A</td>
<td>5A with lab</td>
</tr>
<tr>
<td>French Language</td>
<td>3, 4, 5</td>
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<td>N/A</td>
<td>6 units toward Area C2</td>
<td>N/A</td>
<td>3B &amp; 6A</td>
</tr>
<tr>
<td>German Language</td>
<td>3, 4, 5</td>
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<td>N/A</td>
<td>6 units toward Area C2</td>
<td>N/A</td>
<td>3B &amp; 6A</td>
</tr>
<tr>
<td>Government &amp; Politics:</td>
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<tr>
<td>United States</td>
<td>3, 4, 5</td>
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<td>N/A</td>
<td>4H</td>
</tr>
<tr>
<td>Comparative</td>
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<td>N/A</td>
<td>3 units toward Area D8</td>
<td>N/A</td>
<td>4H</td>
</tr>
<tr>
<td>History: United States</td>
<td>3, 4, 5</td>
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<td>N/A</td>
<td>3 units toward Area D6</td>
<td>N/A</td>
<td>3B or 4F</td>
</tr>
<tr>
<td>History: European</td>
<td>3, 4, 5</td>
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<td>N/A</td>
<td>3 units toward Area D6</td>
<td>N/A</td>
<td>3B or 4F</td>
</tr>
<tr>
<td>History: World</td>
<td>3, 4, 5</td>
<td>N/A</td>
<td>N/A</td>
<td>3 units toward Area D6</td>
<td>N/A</td>
<td>3B or 4F</td>
</tr>
<tr>
<td>Human Geography</td>
<td>3, 4, 5</td>
<td>N/A</td>
<td>N/A</td>
<td>Proposed toward Area D5</td>
<td>N/A</td>
<td>4E</td>
</tr>
<tr>
<td>Italian Language &amp; Culture</td>
<td>3, 4, 5</td>
<td>N/A</td>
<td>N/A</td>
<td>Proposed toward Area C2</td>
<td>N/A</td>
<td>3B &amp; 6A</td>
</tr>
<tr>
<td>Japanese Language &amp; Culture</td>
<td>3, 4, 5</td>
<td>N/A</td>
<td>No equivalent</td>
<td>Proposed toward Area C2</td>
<td>N/A</td>
<td>3B &amp; 6A</td>
</tr>
<tr>
<td>Latin: Vergil</td>
<td>3, 4, 5</td>
<td>N/A</td>
<td>No equivalent</td>
<td>3 units toward Area C2</td>
<td>N/A</td>
<td>3B &amp; 6A</td>
</tr>
<tr>
<td>Latin: Literature</td>
<td>3, 4, 5</td>
<td>N/A</td>
<td>No equivalent</td>
<td>3 units toward Area C2</td>
<td>N/A</td>
<td>3B &amp; 6A</td>
</tr>
<tr>
<td>Mathematics: Calculus AB</td>
<td>3</td>
<td>N/A</td>
<td>N/A</td>
<td>3 units toward Area B4</td>
<td>N/A</td>
<td>2A</td>
</tr>
<tr>
<td>Calculus BC</td>
<td>3</td>
<td>N/A</td>
<td>N/A</td>
<td>3 units toward Area B4</td>
<td>N/A</td>
<td>2A</td>
</tr>
<tr>
<td>Calculus AB</td>
<td>4, 5</td>
<td>4 units</td>
<td>MATH 50</td>
<td>3 units toward Area B4</td>
<td>Mathematics</td>
<td>2A</td>
</tr>
<tr>
<td>Calculus BC</td>
<td>4, 5</td>
<td>8 units</td>
<td>MATH 50 + 60</td>
<td>3 units toward Area B4</td>
<td>Mathematics</td>
<td>2A</td>
</tr>
<tr>
<td>Music Theory</td>
<td>3, 4, 5</td>
<td>N/A</td>
<td>N/A</td>
<td>3 units toward Area C1</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Physics: B</td>
<td>3</td>
<td>N/A</td>
<td>N/A</td>
<td>6 units toward Area B1&amp;B3</td>
<td>N/A</td>
<td>5A with lab</td>
</tr>
<tr>
<td>Physics: C</td>
<td>3</td>
<td>N/A</td>
<td>N/A</td>
<td>3 units toward Area B1&amp;B3</td>
<td>N/A</td>
<td>5A with lab</td>
</tr>
<tr>
<td>Physics: B</td>
<td>4, 5</td>
<td>4 units</td>
<td>PHYS 35</td>
<td>3 units toward Area B1&amp;B3</td>
<td>Science</td>
<td>5A with lab</td>
</tr>
<tr>
<td>Physics: C</td>
<td>4, 5</td>
<td>4 units</td>
<td>PHYS 40</td>
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<td>Science</td>
<td>5A with lab</td>
</tr>
<tr>
<td>Psychology</td>
<td>3, 4, 5</td>
<td>N/A</td>
<td>N/A</td>
<td>Units toward Area D9</td>
<td>N/A</td>
<td>4I</td>
</tr>
<tr>
<td>Spanish Language</td>
<td>3, 4, 5</td>
<td>N/A</td>
<td>N/A</td>
<td>6 units toward Area C2</td>
<td>N/A</td>
<td>3B &amp; 6A</td>
</tr>
<tr>
<td>Spanish Literature</td>
<td>3, 4, 5</td>
<td>N/A</td>
<td>No equivalent</td>
<td>6 units toward Area C2</td>
<td>N/A</td>
<td>3B &amp; 6A</td>
</tr>
<tr>
<td>Statistics</td>
<td>3, 4, 5</td>
<td>4 units</td>
<td>MATH 34</td>
<td>3 units toward Area B4</td>
<td>Mathematics</td>
<td>2A</td>
</tr>
<tr>
<td>Studio Art: 2D Design</td>
<td>3, 4, 5</td>
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<td>Studio Art: Drawing</td>
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<td>N/A</td>
<td>N/A</td>
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</tr>
</tbody>
</table>

Note: A student planning to transfer to a four-year college or university should consult that transfer institution's catalog regarding its awarding of Advanced Placement credit. Credit awarded at Los Medanos College for the completion of a CSU general education area and/or IGETC is as noted above.

* Units awarded for Advanced Placement exams may not be used to meet the residency requirements for the associate degree.
4) Successful passing of the challenge exam will be noted on the student's academic record as "CR BY EXAM."

Procedures:
1) Student submits petition for credit by exam to the Admissions Office.
2) If the student is eligible, the petition form is forwarded and the student is referred to the area dean.
3) The credit by exam fee is payable at the Admissions Office, upon determination of eligibility. The fee is the same as if the student were enrolling in the course.
4) The dean and/or subarea chair will arrange for testing and, once completed, return the petition form to the Admissions Office.
5) Examination results will be entered on the student's academic history.

Credit by Advanced Placement (AP)
Los Medanos College grants credit toward undergraduate degrees for successful completion of examinations of the Advanced Placement Program of the College Board. The policy for granting credit for specific scores and exams is presented in the table below.

Students who participate in this program should indicate at the time they take the Advanced Placement Examinations that their scores be sent to Los Medanos College. To obtain credit for Advanced Placement Examinations, students should contact the Admissions Office. Credit may not be earned at Los Medanos College for courses which duplicate credit already allowed for examination results will be entered on the student's academic record as "CR BY EXAM."

Credit by examination is evaluated on a credit/no credit basis. No letter grade will be given.

Academic Renewal Without Course Repetition
A student's performance under certain circumstances may not reflect the student's true academic ability. Academic renewal provides for the removal of previously recorded substandard grade points and units, not reflective of a student's demonstrated scholastic ability. In such cases, a student may petition the Director of Admissions and Records to have prior D or F grades disregarded in computing grade point average. Petitions are available at the Admissions Office.

The following provisions apply:
1) Immediately following the semester/term of course work to be alleviated, the student must have completed at least 20 units with grades of "C" or better at Los Medanos College, or any other accredited college or university;
2) There is no time limit for academic renewal;
3) The units to be alleviated may not exceed 15 units; and
4) The student's transcript will reflect the adjustment for academic renewal by annotation in a manner that shows the complete academic history.

Transcript Requests
In order to evaluate previous college course work that may apply toward prerequisite verifications, program planning, veteran certifications, graduation requirements, and financial assistance, students must request official transcripts from high school or other colleges to be sent to the Los Medanos College Admissions & Records Office. Once received by LMC, incoming transcripts cannot be released to the student or forwarded to a third party. Incoming transcripts are evaluated in preparation for counseling appointments and/or upon submission of a petition to graduate.

The LMC Admissions & Records Office must receive written authorization, including the student's signature, in order to release official LMC student records. The transcript request form is available on the college web site (www.losmedanos.edu), at the college Admissions & Records Office and at the...
General College Information

Brentwood Center. A handwritten or typed request may also be mailed or faxed to the college (925.427.6351). Requests must include applicable fees and will be processed within three to five business days upon receipt.

Students may receive their first two official transcripts within the Contra Costa Community College District free of charge. A fee of $5.00, payable in advance, will be charged for each additional copy. Unofficial transcripts are available for $1.00 from the Admissions & Records Office or may be printed at no charge through WebAdvisor on the college web site. Note that there are separate transcripts maintained for each college within the district. Transcript requests processed through the college will only contain academic history for course work completed at LMC.

Enrollment and Degree Verifications

Enrollment and Degree Verification are available online through the National Student Clearinghouse. Free copies of official verification of enrollment can be obtained (24 hours a day, 7 days a week) by visiting the campus web site www.losmedanos.edu. Log onto WebAdvisor and click on “Enrollment Verification” for this free service.

If an entity needs to verify student enrollment or degree completion and will not accept a printed copy from the student, the agency should be referred to: National Student Clearinghouse, 13353 Sunrise Valley Drive, Suite 300, Herndon, VA 20171, Web site: www.studentclearinghouse.org, Email service: service@studentclearinghouse.org, Phone: (703) 742-4200, or Fax: (703) 742-4239.

Enrollment information is sent to the Clearinghouse three times each semester.

Rights of Instructors

Los Medanos College instructors have the following rights:

1) The right to drop students who fail to attend the first meeting of any course.

2) The right to deny permission to use a tape recorder in class.

3) The right to send a withdrawal notice when students are absent during three consecutive weeks of instruction or when students are tardy to the degree that classes and learning opportunities are disrupted.

4) The right to send a withdrawal notice at any point that the instructor concludes that absences have irretrievably affected a student’s progress in a course.

5) The right to remove a student from a single course session and one following for conduct disturbing to the class or the instructor.

6) The right to recommend suspension of a student.

Fees, Benefits & Financial Aids

Enrollment Fee for California Legal Residents

As established by state legislation, enrollment fees* are $20 per unit for California residents.

* The District reserves the right to adjust the enrollment fee, based on changes in state legislation.

Tuition for Non-California Residents

Nonresident tuition for non-California residents is $181 per unit, in addition to the enrollment fee of $20 per unit and is payable at time of course registration. The nonresident fee for non-U.S. citizens is $188 per unit, in addition to the enrollment fee.*

The nonresident tuition fee may be waived, based on eligibility requirements of Assembly Bill 540. The law does not grant California residency status, however it requires that certain nonresident students be exempted from paying the nonresident tuition fee. The exemption is primarily based on three or more years of attendance at a California high school and a high school diploma. Completion of the California General Education Development (GED) program or passing the California High School Proficiency Exam may be accepted in lieu of a high school diploma. The law does not distinguish between public and private high schools, although attendance at a home school is not acceptable unless the home schooling was provided in a manner recognized under state law. For further details, inquire in the Admissions & Records Office.

* The District reserves the right to adjust the nonresident tuition fee consistent with applicable law.

Financial Holds

A hold may be placed on a student’s record whenever that student has failed to pay any debt owed to the college or has failed to return a library book or other college property or equipment. Students with holds will not be allowed to register, receive or forward transcripts, receive certificates or degrees, and/or receive other services related to student records. The hold will be removed once the student has cleared the obligation with the college.

Student Fee & Enrollment Refund Policy

Fee refunds for students who withdraw from school or drop classes by the deadline for class add/drop will be automatically calculated at the District Information Technology Center. Refunds for complete or partial withdrawals from school will be processed after the first two weeks of instruction. Refund checks will be mailed to the student address on file in the college Admissions Office. If the student paid by credit card on Web registration, the refund will be processed as a credit to the credit card. If you have a new address, please notify the Admissions Office at the time of withdrawal or change of program.

A refund will not be made if the student has other outstanding debts to the college.

Refund checks will be issued monthly after the first two weeks of instruction each semester. No refund of the enrollment fee will be made to any student who withdraws from classes after the first two

Residents

Enrollment Fee for California Legal Residents

As established by state legislation, enrollment fees* are $20 per unit for California residents.

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A refund will not be made if the student has other outstanding debts to the college.

Refund checks will be issued monthly after the first two weeks of instruction each semester. No refund of the enrollment fee will be made to any student who withdraws from classes after the first two
weeks of instruction for a full semester class, or after 10% of the class time for a short-term class.

The Student Union Fee refund policy is identical to the refund policy for enrollment fees.

Students who register early for the Fall or Spring semester and subsequently drop all classes prior to the beginning of the semester may petition for an early refund at the Cashiers Office.

The above policy also applies to the refund of nonresident tuition fees.

Financial Aid Enrollment Fee Deferments
If subsequent to paying enrollment fees, a student becomes eligible for financial aid and receives an enrollment fee waiver, the student will automatically be mailed a full refund check or a credit card will be issued according to the same refund processing cycle as enrollment fee refunds. Students who qualify for the Board of Governors Enrollment Fee Waivers are exempt from parking fees over $20.00 per semester.

Enrollment Fee Deferments
If subsequent to paying enrollment fees, a student becomes eligible for an enrollment fee deferment to an outside agency, the student should have the document stating the deferment submitted to the Cashier’s Office. The student will then automatically be mailed a refund check of the deferred fees or a credit card credit within two weeks after the outside agency has been billed.

Details regarding the refund policy are available from the Cashier’s Office or Admissions Office.

Parking Fees
Students may purchase a parking permit, valid for one semester. The cost is $35.00 for automobiles and $20.00 for motorcycles or mopeds for Fall or Spring semesters. Summer permits are $20.00 for automobiles and $10.00 for motorcycles or mopeds. A permit holder may be purchased for an additional $1.00, if desired. These permits may be purchased from the Admissions & Records Office, Bookstore, or the Cashier. Permits should be placed on the front or rear window or hung from the rearview mirror on a permit holder.

Daily parking permits may be purchased from the ticket machines for $2.00. These machines are located in Lot A, Lot 1A, Lot B, Lot C and on the perimeter road, by the softball fields.

Daily permits must be displayed on the dashboard of the student’s vehicle.

Parking Fee Refunds
Parking permit refunds will be made if the student drops all classes within the first two weeks of instruction for semester-length courses or by 10% of the length of short-term courses. The parking decal and receipt must be returned to the Cashier’s Office for a refund. The refund check will be mailed to the student according to the same refund processing cycle as enrollment fee refunds. The refund check will be mailed to the student according to the same refund processing cycle as enrollment fee refunds. Lost or stolen parking permits are not refundable.

Returned Check Fee
Only cash or cashier checks will be honored for clearing checks returned for insufficient funds. The returned check fee is $15. Records are held until the fee is cleared. Students who fail to clear debt for enrollment fees will be dropped from all classes.

Instructional Materials Fee
Instructional materials fees for certain selected credit or non-credit courses may be paid at the time of registration, the first week of class or the materials may be purchased on your own. Authority for the charge is granted under Contra Costa Community College District Board Policy 5024. These instructional and other materials include but are not limited to: textbooks, tools, equipment and clothing if:

a. The instructional and other materials required for the course have a continuing value to the student outside of the classroom setting, or

b. The instructional and other materials are used in the production of an “end product” that has continuing value to the student outside the classroom setting.

At the beginning of each term, the instructor will inform you of the material specification. You may choose to purchase the material on your own or you choose to pay the instructional materials fee.

Instructional materials fee refunds are provided to students who withdraw from school or drop the course by the required drop date. This refund is contingent upon the return of all usable materials. The instructor will verify that all materials have been returned and suitable for resale and reuse. Refund checks will be processed after the first two weeks of instruction and mailed to the student.

Veterans Benefits
Los Medanos College is approved for the training of veterans, dependents of deceased veterans, and children of disabled veterans under applicable federal and state laws administered by the Veterans Administration and the State Department of Veterans Affairs. Eligibility for benefits under any of these programs is determined by the appropriate federal or state agency. The College will make necessary certifications of enrollment and progress for such eligible students and will provide any desirable or necessary planning of programs of study. Certification of attendance depends upon the student being registered in the College, enrolled in courses, and requesting such certification. Priority registration appointments are available by request to active military personnel and to veterans discharged within two years preceding the term of enrollment.

Only courses which meet requirements for the major and degree objective indicated on the veteran student’s record will be certified for payment of benefits. If the educational objective has changed, the student must complete a new evaluation. Los Medanos College is approved to certify for an associate degree or a certificate of achievement, as listed in the catalog, or for transfer majors approved for UC and CSU colleges only. Veterans are cautioned that some courses are less than a semester in length and benefits are paid according to time and load. 12 units = full benefits; 9 through 11 1/2 = 3/4 benefits; 6 through 8 1/2 units = 1/2 benefits. For summer session (6 week courses),
Financial Aid


The Philosophy of Financial Aid

Financial Aid is a means of assisting students to receive a college education who would otherwise be unable to afford this opportunity. Students to be helped are those who show the most financial need and who demonstrate the desire and ability to achieve academic goals and complete a course of study in a degree or certificate program.

There are three types of financial aid:

- Grants – Awards that a student does not have to repay unless student drops all classes before completing 60% of the semester.
- Federal Work-Study – part-time work earned on a monthly basis.
- Loans – low interest government loans that students can borrow and must be repaid with interest.

Basic Requirements

To be eligible, students must meet certain requirements:

- Be a U.S. citizen or eligible noncitizen.
- Be enrolled in an eligible program working toward a degree or certificate (an AA degree or transfer program to a 4-year school or a certificate program that meets requirements).
- Have a high school diploma, a GED Certificate or pass a test to show you can benefit from instruction.
- Not be in default on a Federal student loan or owe a repayment on a Federal grant.
- Be registered with Selective Service (if required).
- Complete a Free Application for Federal Student Aid.
- Use your name as it appears on your official Social Security Card.

How to Apply for Financial Aid

All students are encouraged to apply for all forms of Federal and State financial aid programs offered at Los Medanos College. By completing the Free Application for Federal Student Aid (FAFSA) on-line at www.fafsa.ed.gov or by completing the paper FAFSA.

The FAFSA is typically available in December of each year and should be completed beginning January 1 and no later than March 2 to meet Los Medanos College priority filing date. Students must reapply each year.

1) Complete a “Free Application for Federal Student Aid (FAFSA)” on line at www.fafsa.ed.gov or complete your paper FAFSA.
2) You will receive an electronic or paper “Student Aid Report (SAR)” from the Federal government Central Processing System (CPS).

3) If you complete the FAFSA you will also be automatically considered for the “Board of Governor’s Waiver: (BOGW) which waives or refunds your enrollment fees (assuming you are a California resident). You do not have to file the separate BOGW application.

4) If you want only your fees paid or refunded, you can complete the shorter “Board of Governor’s Grant” (BOGW) form on line or on paper.

**BOG Fee Waiver Program**

All California residents are encouraged to apply for a state funded Board of Governor’s (BOGW) Fee Waiver which waves or refunds your enrollment fees.

Students who complete the FAFSA will automatically be considered for the “Board of Governor’s” Fee Waiver.

If you want only your fees paid or refunded, you can complete the shorter “Board of Governor’s (BOGW) form on-line or on paper.

Students will be considered for one of the fee waivers as follows:

**BOGW – A:**
You or your family are receiving public assistance from CalWORKS/Temporary Assistance for Needy Families (TANF) or Supplemental Security Income (SSI) or General Assistance/General Relief or have certification from the California Department of Veteran’s Affair.

**BOGW – B:**
You must meet the following income criteria for the 2008-2009 academic year:

<table>
<thead>
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<th>Family Size</th>
<th>Income</th>
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<tbody>
<tr>
<td>1</td>
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<tr>
<td>2</td>
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<tr>
<td>6</td>
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Each Additional Family Member: $5,220

**BOGW – C:**
You have completed the Free Application for Federal Student Aid (FAFSA) and you have “Financial Need” as defined by the Department of Education located on your Student Aid Report.

**Other Federal and State financial aid programs available at Los Medanos College:**
- Federal Supplemental Educational Opportunity Grant
- Federal Work-Study
- Federal Academic Competitiveness Grant
- Federal Stafford Loans (Subsidized and Unsubsidized)
- Cal Grant B
- Cal Grant C
- California Chafee Grant

**Deadlines**
To get the best aid available, apply early. Students whose applications are completed by March 2 receive priority for some limited funds and can apply for certain state programs.

If this deadline has already passed, don’t panic! Students may still be eligible for significant assistance—like a Pell Grant and a Board of Governor’s Waiver.

**Satisfactory Academic Progress**
Each student receiving financial aid in the District is expected to maintain satisfactory and measurable academic progress.

Satisfactory and measurable academic progress is defined within the District as successfully maintaining a semester and cumulative GPA (grade point average) of 2.0 (C or greater) and complete 67% (or more) units attempted each and every term. Also, students cannot exceed 150% of units as stated in the student’s educational plan.

**Probation**
If the above conditions are not met during a given semester the student will be placed on Financial Aid Probation for the following semester of the attendance. The student will be allowed to receive financial aid during the probationary semester. However, if the student fails to meet the satisfactory academic progress standards during the probationary period, the student will be suspended from financial aid assistance.

**Suspension**
If the student is placed on probation and the student has not successfully improved their semester and cumulative Grade Point Average and/or did not complete 67% of their attempted units the student will be suspended from financial aid the following semester.

Students who have been suspended from financial aid have the right to appeal for reinstatement.
Financial Aid Appeals

A student who is suspended from financial aid may have their eligibility reinstated, if a student feels he/she has unusual or mitigating circumstances that has affected the student’s ability to make progress, they must attend a mandatory appeals workshop and submit a suspension appeal form and supporting documentation outlining the circumstances to the financial aid office. Appeals will be reviewed by the Director of Financial Aid. Students will be notified by mail.

Refusal of Financial Aid Award

If you decide not to accept any program on your Financial Aid Notification Letter, please contact the Financial Aid Office.

Changing Majors: Maximum Time Frame

Students who change their career goals and thus need to revise their educational plan may do so by consulting an academic counselor and filing a new educational plan. However, such changes should be minimized, as students who have 150% of the minimum credit hour requirements toward a course of study (as defined in the College Catalog) or have attempted the maximum time frame of six semesters (prorated for less than full-time enrollment) will not be eligible for financial aid.

If you believe extenuating circumstances prevented you from completing your degree within the time frame or you think the credit totals are inaccurate, you may appeal for an extension or a review of your time frame. On your appeal, you should explain why you were unable to complete your degree within the time frame allowed. Attach documentation to substantiate your petition.

Financial Aid Disbursement

If you have a Federal Work-Study job, you will receive a monthly pay check for the hours you work. Contra Costa Community College District offices will mail out Student’s Financial Aid Disbursement Checks, according to the agreed Financial Award Payment.

Refund and Repayment

A “student refund” is money you receive if you pay fees and then drop out of Los Medanos College before the term is over. All LMC students receive 100% refund of fees in the first two weeks. If subsequent to paying enrollment fees the student is eligible for the Board of Governors Fee Waiver, the student will automatically be mailed a full refund check or a credit card credit will be issued according to the same refund processing cycle as enrollment fee refunds. Students who qualify for the Board of Governors Enrollment Fee Waivers are exempt from parking fees over $20.00 per semester.

A “repayment” is money you may owe to the Federal programs if you received money for your indirect expenses (like rent, food, etc.) and dropped out before completing 60% of the semester. The Office of Financial Aid will calculate the part of the Federal Aid that you have “earned”, according to the day you withdrew. Note: If you withdraw after you have earned 60% of your Financial Aid, you will not have to repay any of the Financial Aid money that you received. Otherwise, you must make the repayment when notified. Here’s how it works:

**EXAMPLE:** You are awarded $1,000 Federal Aid. If there are 100 days in the term and you drop out on the 26th day, then you earned 26% of your Federal Aid.

$1,000 grant x 26% – $260 earned

$1,000 grant x 74% – $740 unearned

Please ask at the Office of Financial Aid if you have questions about your status if you are considering dropping out of school before a term is completed.

Note: These repayment policies apply ONLY if you completely drop out, before completing 60% of the semester.

Students’ Rights and Responsibilities

**Students Have the Right to Ask the College:**

- What it costs to attend and what its refund policies are if you drop out.
- How LMC determines whether you are making satisfactory academic progress and what happens if you’re not.
- What financial help is available, including information on all federal, state and college financial aid programs, not just loans.
- About the deadlines for submitting applications for each financial aid program and how recipients are selected.
- How your financial need is determined, including how costs for tuition, fees, housing, food, transportation, books, supplies, personal and miscellaneous expenses are considered in your cost of attendance.
- What resources (such as parental contribution, private scholarships, personal assets) are considered in the financial need calculation, and how much of your financial need, as determined by the college, is met.
- To explain the various elements in your financial aid package and how and when you will receive your aid.
- To reconsider your financial aid application, if you believe you have been treated unfairly.
- How much of your financial aid must be paid back, and what portion is grant or gift aid. If you are offered a loan, you have the right to know the interest rate, the total amount that must be repaid, payback procedures, when repayment begins and how long you have to repay.
- How to apply for additional aid, if your financial circumstances change.
- About the effect outside scholarships may have on your financial aid award.
- For its statistics on crimes committed on and off campus, and for campus safety policies and procedures.

**Student Responsibilities**

Students have a responsibility to:

- Review and consider all information about the college’s programs before enrolling.
• Compare your anticipated monthly student loan payments and other expenses to your expected income pay after college.
• Complete the financial aid application accurately and submit it on time to the Central Processing Center. Intentional misrepresentation on an application for federal financial aid is a violation of law and a criminal offense subject to penalties.
• Read and keep copies of all forms and agreements you sign.
• Respond promptly and provide all requested documentation, verification, corrections or new information to the appropriate office.
• Notify the college and lender promptly of changes in your name, permanent mailing address, telephone number or enrollment status.
• Know and comply with the deadlines for applications or reapplications for aid, and understand the school’s refund policies.
• Repay your student loans, even if you don’t complete your education, can’t get a job or aren’t happy with your education.
• File for a deferment or forbearance, or change repayment plans if you are at risk of default.
• Complete entrance counseling before you receive your first loan disbursement-and exit counseling before you leave school.
• Report in writing to your college financial aid office all additional financial aid resources you receive.

Student Services

Philosophy
LMC recognizes that student services is an integral part of the student’s educational experience from the initial recruitment through the attainment of educational goals.

Student success depends on the collaboration and cooperation of instructional areas and student services, which fosters appreciation of the ethical, cultural, and aesthetic heritage of humanity.

Goals
• Pursue excellence in programs, personnel, and services to students.
• Provide equal opportunity for all individuals in obtaining access to the college, to programs, to services and to employment.
• Help students identify strengths and areas for improvement in order to ensure success. To advocate for students and student interests.

Objectives
• Sponsor activities that complement academic programs, enhance personal development, provide opportunities for leadership development, reflect cultural diversity and contribute to the general enrichment of the student and the college community.
• Assist students in exploring career options and defining an educational plan to achieve career goals.
• Provide leadership, coordination, and collaborative efforts among instructional areas, student services, other institutions and community agencies to meet the needs of a diverse population.
• Conduct ongoing research, planning and evaluation to ensure that the student services mission is being accomplished.

Assessment Center
The Assessment Center offers an English and math assessment process, required for all students who plan to earn an Associate Degree, to transfer to a 4-year college, or to enroll in certain English and math courses. The assessment process is taken on a computer and is available on an individual drop-in basis during scheduled testing hours. The Assessment Center also offers ability to benefit exams for non-high school graduates applying for federal financial aid. Tests may be taken in an alternate format, if needed, to accommodate the disabled. Contact the Assessment Center or a DSPS counselor for arrangements. The Assessment Center is located in CC3-524 on Level 3, or call 439-2181, ext.3252.

Bulletin Boards
Chartered student clubs and recognized campus organizations may post their materials on campus bulletin boards. The club/sponsoring organization is responsible for removing the posting no later than three business days after the event. Clubs/sponsoring organizations that do not remove the posting will no longer be allowed to post materials without the approval of the Student Activities Office.

Business Services
Paychecks for all student employees are given out after 12:30 p.m. on the tenth of each month in the Cashier’s Office, Room CC3-425. After 4:30 p.m. to 7:30 p.m., Monday through Thursday, paychecks are available at the switchboard. If the tenth of the month should fall on a Saturday or Sunday, the paychecks will be given out the Friday before.
Career Center
Career development and exploration services are available through LMC's Career Center, located on Level 3, Room 524 by counselor referral. Students receive personalized assistance that includes career interest testing, advice on resume writing, interviewing techniques, as well as career/job exploration on the Internet. Especially popular is the Center's EUREKA system, a computerized career information resource which can help you explore suitable career options. The Center is also the resource to investigate the many occupational programs on campus. To find out more about the LMC Career Center, stop by Room CC3-524 or call 439-2181, ext. 3360.

Child Care Services
LMC provides a wide variety of child care through the Child Study Center. Programs include:

• Full-Day and Part-Day Child Care for Toddlers and Preschoolers. Children aged 2-6 may attend the part time child care program in 3-hour scheduled time blocks. The hours for this program are 8:00 AM to 4:00 PM, Monday through Friday.

• Enrollment is open to the children of LMC students, LMC employees, and community members. Children must attend the Center on a regular basis – no drop-in care is available. Hours are scheduled in minimum 3-hour time blocks. Highest priority is given to full time LMC student-parents who are continuing their education from semester to semester.

Parents who enroll their children in a child care program will be required to enroll in a Child Development course on parenting. College units will be awarded to those completing the seminar and lab work. Participatory duties and responsibilities are assigned by the Child Development staff. Specific course requirements vary. Contact the Child Study Center Director at extension 3167 for applicable course numbers and sections.

For more information, visit the Child Study Center or call extensions 3167 or 3198.

Counseling Services
A college education should help students achieve self-direction in decision making and planning. To assist in progressing toward this goal, the College provides a staff of professional counselors who offer the following services:

1) Exploration of solutions to personal and educational problems.
2) Exploration of vocational and career choices.
3) Exploration of vocational majors offered at Los Medanos College.
4) Exploration of majors offered at four-year colleges.
5) Advice concerning general education requirements.
6) Advice concerning major and transfer requirements.
7) Assistance in adjusting to college.
8) Assistance in developing good study habits and study skills.
9) Assistance in developing an educational plan.

If you would like to Counseling Center for information and/or an appointment with the counselor of your choice at 439-2181, ext.3334, Room CC3-414.

Disabled Students Program and Services
The Disabled Students Program and Services provides a variety of classes and support services to individuals with verified disabilities. To ensure equality of access for students with disabilities, academic accommodations and auxiliary aids shall be provided to the extent necessary to comply with state and federal law regulations. For each student, academic accommodations and auxiliary aids shall specifically address those functional limitations of the disability, which adversely affect equal educational opportunity. Services include specialized instruction, adaptive equipment, sign language interpreting, readers, writers, textbooks in audio format, instructional material in alternate format, testing accommodations (including alternate format), educational counseling and planning, priority registration and specialized tutoring. All services are elective and must be requested by the student.

For additional information contact the Disabled Students Program and Services in the Counseling Area, Room CC3-413, ext. 3133.

Substitution Policy
When the severity of the disability of an otherwise qualified student precludes successful completion of a course required for graduation from LMC, despite an earnest effort on the part of the student to complete the course and despite provisions of academic accommodations and/or auxiliary aids, a course substitution shall be considered. Contact the Disabled Student Program & Services office for more information on policies and procedures.

Employment Center
The LMC Employment Center, Room CC3-435, provides important career development services to LMC students:

1) Job Placement Services
• Referrals to off-campus job openings. (Paid part-time and full-time career opportunities.)
• Referral/placement into on-campus student worker openings.
• Job search guidance counseling.
• Job fairs, employer visits and other events.
• Assistance with resume writing, cover letters, job interview techniques and much more.
• Internet access to job-related websites.
• Lifetime job placement assistance to all our LMC alumni and current students.

2) Cooperative Education Services
The Cooperative Work Experience Program at Los Medanos College grants college credit for what you learn and accomplish on the job. See page 26 for further information.
3) Internship Services

This program provides students with short-term (9-weeks) work experiences related to their major. While unpaid, these internships can result in college credits. Typically, intern candidates are 3rd or 4th semester students seeking to apply their knowledge and in a practical setting. Most of the employers hosting our interns are located in East County, but worksites are available in Martinez, Concord and Walnut Creek as well. Interns are sometimes stationed at LMC.

The Employment Center is located on Level 3, Room CC3-435. Hours of operation are Monday-Friday, 8:30 a.m.–4:00 p.m. Call 439-2181, ext. 3331 or drop by for further information.

Extended Opportunity Programs & Services (EOP&S)
(See Fees, Benefits and Financial Aids Section).

Food Service

The LMC Cafe provides food service and is operated by Fresh & Natural. Service is available to the entire college population, as well as to the student clubs, organizations, and for college related activities and special events. For information regarding planning special events, contact the College Cafeteria, ext. 3311.

The LMC Cafe is open five days and four evenings a week during posted hours. It offers breakfast, lunch, and dinner. In addition, sandwiches, hamburgers, desserts, snacks, beverages, etc., are available.

There are vending machines available in the vocational-technology area and in the vestibule next to the dining room. Snacks, soft drinks, as well as hot chocolate, tea and coffee are available. Cold beverage vending machines are also located in the PE area. Refund requests can be obtained at the switchboard.

The Gay and Lesbian Resource Center

The LMC Gay and Lesbian Resource Center offers information and support to the LMC community on issues related to sexual orientation and gender identity. The Center has a lending library with materials addressing various subjects, including gay and lesbian history, biographies of famous gays and lesbians, fiction and poetry by gays and lesbians, and non-fiction books and videos covering a variety of issues such as the coming-out process, religion and homosexuality, gay and lesbian civil rights, and transgenderism. The Center also provides referral information for outside resources, including counseling and support groups for gay, lesbian, bisexual, transgender, and questioning youth. The Center works to ensure that LMC is safe and supportive for all, and that all members of the LMC community are valued, respected and served, regardless of sexual orientation or gender identity. The LMC Gay and Lesbian Resource Center is located on Level 1, in Room 117. For further information, call (925) 439-2181, ext. 3259 or email LMC-GLRC@yahoogroups.com.

Health Services Referral

Information on a variety of topics, including but not limited to, counseling, crisis intervention, family counseling, alcohol and drug abuse, mental health, venereal disease, may be obtained from or the Los Medanos College Counseling Center in Room CC3-412, ext. 3334.

It is the student’s responsibility to assume all expenses involving injury or illness. A student insurance policy brochure can be obtained from the Student Affairs Center, Room CC3-800.

Students who have a medical problem which might require immediate action; e.g., diabetes, bee sting allergy, epilepsy, etc., should inform their instructors or contact police services, 1st floor, ext. 3228.

Housing

Rental referral listings are available at Los Medanos College through the Student Affairs Center. A binder of current listings is located inside Room CC3-800A. Cards are also posted on a bulletin board directly across from the Student Affairs Center.

Matriculation Services
(See Admission and Course Enrollment Section)

Mustang Corner Bookstore

The College Bookstore is located next to the Cafeteria on level 3. Regular hours, when class is in session, are 7:45 a.m. to 7:00 p.m. Monday through Thursday and 7:45 a.m. to 3:00 p.m. on Fridays. Summer Session hours are Monday through Thursday, 7:45 am to 5:00 pm, closed Fridays. Exceptions are holidays and special events.

The store carries a wide range of supply items, soft goods, gift items, and snacks, in addition to textbooks and general reading books. Browsing is encouraged.

We will be happy to special order, at no additional charge, any book which the store does not stock. A $5.00 deposit for books and a $15.00 deposit for computer software is required. Deposits are nonrefundable once the order is processed.

Visit our website at www.lmcbookstore.net to place orders for current semester textbooks.

Payment for Purchases

Purchases may be paid by: cash, Mastercard, VISA and Discover credit cards, or money orders. Personal checks are not accepted.

Buy-Back Policy

During the last week of each term a textbook buy back will be held. The days and hours will be announced and posted.

Up to fifty percent of the purchase price per book will be given unless:

- The instructor has dropped the text for next semester.
- The publisher has printed a new edition.
- The store is overstocked for the next term.
- The book is not in resalable condition in the Bookstore’s judgment.
- The course will not be offered the next term.
The instructor has not notified the store of the book(s) that will be required.
The material is a workbook, reference module, or is not-required, in nature.
The book retails for less than $3.95.

You are urged to:
• Read signs regarding buy-back policies before selling any books.
• Ask how much is being offered for each book.
• Keep any books that may be used again (in or out of class).
• Not sell your books if you feel the amount offered is not a fair return. The Bookstore cannot guarantee the buyback of any book.

Refund Policy
During the first two weeks of each semester, to allow for schedule changes, the Bookstore will accept textbook returns and refund the cost to students, provided:

1) Textbooks were purchased at the beginning of the current semester.
2) The original cash register receipt received at the time of purchase is submitted with the refunded book.
3) New textbooks are returned in new condition. If books are marked with any highlighting or names, the refund allowance may be at the USED book purchase price. Used books must be in resalable condition.
4) Shrink-wrapped books cannot be returned if the wrap has been removed.

Please note:
• If you buy your books after the refund period, a full refund will only be granted when textbook is returned within 24 hours, accompanied by your original cash register receipt.
• No refunds issued during the last 3 weeks of the semester.
• Always save your receipt. Refunds or exchanges can only be processed with current cash register receipt.
• SUMMER SESSION: Refunds are issued only during the first 4 days of summer session with a receipt.
• SHORT-TERM SESSIONS: Refunds are only issued when textbooks are returned within the first 24 hours of the first day of class, with a receipt.
• No refunds on general or reference books. This includes any children's books or leisure reading book.
• No refunds or returns on supplies and study aids.

Parking
All vehicles parked on the campus, whether in a parking lot, gravel lot, or on a perimeter road (Miwok Way) must have a valid parking permit. Be aware that there are designated student parking areas, as well as faculty and staff parking areas. Parking permits are required for Spring, Fall and Summer. Students who park in faculty/staff spaces will be ticketed. Students can park in staff lots after 5pm except in lot B. These defined areas are indicated on the campus map, which may be picked up at the information desk in admissions or in the Police Services Office, on the bottom level of the complex.

Copies of the college parking regulations are available in the Business Office and the Police Services Office.

Parking Enforcement
Parking regulations are enforced 24 hours a day, from 7:00 AM Monday through 5:00 PM Friday. Parking regulations are not enforced on weekends or holidays.

Important: To avoid a citation, a parking permit must be visible at all times, while parked on campus.

Police Services
The Campus Police Office is located in Room CC1-132, ext. 3228. The police staff is available to assist in problems involving unsafe conditions, lost property, personal injury, theft, civil disturbance, etc.

Student Activities
Los Medanos College offers a range of extracurricular activities that enrich students by giving added meaning to their normal course work. These activities provide recreation, entertainment, and other opportunities to get involved with the community and other students.

Clubs
Students are encouraged to organize clubs and organizations that reflect their interests. Each group is sponsored by a faculty or staff advisor who helps plan and organize meetings and activities. Because the club activities are not limited to the campus, student members are encouraged to cooperate with community organizations that have common interests. In this way, the goal of taking the College to the community and bringing the community to the College can be reached.

The InterClub Council (ICC) is the coordinating body for all clubs and organizations on campus. Each club is represented in ICC, which debates the merits and priorities of community college activities. ICC members recommend the allocation of funds to the groups seeking them and help with activities.

The list of active clubs changes as often as student interests do, so you should check with the Student Life Office in Room CC3-800A to see which ones you can join now.
Student Government
The Los Medanos College student government is comprised of 13 representatives who participate fully in college governance and work closely with faculty and administration. Student senators may be elected or appointed. Applications are available in Room CC3-800A.

In addition, students have their own meetings to discuss current issues and concerns. All students are encouraged to attend these meetings and to bring their own concerns for discussion. Also, student senators are available during the day in Room CC3-800A for consultation.

Transfer Center
The LMC Transfer Center provides a variety of services and information for students planning to transfer to four-year colleges and universities. Support services are available to help students explore transfer opportunities and to assist students with the transfer process.

The LMC Transfer Center schedules regular visits by representatives from four-year colleges and universities. Students can drop in for questions or schedule individual counseling appointments with these representatives. Workshops are provided on topics such as completing admissions applications, general transfer information, writing for essays and scholarships, and financial aid resources. The Transfer Center coordinates campus visits to selected Bay Area baccalaureate institutions.

The LMC Transfer Center has an extensive library of information on UC, CSU, out-of-state and private institutions, historical black colleges, and other reference materials. On-line access to college information is also available. LMC participates in many collaborative programs designed to facilitate the transfer process. Some examples are Transfer Admission Agreements (TAA's), Guaranteed Transfer Options (GTO), Dual Admissions Program, Cross Registration programs, and “On-the-Spot” Admissions.

The Transfer Center makes it easier for LMC students to transfer successfully! Students may join the Transfer eclub, a list service that sends transfer information via email, by entering their email address at http://www.losmedanos.edu/transfer/club.html.

Visit the LMC Transfer Center in Room CC3-434 for more information, or call 439-2181, ext. 3124.

Instructional Services
Athletics
Los Medanos College supports seven intercollegiate teams competing among colleges throughout Northern California. Men's and women's basketball, football, women's soccer and women's volleyball participate in conference play in the fall. Baseball and softball teams compete in the spring. Successful teams compete in regional and state play-offs. To be eligible for intercollegiate sports, a student must be enrolled in 12 units for the first season and must complete 24 units and a 2.0 GPA before the second season of participation. Interested persons should contact the appropriate coach before the practice season begins, or contact the Athletic Office, Room CC3-444, ext.3121

Art Lab
The Art Area offers an integrated program of studies in fine arts and graphic communications. Studies begin with foundation courses, where students learn the fundamentals of creativity, knowledge of tools and materials, and the discipline required for advanced studies or a career in art. From there, students choose to focus on either fine arts or graphic communications. Students may earn an associate of arts degree with either emphasis, or choose to earn a certificate of achievement in graphic communications or in digital publishing.

Business Department Computer Lab
The LMC Business Department provides a computer laboratory where Business students can develop their skills in keyboarding, office procedures, word processing, electronic spreadsheets, accounting, 10-key calculators, desktop publishing, web design, and online classes. Students are encouraged to practice and apply the knowledge gained in class sessions. Instructors, lab coordinators, lab assistants and peer tutors are in the lab to give you individualized instruction and assistance. Lab hours are 8 a.m. to 10 p.m. Monday through Thursday, 8 a.m. to 12 p.m. Fridays.

We encourage Business students to use the equipment and learning materials available in the lab. Let our instructional staff help you meet your goals.

The Business Lab is located on the second level (Rooms CC2-232 and CC2-235).

A computer lab for use by the general student body is located in the Library.

Computer Science Lab
The Computer Science Lab, located in the 600 area, provides Computer Science students with the opportunity to sharpen their skills in the operation of micro-computers apply theory and complete class assignments. The lab is staffed by paraprofessionals, student instructional aides, instructors, and peer tutors.

Lab hours are 8 a.m. to 10 p.m. Monday through Thursday, 8 a.m. to 1 p.m. Friday.

Lab equipment is constantly updated to reflect the ongoing changes in technology. The lab is not fully equipped with wireless computer technology.

A computer lab for use by the general student body is located in the Library.
Cooperative Education Services
The Cooperative Work Experience Program at Los Medanos College grants college credit for what you learn and accomplish on the job. There are two types of enrollees:

CO-OP 99 (Occupational Work Experience) requires that the employment relate to the student’s major or current course work. WORK 99 (General Work Experience) does not require that it relate to the major. Students enrolled in WORK 99 may qualify for up to three units per semester (six units total). The CO-OP 99 participant may qualify for up to four units per semester (sixteen units total).

Interested applicants should contact the Employment Center, Room CC3-435, extension 3331.

The Experience
Los Medanos College’s award–winning newspaper, the “Experience,” is a practical laboratory for journalism students and serves as a First Amendment forum for the college community. Students gain practical experience as reporters, artists, photographers, videographers and editors, and the excitement of contemporary journalism. Groups and organizations with news items should contact the “Experience” by noon on the Tuesday before Friday’s issue. The “Experience” is also available through the college web site: www.losmedanos.edu, or directly at experience.losmedanos.edu.

Honors Program
The Honors Program provides a challenging academic environment for highly motivated students. The Honors Program offers students:

• Honors Courses which involve substantial research, writing and critical thinking and will prepare students for upper division and graduate work. These courses will have smaller class sizes to facilitate more personal attention and discussion.

• Honors Contracts which allow students to create and complete independent research projects, in addition to regular course work.

• Transfer Agreements with prestigious California universities which will greatly increase students’ chances for transfer acceptance and scholarship opportunities.

• Personalized Counseling with the Honors Program Counselor.

• Access to the Honors Center, a fully equipped work and research building with computers, study tables, and places to socialize with other Honors Students.

• Transcript Designation of Honors coursework and program completion so that universities or employers can see the Honors work students have done.

Students may complete the entire Honors Program, or simply take a few Honors courses and contracts. (Transfer Agreements are only available to students who complete the entire program.)

Honors Program Admission Requirements
Students who wish to enter the Honors Program shall:

• Have completed English 100 with a grade of A or B, OR have completed English 221 or 230 with a grade of A; OR have received a score of 4 or 5 on the Advanced Placement English exam. (New students may fulfill the English 100 requirement during their first semester in the program); and

• Have fulfilled at least one of the following requirements:

  1) High School GPA of 3.25 or higher; or

  2) College GPA of 3.25 or higher with a minimum of 12 degree applicable units; or

  3) Have a Letter of Recommendation from a faculty member and a Personal Essay, plus be approved by the Honors Program Board.

For further information or program applications contact Jennifer Saito, Honors Program Director at (925) 439-2181 ext. 3369 or jsaito@losmedanos.edu

Library and Learning Resource Program
Library Philosophy
The Library at Los Medanos College aims to serve the students, faculty and staff of Los Medanos College, and East Contra Costa County residents by providing access to a variety of services and resources that support and strengthen the instructional programs of the college and the informational and intellectual needs of the community.

Specifically, we pledge to:

• Acquire, inventory, store, and make available an organized collection of materials and information in print, non-print, and electronic formats.

• Provide the facilities and environment necessary for individual study and/or research.

• Provide reference and other professional services designed to develop self-reliant and critical users of information resources.

• Provide library and other bibliographic instruction in locating, accessing, and evaluating information resources in a variety of formats or locations.

• Provide interlibrary loan services that expand the resources and instructional capabilities of the local collection.

The Library and related services moved into a brand-new building in the summer of 2007. With the new building, we are able to provide much improved facility for study and research, expanded print and electronic resources and more and better computer access.
Currently, the Library provides close to 30,000 volumes of print materials, and about 16,000 electronic books. In addition, the Library provides roughly two hundred periodicals and newspapers, in print. The library also provides access to hundreds of thousands of articles from newspapers, magazines and journals as well as reference materials in the electronic format, accessible anytime anywhere.

Librarians staff the reference area on the first floor of the Library building. Students needing help in accessing information on the Internet or in the thousands of available print and electronic resources can turn to the librarians for assistance. A large portion of the magazine and newspaper articles referenced in the electronic databases can be immediately printed in full text format or e-mailed to any active e-mail account. For a sample of the resources available in the library, please look at the Library’s website. The Library professional staff also provide a variety of instructional services including one-on-one with the classroom faculty, orientation for students and information competency classes designed to facilitate students’ acquisition of skills to locate, use and evaluate information in a wide variety of formats.

On the main floor of the Library building, we also offer circulation services including self service, four small and one large group study rooms that can be reserved from the circulation desk, a print/copy room for students, an information common that contains 30 computers, the online catalog, reference materials (encyclopedias, dictionaries, etc.), indexes, current periodicals (newspapers, magazines), and close to 200 seats.

Also available on the main level is the reserve collection. Los Medanos College has on reserve copies of all general education books for student use. The books are available for limited check out and use in the Library during normal operating hours. The general education book reserve system is designed to meet the needs of students who cannot otherwise afford to purchase required books for general education.

On the upper level of the Library building is our Media Services department. Currently the media collections include tapes, videos, CDs, and DVDs. With the exception of audio tapes, which will be available in a digital format as well as the analog format, all media collections are accessible via the Library’s online catalog. For students, we provide cassette tape duplication service as well as listening and viewing facility. In addition, student ID cards can be acquired at the Media Services counter. Microfilm (back issues of newspapers and magazines) are available on the upper level as well. We also offer an open access computer lab for Los Medanos College students on the upper level—the Lab is open during all hours that the Library building is open.

The upper level is also designed, equipped, and staffed to serve as a faculty resource area. Located here are campus audiovisual services, and information technology services. The professional reading room provides access to three computers for editing purposes. Laptops can be checked out here for classroom use or for extended travel use. Wireless access is available throughout the Library, both on the main level and on the upper level.

Learning Resources

The College offers a Reading and Writing Center, currently located in CC2-255 where students may receive assistance on paper writing.

Library Resources Available Beyond the Library—
the Virtual Library

The Library staff at Los Medanos College have been progressively extending the walls of the Library to now encompass a wide array of electronic resources including e-Books and full-text databases as well as electronic reference services. These e-resources and e-services are available 24/7 anywhere—on- or off-campus. For more information on what the Library has to offer, please visit our website at http://www.losmedanos.edu/LMC_library/default.htm

Math Lab

The Math Labs, located in Rooms MA-102, are open Monday through Thursday from 8 a.m. to 8 p.m., and Friday from 8 a.m. to 2:30 p.m. Saturday hours vary. There is also a Math Lab at the Brentwood Center in Room 7. For information about the Brentwood Math Lab, please call 925-513-1625. Tutorial assistance by a lab coordinator, peer tutors, and instructors is available for all math courses. For more information about the lab, see the Lab Coordinator in Room MA-102 or call 925-439-2181, ext. 3326.

Music

LMC offers a variety of musical activities from beginning level classes through advanced performance opportunities, including an extensive concert schedule. Courses are available for students who are just learning about music, wanting to sharpen skills, or who are planning a career in the field. Performances by professional artists are included in the campus musical activities. Music and Recording Arts classes are held in a “state of the art” building.

The Puente Project

The mission of the Puente Project is to increase the number of educationally under-served students who: enroll in four-year colleges and universities, earn college degrees, and return to the community as mentors and leaders to future generations. Puente is sponsored by the University of California Office of the President and the California Community Colleges.

College staff provide three areas of service to students: teaching, counseling, and mentoring. For more information call: 439-3381, ext. 3350.

Reading and Writing Center

The Reading and Writing Center is located in CC2-255. A full-time lab coordinator, English instructors, and English graduate students are available to assist students in all disciplines with their reading and writing assignments. The Center is open daily, Monday through Friday. For more information, come by for a tour or call extension 3176.

Science Audio–Tutorial Center

The Science Audio-Tutorial Center, in SC1, is an integral part of the physical and biological sciences curriculums at the College. All instructors of science courses assign learning materials here for students as a regular part of the respective courses. Also available are resource materials. Tutorial assistance by instructional support staff, peer tutor, or instructor is available for most science classes. For more information about the center, contact the instructional support staff in SC1.
Tutoring Services

LMC provides an array of tutoring services to students wishing to strengthen their academic skills in multiple disciplines. Peer tutors are students at LMC who have succeeded in the classes and disciplines for which they tutor. Consult with instructors to determine the range, location, and times of tutoring services available for their classes.

Student Rights & Responsibilities

Academic Freedom

Academic institutions exist for the transmission of knowledge, the pursuit of truth, the development of students and the general well-being of society. Free inquiry and free expression are indispensable to the attainment of these goals. As members of the academic community, students are encouraged to develop the capacity for critical judgment and to engage in a sustained and independent search for truth.

Freedom to teach and freedom to learn are inseparable facets of academic freedom. The freedom to learn depends upon appropriate opportunities and conditions in the classroom, on the campus, and in the large community. Students should exercise their freedom with responsibility.

The responsibility to secure and to respect general conditions conducive to the freedom to learn is shared by all members of the academic community. Los Medanos College has a duty to develop policies and procedures which provide and safeguard this freedom. The purpose of this statement is to enumerate the essential provisions for student freedom to learn. The policies and procedures as set forth in this statement are for institutional use but cannot be separated from the laws of the wider society; therefore, everything stated herein must be considered within the limits of the law.

Freedom of Association

Students bring to the campus a variety of interests previously acquired and develop many new interests as members of the academic community. Students are free to organize and join associations to promote their common interests.

1) The membership, policies, and actions of a student organization will be determined by vote of only those persons who are bona fide students of Los Medanos College.

2) Affiliation with an extramural organization will not disqualify a student organization from institutional recognition.

3) Faculty advisors are necessary; each organization is free to choose its own faculty advisor. Faculty advisors may advise organizations in the exercise of responsibility, but they will not have the authority to control the policies or legal activities of such organizations.

4) Student organizations are required to submit a statement of purpose, criteria for membership, rules of procedures, and a current list of officers. They will be required to submit a membership list as a condition of institutional recognition.

5) Campus organizations, including those affiliated with an extramural organization, are open to all Los Medanos College students without respect to race, creed or national origin.

Freedom of Inquiry and Expression

1) Students and student organizations will be free to examine and discuss all questions of interest to them and to express opinions publicly and privately. They should always be free to support causes by orderly means which do not disrupt the regular and essential operation of the institution. At the same time, it should be made clear to the academic and the large community that sponsorship of guest speakers does not necessarily imply approval or endorsement of the news expressed, either by the sponsoring group or the institution.

2) Students will be allowed to invite and to hear any person of their own choosing. Those routine procedures required by an institution before a guest speaker is invited to appear on campus should be designed only to insure that there is orderly scheduling of facilities and adequate preparation for the event, and that the occasion is conducted in a manner appropriate to an academic community. The institutional control of the campus facilities should not be used as a device of censorship. It should be made clear to the academic and large community that sponsorship of guest speakers does not necessarily imply approval or endorsement of the news expressed, either by the sponsoring group or the institution.

Exercise of Rights of Citizenship

College students are both citizens and members of the academic community. As citizens, students enjoy the same freedom of speech, peaceful assembly and right of petition that other citizens enjoy and, as members of the academic community, they are subject to the obligations which accrue to them by virtue of this membership. Faculty members and administrative officials insure that institutional powers are not employed to inhibit such intellectual and personal development of students as is often promoted by their exercise of the rights of citizenship both on and off campus.

Institutional Authority and Civil Penalties

Activities of students may, upon occasion, result in violation of law. Students who violate the law may incur penalties prescribed by civil authorities, however institutional authority should never be used merely to duplicate the function of general laws.

The student who incidentally violated institutional regulations in the course of his/her off-campus activity, such as those relating to class attendance, is subject to no greater penalty than would normally be imposed. Institutional action is independent of community pressure.
Student Participation in Institutional Government
As constituents of the academic community, students will be free, individually and collectively, to express their views on issues of institutional policy and on matters of general interest to the student body. The student body should have clearly defined means to participate in the formulation and application of institutional policy affecting academic and student affairs. The role of the student government and both its general and specific responsibilities should be made explicit, and the actions of the student government within the areas of its jurisdiction should be reviewed only through orderly and prescribed procedures.

Student Responsibilities and Educational Goals
1) It is the student’s responsibility to verify the correctness and completeness of his/her transcript upon transferring to a four-year institution. It is the student’s responsibility to pursue any discrepancies that may occur with the acceptance or nonacceptance of his/her transcript.
2) Each student has the responsibility as to the completeness and correctness of his/her transcript to receive an A.A. degree, Certificate of Completion or Certificate of Achievement.
3) It is the student’s responsibility to do the assigned coursework and attend courses regularly.
4) It is the student’s responsibility to drop courses he/she does not plan to attend.

Off–Campus Activities
Throughout the semester/school year, the District may sponsor voluntary off-campus extracurricular field trips/excursions. If you choose to participate, be advised that pursuant to California Code of Regulations, Subchapter 5, Section 55450, you have agreed to hold the District, its officers, agents and employees harmless from any and all liability or claims which may arise out of or in connection with your participation in the activity.

Progress Evaluation by Faculty
Any student has the right to request and obtain an informal grade evaluation by his/her instructor prior to the mandatory drop date. In order for a student to make a knowledgeable decision of retention in a class and to increase motivation for improvement, the student needs to know his/her standing in each course.

Grievance Process
The Student Grievance Procedure is to provide every Los Medanos College student with an equitable means of seeking an appropriate remedy for a grievance on any LMC matter, other than as defined under the unlawful discrimination section of this catalog.

The Student Grievance Procedure is available in the Student Affairs Center, Room 800a, ext. 3266.

Student Discipline and Suspension
Student conduct is governed by rules designed to preserve both individual and community freedoms. The individual student, in order to learn and grow, must enjoy freedom of expression and action. The academic community, if it is to properly serve the student, must enjoy freedom from disruption. Students enrolling in the College assume an obligation to conduct themselves in a manner compatible with the College’s function as an educational institution. The following acts constitute misconduct for which College students are subject to discipline and suspension. Such misconduct, whether committed while on campus or off campus, at functions supervised or sponsored by the College, is subject to disciplinary sanctions Education Code 76032 and 76033 administered by the College.

1) Continued disruptive behavior, continued willful disobedience, habitual profanity, or vulgarity, or the open and persistent defiance of the authority of, or persistent abuse of, college personnel.
2) Assault, battery, or any threat of force or violence upon a student or college personnel.
3) Willful misconduct which results in injury or death to a student or college personnel or which results in cutting, defacing, or other injury to any real or personal property owned by the District.
4) The use, sale, or possession on campus of, or presence on campus under the influence of, narcotics, other hallucinogenic drugs or substances, or any poison classified as such by Schedule D in Section 4160 of the Business and Professions Code.
5) Willful or persistent smoking in any area where smoking has been prohibited by law or by regulation of the Governing Board.
6) Persistent, serious misconduct where other means of correction have failed to bring about proper conduct.
7) Dishonesty, such as cheating, plagiarism, or knowingly furnishing false information to the College.
8) Forgery, alteration, or misuse of College documents, records, or identification.
9) Theft or damage to property of the College, of members of the college community or of college visitors.
10) Unauthorized entry to or use of college facilities.
11) Violation of College policies or regulations, including regulations concerning the formation and registration of student organizations, the use of college facilities, or the time, place and manner of public expression.
12) Gambling on College property.
13) Conduct off campus inimical to the welfare and well-being of the College community.

Student Code of Conduct
A complete copy of the Student Code of Conduct, which outlines students’ rights and responsibilities, is available on-line at www.losmedanos.edu. Students may also contact the Office of Student Services, located in the Counseling Center; phone number 439-2181, extension 3364.
Drug-Free Campus Policy
As defined by State and Federal law, it is the policy of Los Medanos College to maintain a campus where students, faculty, staff, and administration are prohibited from the unlawful manufacture, distribution, dispensing, possession, or use of controlled substances, as listed in Schedules I through IV of Section 202 of the Controlled Substances Act (21 USC Section 812) and from abuse of alcohol.

This policy applies not only to the campus, but also includes participation in field trips, athletic competition, international study programs, and any activity sponsored by the college. Any violation of this policy will be cause for disciplinary action, up to and including expulsion.

For information about substance abuse treatment, students may contact a campus counselor or refer to the information binder located in Room 412.

Smoking Policy
Smoking is not permitted within the college buildings, the quad, offices, cafeteria, interior hallways or in those walkways which are open to the air (due to a lack of air circulation). This policy prohibits smoking and other uses of tobacco products in any area designated as no smoking by local ordinance, fire safety, or health codes. Smoking is allowed in parking lots only.

Matriculation Rights and Responsibilities
Student Responsibilities Under Title 5 Matriculation Regulations
Students participating in the matriculation process at Los Medanos College are expected to fulfill the following responsibilities, as part of the State of California Title 5 Matriculation Regulations, section 55530 (d).

1) Educational goal. All students must state a broad educational goal upon admission to the college, and a specific educational goal no later than upon completion of 12 units of course work.

2) Educational plan. All new students are expected to complete a first-semester individual educational plan with the assistance of a counselor prior to registering for classes. This is done in “New Student Workshops.”

3) Counseling. All students are expected to schedule an appointment with a counselor at least once each semester or as needed, to review, update and expand the educational plan. The following students are strongly encouraged to participate in counseling prior to enrollment for the next semester:
   a) Those on academic or progress dismissal.
   b) Those enrolled in developmental courses, such as English 70, Math 1 or Math 2.

4) Attendance/completion of classes. All students are expected to attend their classes regularly, complete assigned coursework on time, and complete their courses each semester. Students are expected to maintain regular progress towards their educational goal.

Waivers, Appeals and Complaints
Students who wish to request waivers, or file appeals or complaints on the basis of their Title 5 Matriculation Rights must follow the sequence of steps outlined, below:

(Students filing other types of complaints or alleging discriminatory practices should follow the procedures listed in the college catalog under “Student Rights and Responsibilities—Grievance Process” or “Admission and Course Enrollment—Equal Opportunity Policy.”)

A. Initial Review of Waiver Appeal or Complaint
1) The student should contact the Director of Enrollment and complete an “Appeal or Request for Waiver” form or file a complaint regarding matriculation rights. The completed form should be turned in to the Director of Enrollment, or to campus mailbox 34.
2) The Director of Enrollment will contact the student and schedule a meeting to discuss the problem and/or inform the student of the decision.

3) In the event that the appeal or request for waiver is not granted, the student will be advised of his/her further rights to further appeal and the correct procedures to follow.

B. Appeal to the Dean

1) If the initial appeal or request for waiver is not granted and the student does not accept this decision, the student may next submit the initial form to the Dean of the appropriate area for further review.

2) The Dean will review the appeal or request for waiver and will meet with the student and/or inform the student of his or her decision concerning the matter.

3) In the event the appeal or request for waiver is not granted by the Dean, the student will be advised of his/her further right to further appeal and the correct procedures to follow.

C. Appeal to the Vice President

1) If the student does not accept the dean’s decision, the student may then submit the appeal or request for waiver to the college vice president.

2) The Vice President will review the appeal and will meet with the student and/or inform the student of the final decision concerning the appeal or request for waiver.

Student Record Privacy Law

A cumulative record of enrollment, scholarship, and educational progress shall be kept for each student. Student records shall be maintained in a manner to insure the privacy of all records and shall not, except as otherwise herein authorized, permit any access to nor release of information therein. Students have the right to examine their own records and provision is made for the student to have copies of those records by written request and by payment of appropriate fees. Provision is also made for the student to challenge the accuracy of these records.

In conformance with federal and state laws, Los Medanos College hereby provides notice that the Contra Costa Community College District Governing Board has adopted a policy regarding access to student records maintained by the College.

Release of Student Records. No instructor, official, employee, or governing board member shall authorize access to student records to any person except under the following circumstances:

- Student records shall be released pursuant to a student’s written consent.
- Directory information* may be released in accordance with Board Policy, unless otherwise specified by the student. Directory information shall include:
  1. Student participation in officially recognized activities and sports, including weight, height, and high school of graduation of athletic team members.
  2. Degrees and awards received by students, including honors, scholarship awards, athletic awards, and Dean’s List recognition.
- Student records shall be released pursuant to a judicial order or a lawfully issued subpoena, or in the event of litigation towards the college district. If a parent or eligible student initiates legal action against an educational agency or institution, the educational agency or institution may disclose to the court, without a court order or subpoena, the student’s educational records that are relevant for the educational agency or institution to defend itself.
- Whenever there is included in any student record any information concerning any disciplinary action taken by a community college in connection with any alleged sexual assault, or physical abuse, or threat of sexual assault, or any conduct that threatens the health and safety of the alleged victim, the alleged victim of that sexual assault or abuse shall be informed within three days of the results of any disciplinary action by the community college and the results of any appeal. The alleged victim shall keep the results of that disciplinary action and appeal confidential.
- Student records may be released to officials and employees of the District only when they have a legitimate educational interest to inspect the record. The assigned custodian of records at each campus determines access to student records.
- Student records may be released to authorized representatives of the Comptroller General of the United States, the Secretary of Education, an administrative head of an educational agency, state education officials, or their respective designees or the United States Office of Civil Rights, where that information is necessary to audit or evaluate a state or federally supported educational program or pursuant to federal or state law. Exceptions are that when the collection of personally identifiable information is specifically authorized by federal law, any data collected by those officials shall be protected in a manner that will not permit the personal identification of students or their parents by other than those officials, and any personally identifiable data shall be destroyed when no longer needed for that audit, evaluation, and enforcement of federal legal requirements.
- Student records may be released to officials of other public or private schools or school systems, including local, county or state correctional facilities where education programs are provided, where the student seeks or intends to enrol or is directed to enroll. The release is subject to the conditions in Education Code 76225.
- Student records may be released to agencies or organizations in connection with a student’s application for, or receipt of, financial aid, provided that information permitting the personal identification of those students may be disclosed only as may be necessary for those purposes as to financial aid, to determine the amount of the financial aid, or conditions that will be imposed regarding financial aid, or to enforce the terms or conditions of financial aid.
- Student records may be released to organizations conducting studies for, or on behalf of, accrediting organizations, educational agencies or institutions for the purpose of developing, validating, or administrating predictive tests, administering financial aid programs, and improving instruction, if those studies are conducted in such a
manner as will not permit the personal identification of students or their parents by persons other than representatives of those organizations and the information will be destroyed when no longer needed for the purpose for which it is conducted.

• Student records may be released to appropriate persons in connection with an emergency if the knowledge of that information is necessary to protect the health or safety of a student or other persons, subject to applicable federal or state law. The assigned custodian of records at each campus will make this determination.

• The following information shall be released to the federal military for the purposes of federal military recruitment: student names, addresses, telephone listings, dates and places of birth, levels of education, degrees received, prior military experience, and/or the most recent previous educational institutions enrolled in by the students.

Availability of Specific Information
The following specific information is on file at the Admissions Office and/or is available to students upon request.

1) The types of student records and information contained therein which are directly related to students and maintained by the institution.

2) The official responsible for the maintenance of each type of record, the persons who have access to those records, and the purposes for which they have such access.

3) The policies of the district for reviewing and expunging these records.

4) The right of the student to access to his/her records.

5) The procedures for challenging the content of student records.

6) The cost which will be charged for reproducing copies of records.

7) The categories of information which the institution has designed as directory information and the parties to whom such information will be released unless the student objects.

8) Any other rights and requirements set forth in Chapter 1.5 (commencing with Section 15430) of Division 18.5 of the Education Code.

Address Changes
Students are required by law to notify the Admissions Office of changes of address. Address, phone number, and email address changes should be submitted in writing or by going into WebAdvisor on the college website, www.losmedanos.edu. Students who are also working as employees at the college should submit changes of address to the Business Office.

Student Right-To-Know and Campus Security Act
In compliance with the Student-Right-to-Know and Campus Security Act of 1990 (Public Law 101-542), it is the policy of the Contra Costa Community College District and Los Medanos College to make available its completion and transfer rates to all current and prospective students. Beginning in Fall 2003, a cohort of all certificate-, degree-, and transfer-seeking first-time, full-time students were 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 Los Medanos College, nor do they account for student outcomes occurring after this three-year tracking period.

Based upon the cohort defined above, 28.3 percent attained a certificate or degree or became ‘transfer prepared’ during a three-year period, from Fall 2003 to Spring 2006. Students who are ‘transfer-prepared’ have completed 56 transferable units with a GPA of 2.0 or better.

Based on the cohort defined above, 15 percent transferred to another postsecondary institution, (UC, CSU, or another California Community College) prior to attaining a degree, certificate, or becoming ‘transfer-prepared’ during a five-semster period, from Spring 2004 to Spring 2006.
College Transfer Requirements

Section 2
Transfer Information

Many students will transfer to a four-year college or university after completing their freshman and sophomore courses at Los Medanos College. Each four-year institution has a basic pattern of lower-division general education/breadth requirements and specific major requirements which may be fulfilled at Los Medanos College before transferring.

All students who plan to transfer should consult with a LMC counselor to develop an educational plan and to update it on a regular basis. Students should acquaint themselves with the catalog and website of the intended university, especially regarding admission requirements and application procedures. Students are advised to talk with LMC counselors and/or university representatives when selecting courses to meet major and general education requirements.

Some majors, such as Engineering, Pre-Medical/Dental/Veterinary, Biology, Chemistry, Physics, Astronomy, Architecture, and Liberal Studies, have very specific courses that must be completed before transfer, and do not require as many general education courses. A very useful website for LMC students planning to transfer to California public universities is http://www.assist.org. Students should also consult with a LMC counselor regarding majors leading to professional careers in fields such as Teaching or Law. Information about the teaching profession may be obtained at http://www.teachcalifornia.org.

Students will find that the LMC Transfer Center provides information and support for transfer planning. Students can drop-in at the Transfer Center, room 434, 925-439-2181x3124, or go online at www.losmedanos.edu and click on Transfer Center.

Transfer to the California State University (CSU)

Los Medanos College transfers students to all 23 campuses of the California State University system. The CSU campuses are located throughout the state, and students can find information about the CSU system at http://www.csumentor.edu. Admission representatives from local CSU campuses visit the Transfer Center on a regular basis. Please consult with a LMC counselor and check with the Transfer Center for more information.

Transfer Admission Requirements for CSU

Students who have completed college units after graduation from high school are considered transfer students. A total of 124 units of college level work is the minimum required for graduation from a California State University with a Baccalaureate Degree. Of these 124 units, a maximum of 70 units may be transferred from a community college. Students should complete classes that meet general education and major requirements.

Many majors have specific course requirements that must be met to be eligible for admission. A higher grade point average than the minimum may also be required. The requirements for a particular major may differ from one CSU campus to the next and may change annually, so students must consult regularly with a counselor when selecting their courses.

Lower Division Transfers

Students who have completed 59 or fewer transferable college semester units are considered lower division transfer students. Students are eligible for admission if they have a grade point average of 2.0 (C) or better in all transferable units attempted, are in good standing at the last college or university attended, and meet any of the following standards:

1) They were eligible as a freshman at the time of high school graduation, i.e. met the eligibility index (GPA/SAT I score) and completed the 15 unit pattern of college preparatory subjects.

2) They were eligible as a freshman at the time of high school graduation except for subject requirements and have made up the missing subjects at a high school or college.

3) Some campuses may require completion of English composition and general education math.

Students should contact their campus of choice to determine whether they have limits on admission as a lower division transfer.

Upper Division Transfers

Students who have completed 60 or more transferable semester college units are considered upper division transfer students. Students are eligible for admission if they meet the following requirements:

1) Students must have a grade point average of 2.0 (C) or better in all transferable units attempted. Non-California residents must have a 2.4 grade point average or better.

2) Students must be in good standing at the last college or university attended, i.e., eligible to re-enroll.

3) Students must have completed or will complete prior to transfer at least 30 semester units of college coursework equivalent to courses that meet general education requirements with a grade of C or better in each course. The 30 units must include all of the general education requirements in communication in the English language (English composition, oral communication, and critical thinking), and at least one course of at least 3 semester units in college level mathematics. Students may complete the Intersegmental General Education Transfer Curriculum (IGETC).

Special Note

Students who complete college units before they graduated from high school or during the summer between high school graduation and CSU enrollment are considered first-time freshman and must meet those admission requirements.

Transfer to the University of California (UC)

Every year Los Medanos College students transfer successfully to the UC system. The UC system is comprised of ten campuses,
the following nine of which have undergraduate programs: UC Berkeley, UC Davis, UC Irvine, UCLA, UC Merced, UC Riverside, UC San Diego, UC Santa Barbara, and UC Santa Cruz. Admission representatives from UC campuses visit the Transfer Center on a regular basis. Check with the Transfer Center to obtain a schedule of these visits, or check online at www.losmedanos.edu and click on Transfer Center.

The University considers a transfer applicant to be a student who graduated from high school and enrolled in a regular session at a college or university. A student who meets this definition cannot disregard his or her college record and apply as a freshman. Students at a California community college should take courses that are transferable, satisfy university and college requirements, and fulfill lower division requirements in their major.

Course requirements vary from one UC campus to the next. Therefore, students should work with a counselor to first select a particular UC campus and then formulate a strategy for completing UC transferable courses which satisfy that campus’ requirements for admission, general education, and major course of study.

### Minimum Admission Requirements for UC Transfer Applicants

University of California admission requirements for transfer students vary depending upon the student’s eligibility to enroll at UC when the student graduated from high school. Many UC campuses do not accept lower division transfers, that is, students with less than 60 UC transferable units.

To be eligible to apply for transfer as a junior, students must complete at least 60 units of UC transferable credit and meet specific admission requirements. In most cases, students may transfer up to 70 semester units of credit from a community college. Information on transferring to the UC system may be obtained online at http://www.universityofcalifornia.edu/admissions.

### Eligible or Partially Eligible from High School

Students who were eligible for admission to the University when they graduated from high school—meaning they satisfied the Subject (15 unit pattern of college preparatory subjects), Scholarship (2.8 minimum GPA), and Examination (SAT I & II) Requirements, or were identified by the University during the senior year in high school as being eligible under the Eligibility in the Local Context (ELC) program—are eligible to transfer if they have a C (2.0) average in transferable college coursework.

Students who met the Scholarship Requirement, but did not satisfy the Subject Requirement, must take 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.

### Transfer to UC as a Junior

Students who were not eligible for admission to the University when they graduated from high school may be eligible to transfer as a junior if they:

1. Complete 60 semester units of transferable college credit with a grade point average of at least 2.4, AND include the:

2. Completion of 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, the physical and biological sciences.

Students who satisfy the Intersegmental General Education Transfer Curriculum (IGETC) prior to transferring to UC will satisfy these transfer admission requirements. For more information please see IGETC Requirements in this catalog and consult with a counselor.

The minimum admission requirements for nonresident transfer applicants are the same as those for residents, except that nonresidents must have a grade point average of 2.8 or higher in all transferable college coursework.

Please note that the requirements described above represent the minimum level of achievement to be eligible for admission to the University. At most UC campuses admission is competitive, and a grade point average higher than the 2.4 minimum may be required.

### Special Transfer Admissions Programs

#### Transfer Admission Agreement (TAA)

Some universities offer a program that guarantees students admission to a specific major as a junior if they complete the specified requirements. Students who have completed 30 transferable units and intend to transfer the following year should see a counselor to complete a transfer admissions agreement.

Participating universities include: University of California at Davis, Merced, Riverside, Santa Barbara, and Santa Cruz; University of the Pacific; National University; CSU East Bay; and Saint Mary’s College.

For more information, stop by the LMC Transfer Center in Room CC3--434 in the Counseling Department.

#### Concurrent Enrollment (UC Berkeley)

The Concurrent Enrollment Program permits access to UCB classes so that eligible students may test their potential for success in a university setting and/or students may take required courses at the University, which may not be available at the community college.

#### Cross Registration (CSU East Bay)

The Cross Registration Program allows eligible students to enroll concurrently at CSU East Bay and provides the opportunity to take required or exploratory courses at this baccalaureate institution.
Dual Admissions (CSU East Bay)

The LMC/CSUEB Dual Admissions Program provides LMC students with a guarantee of transfer admission to CSUEB upon completion of certain program elements. Students are eligible to sign up for the Dual Admissions Program if they have completed any 12 community college units with a grade point average of at least 2.0. Students must enroll at least one year prior to intended entry at CSUEB. Important advantages of participating in the program are the waiver of the CSU application fee, and the opportunity to obtain access to CSUEB libraries, computer labs, and campus events.

Lower-Division Transfer Patterns (LDTP)

The Lower-Division Transfer Pattern (LDTP) project provides a set of “road maps” for students to follow that will ensure appropriate academic preparation and that will decrease time to graduation once LDTP students enter the CSU. Students may enter into an LDTP agreement up to the time they have completed 45 transferable units. Students who elect to follow the LDTP option will receive the highest priority for admission to a CSU campus.

“Highest priority for admission” is defined as a written guarantee of admission to a particular CSU campus and major. The guarantee is subject both to satisfactory completion of the agreement requirements and to the campus’s ability to accommodate the student. Students will be asked to complete successfully a specified set of general education courses identified by the particular CSU campus named in the LDTP agreement.

Through CSUMentor and ASSIST on the Internet, students and counselors will be able to find road maps detailing coursework preparation by CSU campus and major for admission as a junior.

Honors Transfer Admission Agreements

Graduates of the Honors Program receive either guaranteed or priority admission from our ten honors transfer partners. Many of our transfer partners also offer guaranteed or priority scholarship assistance to accepted Honors Students.

The honors transfer partners include UCLA, CSU East Bay, San Francisco State University, Mills College, Saint Mary’s College and other public and private universities around the state. For details and a complete list, visit the Honors Program website at www.losmedanos.edu/honors. Or contact Honors Director Jennifer Saito at jsaito@losmedanos.edu or (925)-439-2181 x 3369.

Intersegmental General Education Transfer Curriculum (CSU & UC)

The Intersegmental General Education Transfer Curriculum (IGETC) is a general education pattern which community college transfer students can use to fulfill lower-division general education requirements in either the California State University (CSU) or University of California (UC) system without the need, after transfer, to take additional lower-division general education courses.

IGETC is not advisable for all students planning to transfer. IGETC is only one way to fulfill the lower-division general education requirements of the UC or CSU. It is not recommended for certain majors and certain colleges, and some colleges do not accept IGETC. Students pursuing majors that require extensive lower-division major preparation may not find the IGETC option to be advantageous. Engineering and Architecture are examples of those majors. Roosevelt and Revelle Colleges at UC San Diego, the HAAS School of Business at UC Berkeley, and the College of Environmental Design (Architecture and Landscape Architecture majors) at UC Berkeley will not accept the IGETC.

Some students may be better served by taking courses which fulfill the CSU general education-breadth requirements or those of the UC campus or college to which they plan to transfer. The IGETC will probably be most useful for students who want to keep their options open before making a final decision about transferring to a particular CSU or UC campus. Students should check with a LMC Counselor or university representative about whether or not IGETC is appropriate for them.

To be certified under IGETC, the entire program must be completed prior to transfer. All courses must be completed with a grade of “C” or better. If the IGETC is not completed prior to transfer, students will be subject to the lower-division general education requirements of the campus or college to which they transfer.

All coursework applicable to the IGETC must be completed and certified in order to be accepted by CSU and UC. In addition to the course requirements for each subject area, full certification for the CSU must include completion of the Oral Communication requirement. For the UC, Oral Communication is not required, but the certification must include satisfaction of the foreign language proficiency requirement. Students should consult with a LMC Counselor and contact the Admissions Office at LMC for IGETC certification.

See the following pages for classes that meet the IGETC pattern or the CSU GE/Breadth requirements at Los Medanos College. Contact the Counseling Center or Transfer Center for the most current approved course list and for questions related to IGETC or general education.

Transfer to Private and Out-of-State Colleges and Universities

Every year LMC students transfer to private colleges and universities in California. LMC students also transfer to universities and colleges out of state, both private and public. Entrance requirements and general education course equivalents are so varied, however, that students anticipating transfer to one of these colleges should obtain its catalog, or consult its website, and work closely with a Los Medanos College counselor to ensure that transfer planning is effective. Some private and out-of-state colleges and universities will accept the completed IGETC to meet their lower-division general education requirements. Admission representatives from local private colleges and universities visit the Transfer Center on a regular basis. Please check with the Transfer Center for more information.
CSU: California State University 2008 - 2009

General Education - Breadth Requirements

Students choosing to transfer are strongly encouraged to see an LMC Counselor since four-year college requirements vary widely and are subject to change.

Students must request that the CSU GE certification be sent to the four-year campus that they will be attending. Check the appropriate box on the “Transcript Request” form at Admissions and Records. Partial GE Certification is available.

Credit by Advanced Placement LMC grants credit toward undergraduate degrees for successful completion of examinations of the Advanced Placement Program of the College Board. See page 10 of the college catalog for the policy for granting credit for specific scores and exams.

At the time this catalog went to press, CSU had not approved the list for 2008-2009. The information on this page is subject to change. Please check with the counseling department for up-to-date information. The current CSU GE list may be found at www.assist.org.

Area C  Arts, Literature, Philosophy and Foreign Languages

A minimum of one course in C1 & C2 and one additional course in C1 or C2.

C1  Arts ......................................................... (3-6 units)
  ART 5, 6, 7, 8, 9
  DRAMA 15, 16, 70, 71
  MUSIC 10, 12, 15
  SPAN 60

C2  Humanities ............................................ (3-6 units)
  CHIN 30, 40
  DRAMA 30
  ENGL 3, 127, 128, 129, 132, 133, 200, 201, 202, 205, 230
  FRNCH 60, 61
  HUMAN 3, 19, 20, 21, 22, 24, 30
  ITAL 60, 61
  LATIN 20, 21
  PHIL 2, 33, 40, 42
  POLSC 33
  SPAN 49, 50, 51, 52, 53
  SIGN 65, 66, 67

Area D  Social, Political, and Economic Institutions and Behavior; Historical Background

No fewer than 9 units should be taken. Courses taken should be in at least two different disciplines listed below. Course(s) listed in more than one discipline will satisfy and be counted in only one discipline.

Discipline(s)          Course(s)
D1  Anthropology & Archeology     ANTHR 5, 6, 7
D2  Economics                    ECON 10, 11
D3  Ethnic Studies               HIST 46, 47, 48, 49, 52
                                    SOCS 45, 56
D4  Gender Studies               HIST 48
D5  Geography                    GEOG 21
D6  History                      ECON 5, HIST 31, 34, 35, 36, 37, 38, 47
D7  Interdisciplinary Social or Behavioral Science
                                    JOURNAL 35, CHDEV 10, 20
D8  Political Science, Government & Legal Institutions
                                    PHIL 33, POLSC 10, 20, 33, 40, 43
D9  Psychology                   PSYCH 10, 11
D10 Sociology and Criminology    SOCI 15, 16

Area E  Lifelong Understanding and Self-Development

Minimum of one course, 3 units.

BIOSC 5, ANTHR 7, PSYCH 12, CHDEV 10

U.S. History, Constitution and American Ideals

One course from group A and one course from group B

These courses may double count in Area D
Group A: POLSC 10, POLSC 20
Group B: ECON 5, HIST 36, HIST 37

Area A  Communication in the English Language and Critical Thinking

A minimum of one course in areas A1, A2 and A3.

A1  Oral Communication ....................... (3 units)
    SPCH 40
A2  Written Communication ..................... (3 units)
    ENGL 100
A3  Critical Thinking ............................ (3 units)
    PHIL 41, ENGL 220, ENGL 221

Some CSU campuses also require English 230 to satisfy graduation requirements. Please consult with a counselor.

Area B  Physical Universe and Its Life Forms

A minimum of one course in areas B1, B2 and B4. At least one course in physical science or biological science must have a laboratory activity as outlined in B3.

B1  Physical Science .......................... (3-6 units)
    ASTRO 10
    CHEM 6, 8, 25, 26, 28, 29
    ENVSCI 10
    GEOG 15
    GEOL 20
    PHYS 15, 35, 36, 40, 41, 42
    PHYS 5

B2  Life Science ................................. (3-6 units)
    BIOS 7, 10, 20, 21, 40, 45, 50

B3  Laboratory Activity
    ASTRO 10 and 11
    BIOS 7, 10, 20, 21, 40, 45, 50
    CHEM 6, 8, 25, 26, 28, 29
    ENVSCI 10
    GEOG 15
    GEOL 10
    PHYS 15, 35, 36, 40, 41, 42

B4  Mathematics/Quantitative Reasoning ... (3-4 units)
    MATH 31, 33, 34, 35, 37, 38, 40, 50, 60, 70, 75, 80

Group A: ART 130, 131, 132, 133, 134, 135, 136, 137
Group B: CHEM 10, 10A, 10B, 10C, 20A, 20B, 20C
Group C: ENGL 100, 101, 102, 103
Group D: PHYS 15, 35, 36, 40, 41, 42
Group E: PHYS 70, 71, 72, 73, 74, 75, 76, 77, 78
IGETC: Intersegmental General Education Transfer Curriculum 2008 - 2009

Requirements for Students Transferring to CSU or UC

Students choosing to transfer are strongly encouraged to see an LMC Counselor since four-year college requirements vary widely and are subject to change.

Although courses may be listed in more than one area, they may be used to satisfy the requirement in only one area.

Students must request that the IGETC certification be sent to the four-year campus that they will be attending. Check the appropriate box on the “Transcript Request” form at Admissions and Records.

Credit by Advanced Placement

LMC grants credit toward undergraduate degrees for successful completion of examinations of the Advanced Placement Program of the College Board. See page 10 of the college catalog for the policy for granting credit for specific scores and exams.

Area 1  English Composition

CSU: Three courses required: One course from 1A, 1B and 1C.
UC: Two courses required: One course from 1A and 1B.

1A English Composition: ENGL 100
1B Critical Thinking – English Composition: ENGL 220, 221
1C Oral Communication (CSU only): SPCH 40

Area 2  Mathematical Concepts and Quantitative Reasoning

One course required (3 semester units minimum).

MATH 34, 35, 37, 38, 40, 50, 60, 70, 75, 80
Math 37 and 50 combined: credit for one course only.
Math 34 and 38 combined: credit for one course only.

Area 3  Arts & Humanities

At least 3 courses, with at least one course from the Arts and one course from the Humanities. (9 semester units.)

3A Arts: ART 5, 6, 7, 8
   DRAMA 15, 16, 70, 71, MUSIC 10, 15
3B Humanities: DRAMA 30, ENGL 127, 128, 129, 132, 133, 200, 201, 202, 205
   HUMAN 3, 19, 20, 21, 22, 24
   MUSIC 12, PHIL 2, 33, 40, 42,
   POLSC 33, SPAN 51, 52, 53

Drama 30, ENGL 127, MUSIC 12 satisfies American Cultures Requirement, UC Berkeley.

Area 4  Social & Behavioral Sciences

At least 3 courses from at least 2 disciplines. (9 semester units.)

4A Anthropology and Archaeology: ANTHR 5, 6, 7
4B Economics: ECON 10, 11
4C Ethnic Studies: HIST 46, SOCSC 45, 56
4F History: ECON 5, HIST 31, 34, 35, 36, 37, 38, 49
4G Interdisciplinary, Social and Behavioral Sciences: CHDEV 10, HIST 47, 48, 52, JOURN 35, POLSC 43
4H Political Science, Government and Legal Institutions: PHIL 33, POLSC 10, 20, 33
4I Psychology: PSYCH 10, 11
4J Sociology and Criminology: SOcio 15, 16

Area 5  Physical & Biological Sciences

At least 2 courses, one Physical Science course and one Biological Science course; at least one must include a laboratory. (7-9 semester units.)

5A Physical Science: ASTRO 10, 11, CHEM: 6, 8, 25, 26, 28, 29
   ENVSCI: 10, GEOG: 15, GEOL: 20, PHYS: 15, 35, 36, 40, 41, 42 PHYSC: 5
5B Biological Science: BIOSC 7, 10, 20, 21, 40, 45, 50

All science courses listed above include lab activity, except for:
   PHYSC 5 and ASTRO 10. ASTRO 11 may be completed along with
   ASTRO 10 for lab activity credit.
   No credit for BIOSC 10 if taken after BIOSC 20.
   No credit for CHEM 6 if taken after CHEM 25.
   No credit for PHYS 15 if taken after PHYS 35.
   No credit for PHYSC 5 if taken after college level course in
   Astronomy, Chemistry, Geology or Physics.

Area 6  Languages Other Than English

UC Requirement only. Proficiency equivalent to two years of high school study in the same language.
One Course (3-5 semester units)

CHIN 30, FRNCH 60, ITAL 20, SPAN 50, SIGN 65

U.S. History, Constitution & American Ideals

CSU Requirement only.
Two courses (6 semester units). One course from Group A and one course from Group B.

Courses used to satisfy this requirement may NOT be double counted in Area 4.

Group A: POLSC 10, 20
Group B: ECON 5, HIST 36, HIST 37

At the time this catalog went to press, IGETC had not approved the list for 2008-2009. The information on this page is subject to change. Please check with the counseling department for up-to-date information. The current IGETC list may be found at www.assist.org.
Associate Degree and Certificate Requirements

Preparing for Graduation

Petitions to graduate with an associate degree or a certificate of achievement should be filed in the LMC Admissions & Records Office. The deadline for submitting a petition for graduation is March 1. Petitions are available in the Admissions & Records Office or on the college web site at www.losmedanos.edu. Credit from other institutions may be used to satisfy graduation requirements. See “Credit Accepted at Los Medanos College” in the Standards of Scholarship section for more information. Petitions for review of requirements for a college skills certificate are also due by March 1.

The graduation ceremony is held once a year at the end of the spring semester for those students who complete the requirements for graduation during the academic year. Awards will be available for graduates approximately five weeks after the end of the spring term.

Catalog Rights

LMC publishes a new catalog every year, and the requirements for the degree/certificate programs may change from one catalog to the next. Students have the right to graduate under the terms of any of the catalogs that are published while in continuous enrollment, prior to eligibility for graduation.

Continuous enrollment is defined as the period of time in which a student’s record reflects completion of at least one course, for one semester or term, during a given catalog (academic) year, from the time of original enrollment. A student who has a break in attendance must use the catalog that is in effect at the time of readmission or a subsequent catalog for the period of continuing enrollment. In the event of discontinued courses, substitutions may be required.

Associate Degree Programs and Requirements

A student who wishes to receive an Associate degree should consult with an LMC counselor. The counselor will assist the student in planning the courses required to satisfy the major for the degree and all other graduation requirements. LMC students have the option of following the “Standard Path” or the “Transfer Path” when planning for an Associate degree. See the following pages for more information on these options and the Associate Degree Requirement chart.

 Majors for an Associate in Science Degree include: biological science, chemistry, or technical/vocational programs. The Associate in Arts Degree is awarded for all other majors.

American Institutions and Ideals Requirement

Beginning with fall, 1983: The American Institutions and Ideals requirement for an associate degree may be cleared by earning a passing grade in POLSC 10 or POLSC 20.

Ethnic/Multicultural Studies Requirement

See associate degree requirement chart for a list of Ethnic/Multicultural studies courses. Students who are considering transferring should consult a counselor for further information.

Certificate of Achievement Requirements

Satisfaction of the requirements defined in the Majors section, including completion of competency requirements, 12 units in residency, and a cumulative grade point average of 2.0, qualifies a student for the Certificate of Achievement, if one is offered in that major.

College Skills Certificates

Other certificate options are available through various occupational programs. These certificates generally require less than 18 units of course work within the following major programs of study: Administration of Justice, Appliance Service Technology, Business, Child Development, Computer Science, Emergency Medical Services, English, Fire Science, Foreign Language, Management and Supervision, Travel Marketing, and Vocational Nursing. For information, contact a department chair or the Counseling Center.

Basic Skills/Competency Requirements

In order to receive an associate degree or a certificate of achievement from Los Medanos College, a student must meet College standards in mathematics, reading and interpreting material, writing expository essays, and computer literacy. The College has an open admissions policy; the competency requirements are designed to insure that every student has reached the standards of mathematics, reading, writing, and computer literacy expected of a Los Medanos College graduate.

Mathematics Competency Requirement

Students seeking an Associates of Arts degree or a Certificate of Achievement must satisfy the mathematics competency requirement by one of the following:

Associate Degree

1) Complete Math 15 or Math 18 with grade of “C” or better, or
2) Complete Math 25A and Math 25B, both with grade of “C” or better, or
3) Complete Math 25AX and Math 25BX, both with grade of “C” or better, or
4) Complete Math 25 or higher with grade of “C” or better, or
5) Score a grade of 4 or 5 on the AP Calculus Exam, or
6) Pass the “Associate Degree Math Competency Exam.”
Certificate of Achievement

1) Complete Math 1 & Math 2, both with grade of “C” or better, or
2) Complete Math 15 or Math 18 with grade of “C” or better, or
3) Complete Math 25A and Math 25B, both with grade of “C” or better, or
4) Complete Math 25AX and Math 25BX, both with grade of “C” or better, or
5) Complete Math 25 or higher with grade of “C” or better, or
6) Complete Bus 3 with a grade of “C” or better, or
7) Score a grade of 4 or 5 on the AP Calculus Exam, or
8) Pass the “Certificate of Achievement Math Competency Exam.”

The Math Competency Exam dates and times are available in the Math Lab, extension 3326. If the student does not pass the test after three attempts, he or she must satisfy the requirement by completing a math class. For additional information and a list of practice questions, contact the Math department or Math Lab, extension 3326.

Reading and Writing Competency Requirements

Associate Degree

The reading/writing competency requirement is cleared when an “A”, “B”, or “C” grade is earned in ENGL 100, required for an associate degree.

Note: Only one English course below English 100 may apply to the associate degree.

Certificate of Achievement

Students seeking a Certificate of Achievement must satisfy reading and writing competency requirements by one of the following:
1) Complete ENGL 90, or ENGL 90A/B or ENGL 100 with a grade of “C” or better, or
2) Place at the ENGL 100 level on the matriculation assessment, or
3) Complete designated course in major program with a grade of “C” or better. Courses approved to satisfy the reading/writing competency are available in the following certificate programs:
   • Art/Digital Publishing or Graphic Communications – ART 5
   • Business/Accounting, Office Administration, or Small Business Operations – BUS 58 or BUS 59
   • Travel Marketing – BUS 58 or BUS 59, or
4) Pass a major program exam available in the following departments: Appliance Service Technology, Automotive Technology, Child Development, and Welding Technology.

Computer Literacy Competency Requirement

Associate Degree and Certificate of Achievement

Computer literacy is a graduation requirement for a degree and for the Certificate of Achievement. This requirement includes an awareness component as well as an operations component. A student may satisfy the requirement by one of the following:
1) “C” grade or better in COMSC 40, 49, 60 or 83, COMSC 10, 11 or
2) “C” grade or better in BUS 18, 35, 65, 66, 67, 68, or
3) “C” grade or better on a challenge examination in the area of computer awareness and evidence of operations experience in an LMC lab setting or similar situation. There are no prerequisites for attempting the challenge examination. The challenge exam may be taken once. Exam includes coverage of basic computer concepts, definitions of common computer terminology, explanations of microcomputer operating procedures, and an awareness of common social applications of computer technology. Students will be expected to demonstrate basic operating procedures on either an Intel-based PC or a Macintosh. Operating procedures competency will include both operating systems operations and applications software operations. See Computer Science area personnel for further information, or to schedule a test session.
Pathways to an Associate Degree at LMC

To be awarded an AA or AS degree at LMC, students must fulfill all of the following requirements:

- Complete 60 degree-applicable units with a cumulative grade point average of 2.0 or higher, with at least 12 units completed at LMC
- Complete Contra Costa Community College District Governing Board requirements:
  - American Institutions (3 units)
  - Health Education (0-3 units)
  - Physical Education (2 units)
- Complete the specific LMC major requirements (a minimum of 18 units) listed in the college catalog
- Complete General Education requirements by either the Transfer or Standard Path, as listed below:

Transfer AA/AS Path

- Students must complete the lower division General Education requirements of a four-year transfer institution.

  Students planning to transfer to a California public university should follow the California State University General Education-Breadth requirements, the University of California specific breadth requirements, or the Intersegmental General Education Transfer Curriculum (IGETC). *

- Another option is to fulfill all major program requirements and be accepted with junior standing at any accredited baccalaureate institution.

- Students must show evidence of acceptance for admission by an accredited transfer institution.

Standard AA/AS Path

- Students must complete the LMC General Education, Graduation, & Competency requirements, as listed on the following page in the catalog.

Note: Unit values appear in parenthesis in both pathways. A zero denotes that a test option is available. Students who score at competency level on a test may bypass the required course (and units). Transferable units are not awarded for LMC competency exams.

*Students planning to transfer to a private or out-of-state university need to consult a counselor. In addition, all students choosing the transfer path option are strongly encouraged to see a counselor since four-year college requirements vary widely and are subject to change.
Los Medanos College Associate Degree Requirements

2008-09

Standard AA/AS Path

A minimum total of 60 degree-applicable units are required for the Associate Degree. Students must complete this coursework, in addition to 18 or more units in a defined major as listed in the catalog. Of the total units completed, 12 units must be at LMC, with a cumulative grade point average of 2.0 or higher. Completing the required courses in the boxes below will total between 32-45 units. Please see a counselor for assistance in selecting appropriate courses. Students choosing the transfer track option are strongly encouraged to see a counselor since four-year college requirements vary widely and are subject to change. Courses that double count are listed in both boxes. This document is subject to change. For updates contact the Counseling Center or www.losmedanos.edu

General Education Requirements

<table>
<thead>
<tr>
<th>Communication/Critical Thinking</th>
<th>3 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Many of these courses will also satisfy the CSU requirement in Area A</td>
<td></td>
</tr>
<tr>
<td>Complete one: ENGL 220, 221, PHIL 41, JOURN 10, SPCH 40</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Biological or Physical Science</th>
<th>3-5 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Many of these courses will also satisfy the CSU requirement in Area B</td>
<td></td>
</tr>
<tr>
<td>Complete one: BIOSC 7, 10, 20, 50</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>Physical: ASTRO 10, CHEM 8, 25, ENGIN 10, ENVSCI 10, GEOG 15, GEOL 70, PHYS 15, 35, PHYS 5</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Creative Arts/Humanities</th>
<th>6 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Many of these courses will also satisfy the CSU requirement in Area C</td>
<td></td>
</tr>
<tr>
<td>Complete two courses: (one from Creative Arts and one from Humanities)</td>
<td></td>
</tr>
<tr>
<td>Creative Arts: ART 5, 6, 7, 8, 9, DRAMA 15, 16, 70, 71, MUSIC 10, 12, 15</td>
<td></td>
</tr>
<tr>
<td>Humanities: PHIL 2*, 40, 42, HUMAN 3, 19, 20, 21, 22, 24, JOURN 35, ENGL 3, 127, 128, 129, 133, 205, 230</td>
<td></td>
</tr>
<tr>
<td>* or completion of Registered Nursing Program</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Behavioral Science</th>
<th>3 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Many of these courses will also satisfy the CSU requirement in Area D</td>
<td></td>
</tr>
<tr>
<td>Complete one: ANTHR 5, 6, 7, PSYCH 10, 11, SOCIO 15, 16</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Social Science/American Institutions &amp; Ideals</th>
<th>6 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete two courses, one from group A and one from group B.</td>
<td></td>
</tr>
<tr>
<td>Group A: POLSC 10, 20</td>
<td></td>
</tr>
<tr>
<td>Group B: ADJUS 120, ECON 5, 10, 11, HIST 34, 35, 36, 37, 38, POLSC 43, SOCSSC 45</td>
<td></td>
</tr>
<tr>
<td>Transfer students should consult with an LMC Counselor regarding meeting the LMC and CSU American Institutions &amp; Ideals requirements.</td>
<td></td>
</tr>
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</table>

Graduation & Competency Requirements

<table>
<thead>
<tr>
<th>Computer Literacy</th>
<th>0-4 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pass proficiency exam</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>Complete one: COMSC 10, 11, 40, 49, 60, 83, BUS 18, 35, 65, 66, 67, 68</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethical Inquiry</th>
<th>3 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete one: ENGL 3, PHIL 2*, HUMAN 3</td>
<td></td>
</tr>
<tr>
<td>*or completion of Registered Nursing Program</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethnic/Multicultural Studies</th>
<th>3 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete one: DRAMA 15, 30, ENGL 127, 128, 129, 133, HIST 46, 47, 48, 52, SOCSC 45, 56</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Health Education</th>
<th>0-3 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete BIOSC 5</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>Completion of Registered Nursing, Vocational Nursing or Paramedic Program or Pass Health Science Exam**</td>
<td></td>
</tr>
<tr>
<td>** For information on Health Science exam, contact Mark Lewis, extension 3224.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mathematics</th>
<th>0-4 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pass proficiency exam</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>Complete: MATH 15 or 18 or 25 or higher</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical Education</th>
<th>2 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete two units of activity courses or FIRE 106 (Does not include lecture courses)</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Reading – Writing</th>
<th>3 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>This course will also satisfy 3 units of the CSU requirement in Area A</td>
<td></td>
</tr>
<tr>
<td>Complete: ENGL 100</td>
<td></td>
</tr>
</tbody>
</table>
# Degrees and Certificates in Major Programs

<table>
<thead>
<tr>
<th>Program</th>
<th>Certificate</th>
<th>Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration of Justice</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Anthropology</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Appliance Service</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Art</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fine Arts</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Graphic Communications</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Digital Publishing</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Automotive Technology</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Biological Science</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounting</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Office Administration</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Small Business Operations</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Child Development</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Computer Science</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Cosmetology</td>
<td>X</td>
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</tr>
<tr>
<td>Electrical/Electronic Technology</td>
<td>X</td>
<td></td>
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<tr>
<td>Emergency Medical Services</td>
<td>X</td>
<td></td>
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<tr>
<td>Engineering</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>English*</td>
<td>X</td>
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</tr>
<tr>
<td>Environmental Science</td>
<td>X</td>
<td></td>
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<tr>
<td>Fire Academy</td>
<td>X</td>
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<tr>
<td>Fire Technology</td>
<td>X</td>
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<tr>
<td>Journalism</td>
<td>X</td>
<td></td>
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<tr>
<td>Liberal Arts</td>
<td>X</td>
<td></td>
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<tr>
<td>Management and Supervision</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Music</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Commercial Music–Bus Mgmt</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Commercial Music–Pedagogy</td>
<td>X</td>
<td></td>
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<tr>
<td>Commercial Music–Performance</td>
<td>X</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Program</th>
<th>Certificate</th>
<th>Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registered</td>
<td>X</td>
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<tr>
<td>Vocational</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Process Technology</td>
<td>X</td>
<td></td>
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<tr>
<td>Psychology</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Real Estate</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Recording Arts</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Sociology</td>
<td>X</td>
<td></td>
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<tr>
<td>Travel Marketing</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Welding Technology</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

**College Skills Certificates (Departmental)**

College Skills Certificates (Departmental), requiring fewer than 18 units of coursework, are offered in the following departments:

- Administration of Justice
- Appliance Service Technology
- Business
- Child Development
- Computer Science
- Emergency Medical Services
- Engineering
- English*
- Environmental Science
- Fire Academy
- Fire Technology
- Journalism
- Liberal Arts
- Management and Supervision
- Mathematics
- Music
  - Commercial Music–Bus Mgmt
  - Commercial Music–Pedagogy
  - Commercial Music–Performance

*Pending State Approval

*Please check with the appropriate department for more information.*
### CCCCD Programs

The programs of study listed below are offered by the Colleges in the Contra Costa Community College District.

**CCC - Contra Costa College**

**DVC - Diablo Valley College**

**LMC - Los Medanos College**

<table>
<thead>
<tr>
<th>Program</th>
<th>Certificate of Achievement</th>
<th>Associate Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration of Justice</td>
<td>DVC</td>
<td>CCC, LMC</td>
</tr>
<tr>
<td>Corrections</td>
<td>CCC</td>
<td>CCC</td>
</tr>
<tr>
<td>Law Enforcement</td>
<td>CCC</td>
<td>CCC</td>
</tr>
<tr>
<td>African-American Studies</td>
<td></td>
<td>CCC</td>
</tr>
<tr>
<td>Alcohol and Drug Studies</td>
<td>DVC</td>
<td>CCC</td>
</tr>
<tr>
<td>Anthropology</td>
<td></td>
<td>CCC, LMC</td>
</tr>
<tr>
<td>Appliance Service Technology</td>
<td>LMC</td>
<td>LMC</td>
</tr>
<tr>
<td>(See also Refrigeration &amp; Appliance Repair)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Architecture/Environmental Design</td>
<td>DVC</td>
<td>CCC</td>
</tr>
<tr>
<td>Art</td>
<td>CCC</td>
<td>LMC</td>
</tr>
<tr>
<td>Fine Arts</td>
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<td>CCC, LMC</td>
</tr>
<tr>
<td>Graphic Communication</td>
<td>LMC</td>
<td>LMC</td>
</tr>
<tr>
<td>Digital Publishing</td>
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<td>CCC</td>
</tr>
<tr>
<td>Automotive Services</td>
<td>CCC</td>
<td>CCC, LMC</td>
</tr>
<tr>
<td>Auto Collision Repair</td>
<td>DVC</td>
<td>CCC, LMC</td>
</tr>
<tr>
<td>Auto Mechanics</td>
<td>CCC, LMC</td>
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</tr>
<tr>
<td>Biological Science</td>
<td>CCC, LMC</td>
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<tr>
<td>Biotechnology</td>
<td>CCC</td>
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</tr>
<tr>
<td>Business</td>
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</tr>
<tr>
<td>Accounting</td>
<td>CCC, DVC, LMC</td>
<td>CCC, LMC</td>
</tr>
<tr>
<td>Administration</td>
<td>CCC, LMC</td>
<td>CCC, LMC</td>
</tr>
<tr>
<td>Customer Services</td>
<td>DVC</td>
<td>CCC</td>
</tr>
<tr>
<td>General Business</td>
<td>CCC, DVC</td>
<td>CCC</td>
</tr>
<tr>
<td>Marketing/Merchandising</td>
<td>CCC</td>
<td>CCC</td>
</tr>
<tr>
<td>Small Business Operation</td>
<td>LMC</td>
<td>LMC</td>
</tr>
<tr>
<td>Management &amp; Supervision</td>
<td>DVC, LMC</td>
<td>LMC</td>
</tr>
<tr>
<td>Retailing</td>
<td>DVC</td>
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</tr>
<tr>
<td>Chemistry</td>
<td>CCC, LMC</td>
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<tr>
<td>Computer Information Systems</td>
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<td>Microcomputer</td>
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<tr>
<td>Programmer</td>
<td>CCC</td>
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<tr>
<td>Data Entry Operator</td>
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<td>Computer Science</td>
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<td>CCC</td>
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<tr>
<td>AS/400 Programming &amp; Operators</td>
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<tr>
<td>Microcomputer System Specialists</td>
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</table>

The programs of study listed below are offered by the Colleges in the Contra Costa Community College District.

**CCC - Contra Costa College**

**DVC - Diablo Valley College**

**LMC - Los Medanos College**

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<tr>
<th>Program</th>
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<td>Corrections</td>
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<td>Law Enforcement</td>
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<td>CCC</td>
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<tr>
<td>African-American Studies</td>
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<td>Alcohol and Drug Studies</td>
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<td>CCC</td>
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<td>Anthropology</td>
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<tr>
<td>Appliance Service Technology</td>
<td>LMC</td>
<td>LMC</td>
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<tr>
<td>(See also Refrigeration &amp; Appliance Repair)</td>
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<tr>
<td>Architecture/Environmental Design</td>
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<td>Art</td>
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<td>Digital Publishing</td>
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<td>Auto Collision Repair</td>
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<td>Customer Services</td>
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<td>Small Business Operation</td>
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<td>Chemistry</td>
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<td>Computer Information Systems</td>
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<td>Microcomputer</td>
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<td>Programmer</td>
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<td>Data Entry Operator</td>
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<td>Computer Science</td>
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<td>CCC</td>
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<td>AS/400 Programming &amp; Operators</td>
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## CCCCD Programs

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<tr>
<td>Fire Technology</td>
<td>LMC, CCC</td>
<td>Office Information Systems</td>
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<td>French</td>
<td>CCC</td>
<td>Administrative Assistant/</td>
<td>CCC, DVC, LMC</td>
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<td>Geography</td>
<td>CCC</td>
<td>Executive Secretary</td>
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<td>Graphic Communications</td>
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<td>History</td>
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<td>Horticulture</td>
<td>DVC, CCC</td>
<td>Medical Transcription</td>
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<td>Industrial Technology</td>
<td>CCC</td>
<td>Word Information Processing</td>
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<td>Inspection Technology</td>
<td>CCC</td>
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<td>Political Science</td>
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<td>LaRaza Studies</td>
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<td>Process Technology</td>
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<td>Liberal Arts</td>
<td>DVC, LMC</td>
<td>Psychology</td>
<td>CCC</td>
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<td>Liberal Studies</td>
<td>CCC</td>
<td>Refrigeration &amp; Appliance</td>
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<td>Library &amp; Information Technology</td>
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<td>Television Arts</td>
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<td>Welding Technology</td>
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<td>Nondestructive Examination</td>
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<td>Mathematics</td>
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<tr>
<td>Medical Assisting &amp; Office Technician</td>
<td>CCC, LMC</td>
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<td>Music</td>
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CCC - Contra Costa College  
DVC - Diablo Valley College  
LMC - Los Medanos College
Anthropology

Degree: Associate of Science: Anthropology

The Anthropology major is designed to meet the needs of a broad spectrum of students. In addition to providing valuable multicultural understanding and cultural literacy "life skills", the Anthropology major can be used to augment career success in Business, Mental Health, as well as Medical and Social Service occupations. The major in Anthropology also prepares students for further study at a four-year institution.

For the Associate of Science Degree in Anthropology, complete 18-19 units of coursework listed below as well as the LMC General Education and Graduation requirements. Consult a Los Medanos College counselor to develop your education plan for the Associate of Science Degree.

Required Courses:

Select a minimum of 2 courses in Anthropology: 

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ANTHR 5</td>
<td>General Anthropology</td>
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<td>ANTHR 6</td>
<td>Cultural Anthropology</td>
<td>3</td>
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<td>ANTHR 7</td>
<td>Anthropology of Culture Change</td>
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And select:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>PSYCH 10*</td>
<td>Psychology: Individual and Social Processes</td>
<td>3</td>
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<tr>
<td>OR</td>
<td>PSYCH 11*</td>
<td>3</td>
</tr>
<tr>
<td>SOCIO 15*</td>
<td>Introduction to Sociology</td>
<td>3</td>
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<tr>
<td>OR</td>
<td>SOCIO 16*</td>
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And select a minimum of 2 elective courses:

<table>
<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>ADJUS 150</td>
<td>Criminal Investigations</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 151</td>
<td>Basic Drug Laws and Investigation</td>
<td>3</td>
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<tr>
<td>ADJUS 152</td>
<td>Gang Theory, Practice &amp; Suppression</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS 222</td>
<td>Juvenile Laws and Procedures</td>
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<td>ADJUS 260</td>
<td>Patrol Procedures</td>
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<tr>
<td>ADJUS 270</td>
<td>Personal Self-Defense and Firearms Training</td>
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<tr>
<td>ADJUS 900*</td>
<td>Selected Topics</td>
<td>3</td>
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Total Units Required in Major Courses: 18-19

* Courses cannot be used to meet both required and elective categories.

Total Units Required in Major Courses: 18-19
Appliance Service Technology

Degree: Associate of Science: Appliance Service Technology

Certificates: Certificate of Achievement: Appliance Technician I
Certificate of Achievement: Appliance Technician II
College Skills Certificate: Heating, Ventilation & Air Conditioning Specialist
College Skills Certificate: Electrical Appliance Technician
College Skills Certificate: Refrigeration Technician

The program in Appliance Service Technology offers instruction for two career options. The Appliance Technician I option prepares students for entry-level positions as appliance installers or shop technician trainees. Students selecting the Appliance Technician II option will be prepared for entry-level positions in the appliance service field, with sufficient background to support a rapid transition to the field technician level.

For the Certificate of Achievement in Appliance Service Technology, complete 21.5 units of coursework listed below as well as the Graduation Requirements in English, Math and Computer Competency. Consult a Los Medanos College counselor to develop your education plan for the Certificate of Achievement.

For the Associate of Science Degree in Appliance Service Technology, complete 39 units of coursework listed below as well as the LMC General Education and Graduation requirements. Consult a Los Medanos College counselor to develop your education plan for the Associate of Science Degree.

Appliance Technician I (primarily an evening program)

**Required Courses:**

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>APPLI 13</td>
<td>Beginning Electrical Appliances Tech I</td>
</tr>
<tr>
<td>APPLI 14</td>
<td>Advanced Electrical Appliances Tech I</td>
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<tr>
<td>APPLI 20</td>
<td>Electrical Appliances Shop Practice</td>
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<tr>
<td>APPLI 23</td>
<td>Basic Refrigeration Tech I</td>
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<tr>
<td>APPLI 24</td>
<td>Advanced Refrigeration Tech I</td>
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<tr>
<td>APPLI 30</td>
<td>Gas Appliance and Refrigeration Shop Practice</td>
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<tr>
<td>APPLI 35</td>
<td>Appliance Shop Practice-Intermediate</td>
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<tr>
<td>APPLI 36</td>
<td>Appliance Shop Practice-Advanced</td>
</tr>
<tr>
<td>APPLI 46</td>
<td>Principles and Repair of Microwave Ovens</td>
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<tr>
<td>EETEC 10</td>
<td>Introduction to Electrical Technology</td>
</tr>
<tr>
<td>ACREF 45</td>
<td>Central Heating &amp; Cooling Troubleshooting</td>
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**Total Units Required in Major Courses** ................. 21.5

Appliance Technician II (primarily a day program)

**Required Courses:**

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<th>Course</th>
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<tr>
<td>APPLI 15</td>
<td>Electrical Appliances I</td>
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<tr>
<td>APPLI 16</td>
<td>Electrical Appliances II</td>
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<tr>
<td>APPLI 20</td>
<td>Electrical Appliance Shop Practice</td>
</tr>
<tr>
<td>APPLI 25</td>
<td>Refrigeration I</td>
</tr>
<tr>
<td>APPLI 26</td>
<td>Refrigeration II</td>
</tr>
<tr>
<td>APPLI 30</td>
<td>Gas Appliance and Refrigeration Shop Practice</td>
</tr>
<tr>
<td>APPLI 35</td>
<td>Appliance Shop Practice-Intermediate</td>
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<td>APPLI 36</td>
<td>Appliance Shop Practice-Advanced</td>
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<tr>
<td>EETEC 10</td>
<td>Introduction to Electrical Technology</td>
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</tbody>
</table>

**Total Units Required in Major Courses** ................. 39

With the approval of an Appliance Technology instructor, APPLI 99 can be used to satisfy the requirements of some appliance repair courses for the Appliance Technician II option.

**Note:** A reading/writing exam option is available for Appliance Service Technology majors to fulfill the reading/writing competency requirement.

**College Skills Certificates in Appliance Service Technology:**

**College Skills Certificate: Heating, Ventilation & Air Conditioning Specialist**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>APPLI 23 or 24</td>
<td>Refrigeration Tech I</td>
</tr>
<tr>
<td>REFRG 45</td>
<td>Central Heating &amp; Cooling Troubleshooting</td>
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<tr>
<td>REFRG 73</td>
<td>Basic Refrigeration R1A</td>
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<td>REFRG 75</td>
<td>HVAC Tech H1A Heating Technology</td>
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<tr>
<td>REFRG 76</td>
<td>Basic HVAC H1B Air Conditioning Repair</td>
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<td>REFRG 77</td>
<td>HVAC Tech AH1A Duct Testing &amp; Repair</td>
</tr>
<tr>
<td>REFRG 78</td>
<td>HVAC AH1B Residential Load Calculation</td>
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**Total Units** 14.5

**College Skills Certificate: Electrical Appliance Technician**

<table>
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<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPLI 13 or 15</td>
<td>Electrical Appliances I</td>
</tr>
<tr>
<td>APPLI 14 or 16</td>
<td>Electrical Appliances II</td>
</tr>
<tr>
<td>APPLI 20</td>
<td>Electrical Appliance Shop Practice</td>
</tr>
<tr>
<td>APPLI 35 or 36</td>
<td>Electrical Appliances Adv. Shop Practice</td>
</tr>
</tbody>
</table>

**Total Units** 8
Art

Degrees: Associate of Art — Fine Arts
Associate of Art — Graphic Communications

Certificates: Certificate of Achievement: Graphic Communications
Certificate of Achievement: Digital Publishing

The Art Program offers a comprehensive and integrated series of courses that lead to an Associate of Arts degree in Art, with an emphasis in Fine Arts or Graphic Communications. We also offer Certificates of Achievement in graphic Communications and Digital Publishing. Students start with required core courses that address the fundamentals of art and design and proceed to advanced-level studies in their chosen emphasis. Departmental philosophy integrates discipline, creativity, art history, tools materials, safe studio practices and professionalism across the curriculum.

Associate Degree - Fine Arts

For the Associate of Art Degree in Fine Arts, complete the 30 units of coursework listed below as well as the LMC General Education and Graduation requirements. Consult a Los Medanos College counselor to develop your education plan for the Associate of Art Degree.

Required Foundation Courses 18

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 5</td>
<td>The Visual Arts</td>
<td>3</td>
</tr>
<tr>
<td>ART 6, 7, 8 or 9</td>
<td>Western Art History I, II, III or IV</td>
<td>3</td>
</tr>
<tr>
<td>ART 10</td>
<td>Introduction to Two-Dimensional Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 11</td>
<td>Introduction to Three-Dimensional Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 20</td>
<td>Introduction to Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 72</td>
<td>Survey of Digital Photography</td>
<td>3</td>
</tr>
</tbody>
</table>

And select a minimum of 12 elective units:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 21</td>
<td>Advanced Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 26</td>
<td>Landscape Sketching on Location</td>
<td>3</td>
</tr>
<tr>
<td>ART 30</td>
<td>Life Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 40</td>
<td>Introduction to Painting</td>
<td>3</td>
</tr>
<tr>
<td>ART 42</td>
<td>Watercolor Painting</td>
<td>3</td>
</tr>
<tr>
<td>ART 45</td>
<td>Advanced Painting</td>
<td>3</td>
</tr>
<tr>
<td>ART 46</td>
<td>Landscape Painting on Location</td>
<td>1</td>
</tr>
<tr>
<td>ART 47</td>
<td>Color Dynamics in Painting</td>
<td>1</td>
</tr>
<tr>
<td>ART 60</td>
<td>Introduction to Sculpture</td>
<td>3</td>
</tr>
<tr>
<td>ART 63</td>
<td>Raku Workshop</td>
<td>1</td>
</tr>
<tr>
<td>ART 66</td>
<td>Introduction to Ceramics</td>
<td>1</td>
</tr>
<tr>
<td>ART 67</td>
<td>Intermediate Ceramics</td>
<td>3</td>
</tr>
<tr>
<td>ART 69</td>
<td>Figurative Ceramic Sculpture</td>
<td>3</td>
</tr>
<tr>
<td>ART 73</td>
<td>Location Photography</td>
<td>1</td>
</tr>
<tr>
<td>ART 74</td>
<td>Photo II: Developing a Personal Vision</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units Required in Major Courses 30

Associate Degree - Graphic Communications

For the Associate of Art Degree in Graphic Communications, complete 30 units of coursework listed below as well as the LMC General Education and Graduation requirements. Consult a Los Medanos College counselor to develop your education plan for the Associate of Art Degree.

Required Foundation and Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 5</td>
<td>The Visual Arts</td>
<td>3</td>
</tr>
<tr>
<td>ART 6, 7, 8 or 9</td>
<td>Western Art History I, II, III or IV</td>
<td>3</td>
</tr>
<tr>
<td>ART 10</td>
<td>Introduction to Two-Dimensional Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 11</td>
<td>Introduction to Three-Dimensional Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 12</td>
<td>Design Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 13</td>
<td>Graphic Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 14</td>
<td>Advanced Graphic Design</td>
<td>2</td>
</tr>
<tr>
<td>ART 23</td>
<td>Page and Publication Design</td>
<td>2</td>
</tr>
<tr>
<td>ART 24</td>
<td>Advanced Page and Publication Design</td>
<td>2</td>
</tr>
<tr>
<td>ART 33</td>
<td>Introduction to Digital Pre-Press</td>
<td>2</td>
</tr>
<tr>
<td>ART 34</td>
<td>Advanced Digital Pre-Press</td>
<td>2</td>
</tr>
<tr>
<td>ART 72</td>
<td>Survey of Digital Photography</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units Required in Major Courses 30

Certificate of Achievement - Graphic Communications

For the Certificate of Achievement in Graphic Communications, complete 30 units of coursework listed below as well as the Graduation Requirements in English, Math and Computer Competency. Consult a Los Medanos College counselor to develop your education plan for the Certificate of Achievement.

Required Foundation Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 5*</td>
<td>The Visual Arts</td>
<td>3</td>
</tr>
<tr>
<td>ART 10</td>
<td>Introduction to Two-Dimensional Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 12</td>
<td>Design Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 13</td>
<td>Graphic Design</td>
<td>2</td>
</tr>
<tr>
<td>ART 14</td>
<td>Advanced Graphic Design</td>
<td>2</td>
</tr>
<tr>
<td>ART 23</td>
<td>Page and Publication Design</td>
<td>2</td>
</tr>
<tr>
<td>ART 24</td>
<td>Advanced Page and Publication Design</td>
<td>2</td>
</tr>
<tr>
<td>ART 33</td>
<td>Introduction to Digital Pre-Press</td>
<td>2</td>
</tr>
<tr>
<td>ART 34</td>
<td>Advanced Digital Pre-Press</td>
<td>2</td>
</tr>
<tr>
<td>ART 72</td>
<td>Survey of Digital Photography</td>
<td>3</td>
</tr>
</tbody>
</table>

And select a minimum of 6 elective units:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 48</td>
<td>Publishing Software Concepts</td>
<td>1.5</td>
</tr>
<tr>
<td>ART 49</td>
<td>Advanced Publishing Software Concepts</td>
<td>1.5</td>
</tr>
<tr>
<td>ART 54</td>
<td>Adobe Photoshop</td>
<td>3</td>
</tr>
<tr>
<td>ART 55</td>
<td>Adobe Illustrator on the Macintosh</td>
<td>1.5</td>
</tr>
<tr>
<td>ART 56</td>
<td>Adobe Illustrator Workshop</td>
<td>1.5</td>
</tr>
<tr>
<td>ART 58</td>
<td>Desktop Typography and Font Management for the Macintosh</td>
<td>1.5</td>
</tr>
<tr>
<td>ART 73</td>
<td>Location Photography</td>
<td>1</td>
</tr>
<tr>
<td>ART 74</td>
<td>Photo II: Developing a Personal Vision</td>
<td>3</td>
</tr>
<tr>
<td>ART 90</td>
<td>Digital Communications Portfolio</td>
<td>1.5</td>
</tr>
<tr>
<td>JOURN 10</td>
<td>Writing for the Media</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units Required in Major Courses 30

* Also meets reading/writing competency requirement for Certificates of Achievement.
Automotive Technology

Degree: Associate of Science – Automotive Technology

Certificates:
- Certificate of Achievement - Automotive Technology
- College Skills Certificate: Smog Technician Specialist Certificate
- College Skills Certificate: Air Conditioning Specialist
- College Skills Certificate: Transmission Specialist
- College Skills Certificate: Engine Performance
- College Skills Certificate: Engine Repair & Machining Specialist

Automotive Technology provides instruction in engine diagnosis, tune-up, emission control, brakes, front-end, and suspension systems. These courses are designed to prepare students for certification in these areas and for employment as automotive mechanics.

For the Certificate of Achievement in Automotive Technology, complete 18 units of coursework listed below as well as the Graduation Requirements in English, Math and Computer Competency. Consult a Los Medanos College counselor to develop your education plan for the Certificate of Achievement.

For the Associate of Science Degree in Automotive Technology, complete 24 units of coursework listed below as well as the LMC General Education and Graduation requirements. Consult a Los Medanos College counselor to develop your education plan for the Associate of Science Degree.

**Select a minimum of 18 units**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 35</td>
<td>Automotive Fundamentals</td>
<td>4</td>
</tr>
<tr>
<td>AUTO 37</td>
<td>Automotive Engine Machining</td>
<td>4</td>
</tr>
<tr>
<td>AUTO 40</td>
<td>Automotive Engine Diagnosis I</td>
<td>4</td>
</tr>
<tr>
<td>AUTO 41</td>
<td>Automotive Tune-Up and Emission Control Diagnosis</td>
<td>4</td>
</tr>
<tr>
<td>AUTO 42</td>
<td>Automotive Brakes</td>
<td>3-4</td>
</tr>
<tr>
<td>AUTO 43</td>
<td>Automotive Suspension and Steering</td>
<td>3-4</td>
</tr>
<tr>
<td>AUTO 45</td>
<td>Automotive Laboratory Practice</td>
<td>3-4</td>
</tr>
<tr>
<td>AUTO 46</td>
<td>Automotive Electricity and Electronics</td>
<td>3-4</td>
</tr>
<tr>
<td>AUTO 47</td>
<td>Automotive Heating and Air Conditioning</td>
<td>4</td>
</tr>
<tr>
<td>AUTO 48</td>
<td>Automatic Transmission and Transaxles</td>
<td>4</td>
</tr>
<tr>
<td>AUTO 49</td>
<td>Manual Transmission and Final Drive</td>
<td>4</td>
</tr>
<tr>
<td>AUTO 50</td>
<td>Clean Air Car Course</td>
<td>4</td>
</tr>
<tr>
<td>AUTO 909*</td>
<td>Automotive Open Lab</td>
<td>1</td>
</tr>
</tbody>
</table>

Total Units Required in Major Courses ...................... 18

* AUTO 900 courses do not necessarily transfer to four-year colleges and universities (please see a counselor regarding transfer information and degree applicability).

Note: A reading/writing exam option is available for Automotive Technology majors to fulfill the reading/writing competency requirement.

College Skills Certificates in Automotive Technology:

**College Skills Certificate: Smog Technician Specialist**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 40</td>
<td>Automotive Engine Diagnosis I</td>
<td>4</td>
</tr>
<tr>
<td>AUTO 41</td>
<td>Automotive Engine Diagnosis II</td>
<td>4</td>
</tr>
</tbody>
</table>
Graduation Requirements

MAJOR PROGRAM REQUIREMENTS

**AUTO 46** Automotive Electricity and Electronics 4
**AUTO 55** Clean Air Car Course 3
**AUTO 57** Smog/Advance Training  .5

**15.5 Total Units**

**College Skills Certificate: Air Conditioning Specialist**
**AUTO 47** Automotive Heating & Air Conditioning 3

**3 Total Units**

**College Skills Certificate: Transmission Specialist**
**AUTO 48** Automatic Transmission & Transaxles 4
**AUTO 47** Manual Transmission & Differential 4

**8 Total Units**

**College Skills Certificate: Engine Performance**
**AUTO 35** Automotive Fundamentals 4
**AUTO 40** Automotive Engine Diagnosis I 4
**AUTO 41** Automotive Engine Diagnosis II 4
**AUTO 46** Automotive Electricity and Electronics 4

**16 Total Units**

**College Skills Certificate: Engine Repair & Machining Specialist**
**AUTO 35** Automotive Fundamentals 4
**AUTO 37** Automotive Engine Machining 2

**6.5 Total Units**

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**Biological Science**

**Degree**  Associate of Science – Biological Science

For the Associate of Science Degree in Biological Science, complete 18 units of coursework listed below as well as the LMC General Education and Graduation requirements. Consult a Los Medanos College counselor to develop your education plan for the Associate of Science Degree.

**Select a minimum of 18 units** (including BIOSC 20 and BIOSC 21)  

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOSC 7</td>
<td>Environmental Biology*</td>
<td>4</td>
</tr>
<tr>
<td>BIOSC 20</td>
<td>Principles of Biology: Cellular</td>
<td>5</td>
</tr>
<tr>
<td>BIOSC 21</td>
<td>Principles of Biology: Organismic</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 25</td>
<td>General College Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 26</td>
<td>General College Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 28</td>
<td>Organic Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 29</td>
<td>Organic Chemistry*</td>
<td>5</td>
</tr>
<tr>
<td>MATH 50</td>
<td>Calculus and Analytic Geometry</td>
<td>4</td>
</tr>
<tr>
<td>MATH 60</td>
<td>Calculus and Analytic Geometry*</td>
<td>4</td>
</tr>
<tr>
<td>MATH 34</td>
<td>Probability and Statistics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 35</td>
<td>General College Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 36</td>
<td>General College Physics</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total Units Required in Major Courses 18**

* Optional for some Biological specialties. A basic science and math core program is recommended for students majoring in Biological Sciences. However, students are advised to meet with their science advisor to draft a specific program of studies. Transfer requirements may vary depending upon which major specialty in biological science the student will be pursuing at the transfer institution.

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**Business**

**Degrees:**  
Associate of Science – Accounting  
Associate of Science – Business  
Small Business Operations  
Associate of Science – Business Office Administration

**Certificates:**  
Certificate of Achievement – Accounting  
Certificate of Achievement Business Small Business Operations  
Certificate of Achievement – Business Office Administration  
Certificate of Achievement Business Retail Management  
College Skills Certificate: Accounting Clerk/Bookkeeper  
College Skills Certificate: Administrative Assistant  
College Skills Certificate: Basic Clerical  
College Skills Certificate: Business Computer Skills  
College Skills Certificate: Business Literacy Skills  
College Skills Certificate: Business Transfer Preparation  
College Skills Certificate: Entrepreneurship//Small Business Start-Up  
College Skills Certificate: Front Office/ Medical Billing/Medical Coding  
College Skills Certificate: Fundamental Business Skills  
College Skills Certificate: Basic Medical Clerical/Medical Records Clerk  
College Skills Certificate: Medical Transcription  
College Skills Certificate: Office Essentials  
College Skills Certificate: Small Business Management and Operations

Business Program curriculum is designed to accomplish several goals: 1) to prepare students for entry-level careers, 2) to prepare students for career advancement in business, industry, government, and non-profit organizations; 3) to prepare students for entrepreneurship and small business start-ups, operations, management and expansion, 4) to prepare business students to transfer to four-year colleges, and 5) to provide major prep courses for students with Bachelor of Arts degrees seeking an advanced business degree. The Business Department offers majors in accounting, business administration, small business operations and office administration.
Graduation Requirements

The Business Department provides three ways to achieve your business education and training goals: 1) Associate of Science degrees, 2) Certificates of Achievement and/or 3) College Skills Certificates.

Business—Accounting Associate of Science Degree and Certificate of Achievement

The associate degree and certificate curriculum in accounting prepare students for entry-level positions and professional advancement in public, private, and governmental accounting. Entry-level employment opportunities consist of positions such as accounts payable/receivable clerk, payroll accountant, accounting paraprofessional, and tax examiner assistant. The Business Department also offers a transfer curriculum to a four-year university (see Business Administration: Pre-Transfer).

For the Certificate of Achievement in Accounting, complete 23-24 units of coursework listed below as well as the LMC General Education and Graduation requirements. Consult a Los Medanos College counselor to develop your education plan for the Certificate of Achievement.

For the Associate of Science Degree in Accounting, complete 23-24 units of coursework listed below as well as the LMC General Education and Graduation requirements. Consult a Los Medanos College counselor to develop your education plan for the Associate of Science Degree.

Required Courses: Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 185</td>
<td>3</td>
</tr>
<tr>
<td>BUS 186</td>
<td>3</td>
</tr>
<tr>
<td>BUS 187</td>
<td>3</td>
</tr>
<tr>
<td>BUS 18*</td>
<td>3</td>
</tr>
<tr>
<td>BUS 109</td>
<td>3</td>
</tr>
</tbody>
</table>

And select 5 units from the following:

Bus 27 Small Business Management 3
Bus 294 Business Law (or Bus 34) 3
Bus 91, 92, 93 or 95 Various one day seminars (each) .5
Bus 99 Cooperative Education in Business 1-4
Bus 900*** Selected Topics in Business varies

Total Units Required in Major Courses ............... 23

*Meets college computer literacy competency requirement for the AS Degree and for the Certificate of Achievement.

** Also meets reading/writing competency requirement for Certificate of Achievement.

***BUS 900 courses do not necessarily transfer to four-year colleges and universities (please see a counselor regarding transfer information and degree applicability).

Business—Small Business Operations Associate Degree and Certificate

The Small Business Operations associate degree and certificate curriculum is designed to prepare students for success in small business management—starting, operating, and expanding a small business. It is directed to the potential or current entrepreneur and to persons who serve as employees of small business firms.

For the Certificate of Achievement in Small Business Operations, complete 23-24 units of coursework listed below as well as the Graduation Requirements in English, Math and Computer Competency. Consult a Los Medanos College counselor to develop your education plan for the Certificate of Achievement.

For the Associate of Science Degree in Small Business Operations, complete 23-24 units of coursework listed below as well as the LMC General Education and Graduation requirements. Consult a Los Medanos College counselor to develop your education plan for the Associate of Science Degree.

Required Courses: Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 181</td>
<td>3</td>
</tr>
<tr>
<td>BUS 186</td>
<td>3</td>
</tr>
<tr>
<td>BUS 27</td>
<td>3</td>
</tr>
<tr>
<td>BUS 35*</td>
<td>3</td>
</tr>
<tr>
<td>BUS 35 A/B/C/D</td>
<td></td>
</tr>
<tr>
<td>COMSC 60*</td>
<td>4</td>
</tr>
<tr>
<td>MANGT 75A-C</td>
<td>3</td>
</tr>
</tbody>
</table>

And select a minimum of 11 units:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 285</td>
<td>3</td>
</tr>
<tr>
<td>BUS 18*</td>
<td>3</td>
</tr>
<tr>
<td>BUS 109</td>
<td>3</td>
</tr>
<tr>
<td>BUS 294</td>
<td>3</td>
</tr>
<tr>
<td>BUS 35*</td>
<td>3</td>
</tr>
<tr>
<td>BUS 58**</td>
<td>3</td>
</tr>
<tr>
<td>BUS 35 A/B/C/D</td>
<td></td>
</tr>
<tr>
<td>BUS 59**</td>
<td>3</td>
</tr>
<tr>
<td>BUS 68*</td>
<td>3</td>
</tr>
<tr>
<td>BUS 91,92,93,95</td>
<td></td>
</tr>
<tr>
<td>BUS 900***</td>
<td>varies</td>
</tr>
<tr>
<td>ART 13</td>
<td>2</td>
</tr>
<tr>
<td>COMSC 30</td>
<td>1.5</td>
</tr>
<tr>
<td>COMSC 31</td>
<td>1.5</td>
</tr>
<tr>
<td>COMSC 60*</td>
<td>4</td>
</tr>
<tr>
<td>JOURN 35</td>
<td>3</td>
</tr>
<tr>
<td>MANGT 50A-C</td>
<td>1</td>
</tr>
<tr>
<td>MANGT 55A-C</td>
<td>1</td>
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<tr>
<td>MANGT 60A-C</td>
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</tr>
<tr>
<td>MANGT 65A-C</td>
<td>1</td>
</tr>
<tr>
<td>MANGT 70A-E</td>
<td>1</td>
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</tbody>
</table>

Total Units Required in Major Courses ............... 23-24

* Also meets computer literacy competency requirement for Associate in Science Degree and Certificate of Achievement

** Also meets reading/writing competency requirement for Certificate of Achievement.

*** BUS 900 courses do not necessarily transfer to four-year colleges and universities (please see a counselor regarding transfer information and degree applicability).
Business—Office Administration Associate Degree and Certificate

The Office Administration Program is designed to provide instruction for those interested in professional office skills and technologies to meet the requirements of a constantly changing office environment. Emphasis is placed on state-of-the-art technology, software, office skill development, interpersonal relations, and career planning.

For the Certificate of Achievement in Office Administration, complete 23-24 units of coursework listed below as well as the Graduation Requirements in English, Math and Computer Competency. Consult a Los Medanos College counselor to develop your education plan for the Certificate of Achievement.

For the Associate of Science Degree in Office Administration, complete 23-24 units of coursework listed below as well as the LMC General Education and Graduation requirements. Consult a Los Medanos College counselor to develop your education plan for the Associate of Science Degree.

Required Courses:  

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 18*</td>
<td>3</td>
<td>Microsoft Excel for Windows</td>
</tr>
<tr>
<td>BUS 47</td>
<td>3</td>
<td>Office Procedures</td>
</tr>
<tr>
<td>BUS 58**</td>
<td>3</td>
<td>Business English (See Note)</td>
</tr>
<tr>
<td>BUS 59**</td>
<td>3</td>
<td>Business Communication</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MANGT 55A-C</td>
<td>3</td>
<td>Communicating with Confidence</td>
</tr>
<tr>
<td>BUS 65*</td>
<td>3</td>
<td>Introduction to Word Processing</td>
</tr>
<tr>
<td>BUS 91</td>
<td>.5</td>
<td>Diverse Workforce</td>
</tr>
<tr>
<td>BUS 92</td>
<td>.5</td>
<td>Business Ethics</td>
</tr>
<tr>
<td>BUS 93</td>
<td>.5</td>
<td>Dealing with Difficult People</td>
</tr>
<tr>
<td>BUS 95</td>
<td>.5</td>
<td>Developing Customer Service Satisfaction</td>
</tr>
<tr>
<td>BUS 96</td>
<td>.5</td>
<td>Time Management and Goal Setting</td>
</tr>
</tbody>
</table>

Typing Proficiency of 40 WPM (Business Department faculty will evaluate students for this proficiency)

* Also meets computer literacy competency requirement for Associate in Science Degree and Certificate of Achievement

** Also meets reading/writing competency requirement for Certificate of Achievement.

Note: Students who place at the ENGL 100 level on assessment or have completed ENGL 100 are not required to complete BUS 58.

And select 9 units in area of specialization (students may elect to complete 9 units without specialization and receive a general Office Administration Certificate):

<table>
<thead>
<tr>
<th>Specialization:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bookkeeping/Account Clerk</td>
<td></td>
</tr>
<tr>
<td>BUS 181</td>
<td>Accounting: Applied Principles 3</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>BUS 186</td>
<td>Principles of Accounting I 3</td>
</tr>
<tr>
<td>BUS 185</td>
<td>Computer Assisted Accounting 3</td>
</tr>
<tr>
<td>BUS 45</td>
<td>Office Accounting Essentials 3</td>
</tr>
<tr>
<td>BUS 80</td>
<td>Ten-Key / Data Entry Skills 1</td>
</tr>
<tr>
<td>BUS 81</td>
<td>Accounts Receivable / Accounts Payable 2</td>
</tr>
<tr>
<td>BUS 82</td>
<td>Payroll 1 3</td>
</tr>
</tbody>
</table>

Administrative Assistant

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 35**</td>
<td>Using Microsoft Office 3</td>
</tr>
<tr>
<td>BUS 56</td>
<td>Database Management Using Microsoft Access 3</td>
</tr>
<tr>
<td>BUS 66**</td>
<td>Intermediate Word Processing 3</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>BUS 67**</td>
<td>Advanced Word Processing 3</td>
</tr>
<tr>
<td>BUS 68**</td>
<td>Introduction to Desktop Publishing on the PC 3</td>
</tr>
</tbody>
</table>

Office Management

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MANGT 50A-C</td>
<td>Introducing Supervision (each) 1</td>
</tr>
<tr>
<td>MANGT 60A-C</td>
<td>Making Effective Decisions (each) 1</td>
</tr>
<tr>
<td>MANGT 65A-C</td>
<td>Mastering Management's Essential Tools (each) 1</td>
</tr>
<tr>
<td>MANGT 70A-E</td>
<td>Relating in Human Terms (each) 1</td>
</tr>
<tr>
<td>MANGT 75A-C</td>
<td>Managing Human Resources (each) 1</td>
</tr>
</tbody>
</table>

Medical/Clerical

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 86</td>
<td>Medical Terminology 3</td>
</tr>
<tr>
<td>BUS 87</td>
<td>Medical Transcription 3</td>
</tr>
<tr>
<td>BUS 88</td>
<td>Patient Billing/Accounting 3</td>
</tr>
</tbody>
</table>

Total Required Units in Major Courses ...............23-26

* Also meets reading/writing competency requirement for Certificate of Achievement.

** Also meets computer literacy competency requirement for Certificate of Achievement.

Business—Retail Management Certificate of Achievement

The Retail Management Program is designed to provide students with a retail management foundation that will enable them, as current or prospective employees, to deal with the challenges of the retail environment. This program meets the requirements of the Western Association of Food Chains (WAFC) Retail Management Certificate program.

For the Certificate of Achievement in Retail Management complete 30-31 units of coursework listed below as well as the Graduation Requirements in English, Math and Computer Competency. Consult a Los Medanos College counselor to develop your education plan for the Certificate of Achievement.
Graduation Requirements

Required Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 3*</td>
<td>3</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>MATH 1 AND 2</td>
<td>Applied Mathematics</td>
</tr>
<tr>
<td>BUS 181</td>
<td>3</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>BUS 186</td>
<td>3</td>
</tr>
<tr>
<td>BUS 26</td>
<td>3</td>
</tr>
<tr>
<td>BUS 33</td>
<td>3</td>
</tr>
<tr>
<td>BUS 35**</td>
<td>3</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>COMSC 60</td>
<td>4</td>
</tr>
<tr>
<td>BUS 59****</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Required Units in Major Courses ................. 30-31

* Also meets mathematics competency requirement for Certificate of Achievement
** Also meets computer literacy competency requirement for Associate in Science Degree and Certificate of Achievement
*** Also meets reading/writing competency requirement for Certificate of Achievement.

College Skills Certificates in Business:

Certificate: Accounting Clerk/Bookkeeper

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 18</td>
<td>Microsoft Excel</td>
</tr>
<tr>
<td>BUS 181</td>
<td>Accounting Applied Principles</td>
</tr>
<tr>
<td>BUS 185</td>
<td>Computer Assisted Accounting</td>
</tr>
</tbody>
</table>

Choose 1 course from following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 45</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>BUS 81</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>BUS 82</td>
<td>3</td>
</tr>
</tbody>
</table>

12 Total Units

College Skills Certificate: Administrative Assistant

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 59</td>
<td>3</td>
</tr>
<tr>
<td>or MANGT 55A/B/C</td>
<td>Business Communications</td>
</tr>
<tr>
<td>Introducing Supervision</td>
<td></td>
</tr>
<tr>
<td>MANGT 50 A/B/C</td>
<td></td>
</tr>
<tr>
<td>MANGT 70D</td>
<td></td>
</tr>
<tr>
<td>MANGT 70A-E</td>
<td>Relating in Human Terms: Leadership Skills</td>
</tr>
<tr>
<td>BUS 18</td>
<td>Microsoft Excel</td>
</tr>
<tr>
<td>BUS 35D</td>
<td>Microsoft Access</td>
</tr>
</tbody>
</table>

11 Total Units

College Skills Certificate: Basic Clerical

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 47</td>
<td>Office Procedures</td>
</tr>
<tr>
<td>BUS 55</td>
<td>Keyboarding Speed &amp; Accuracy</td>
</tr>
<tr>
<td>BUS 65</td>
<td>Introduction to Word Processing</td>
</tr>
<tr>
<td>BUS 91</td>
<td>Managing/Working in a Diverse Workforce</td>
</tr>
<tr>
<td>BUS 92</td>
<td>Business Ethics</td>
</tr>
<tr>
<td>BUS 93</td>
<td>Dealing with Difficult People</td>
</tr>
<tr>
<td>BUS 95</td>
<td>Develop. Customer Service Satisfaction</td>
</tr>
<tr>
<td>BUS 96</td>
<td>Time Management &amp; Goal Setting</td>
</tr>
</tbody>
</table>

9.5 Total Units

College Skills Certificate: Business Computer Skills

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 35</td>
<td>Microsoft Office</td>
</tr>
<tr>
<td>BUS 51</td>
<td>Computer Keyboarding</td>
</tr>
<tr>
<td>BUS 80</td>
<td>2Ten Key/Data Entry Skills</td>
</tr>
</tbody>
</table>

7 Total Units

College Skills Certificate: Business Literacy Skills

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 109</td>
<td>Introduction to Business</td>
</tr>
<tr>
<td>BUS 160</td>
<td>Personal Finance</td>
</tr>
</tbody>
</table>

6 Total Units

College Skills Certificate: Business Transfer Preparation

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 186</td>
<td>Principles of Financial Accounting</td>
</tr>
<tr>
<td>BUS 187</td>
<td>Accounting: Managerial Principles</td>
</tr>
<tr>
<td>BUS 109</td>
<td>Introduction to Business</td>
</tr>
<tr>
<td>BUS 294</td>
<td>Business Law</td>
</tr>
<tr>
<td>BUS 18 or</td>
<td></td>
</tr>
<tr>
<td>BUS 18ABC or</td>
<td></td>
</tr>
<tr>
<td>BUS 35</td>
<td>MS Excel or MS Office</td>
</tr>
</tbody>
</table>

15 Total Units

College Skills Certificate: Entrepreneurship/Small Business Start-Up

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 9010</td>
<td>Exploring Entrepreneurship</td>
</tr>
<tr>
<td>BUS 18</td>
<td>Microsoft Excel</td>
</tr>
<tr>
<td>BUS 181</td>
<td>(Formerly BUS 10) Acct: Applied Principles</td>
</tr>
<tr>
<td>BUS 29</td>
<td>Quick Books</td>
</tr>
</tbody>
</table>

11 Total Units

College Skills Certificate: Front Office/Medical Billing/Medical Coding

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 59</td>
<td>Business Communications</td>
</tr>
<tr>
<td>BUS 83</td>
<td>Basic CPT &amp; ICD-9CM Coding</td>
</tr>
<tr>
<td>BUS 88</td>
<td>Patient Billing/Accounting</td>
</tr>
<tr>
<td>BUS 90</td>
<td>Advanced Patient Billing</td>
</tr>
</tbody>
</table>

10 Total Units

College Skills Certificate: Fundamental Business Skills

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 3</td>
<td>Business Math</td>
</tr>
<tr>
<td>BUS 58</td>
<td>Business English</td>
</tr>
</tbody>
</table>

6 Total Units

College Skills Certificate: Basic Medical Clerical/Medical Records Clerk

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 84</td>
<td>Medical Office Procedures/Records Mangt</td>
</tr>
<tr>
<td>BUS 86</td>
<td>Medical Terminology</td>
</tr>
<tr>
<td>BUS 90</td>
<td>Medical Law &amp; Ethics for the Med. Office</td>
</tr>
<tr>
<td>BUS 91</td>
<td>Managing/Working in a Diverse Workplace</td>
</tr>
<tr>
<td>BUS 91</td>
<td>Dealing with Difficult People</td>
</tr>
</tbody>
</table>

7 Total Units

College Skills Certificate: Medical Transcription

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOSC 30</td>
<td>Introduction to Anatomy &amp; Physiology</td>
</tr>
<tr>
<td>BUS 87</td>
<td>Beginning Medical Transcript</td>
</tr>
<tr>
<td>BUS 94</td>
<td>Advanced Medical Transcription</td>
</tr>
</tbody>
</table>

9 Total Units
Child Development

Degree: Associate of Science – Child Development
Certificates: Certificate of Achievement - Child Development

College Skills Certificate: Assistant Teacher Permit

College Skills Certificate: Specialization in Art and the Creative Process

College Skills Certificate: Specialization - Curriculum in Early Childhood Education

College Skills Certificate: Specialization - Infant Toddler Care

College Skills Certificate: Specialization - School Age Care

College Skills Certificate: Specialization - Special Needs and Care & Education

College Skills Certificate: Specialization - Working with Culturally Diverse families in Early Childhood

For the Certificate of Achievement in Child Development, complete 24-28 units of coursework listed below as well as the Graduation Requirements in English, Math and Computer Competency. Consult a Los Medanos College counselor to develop your education plan for the Certificate of Achievement.

For the Associate of Science Degree in Child Development, complete 24-28 units of coursework listed below as well as the LMC General Education and Graduation requirements. Consult a Los Medanos College counselor to develop your education plan for the Associate of Science Degree.

Courses required for the major*, with suggested 2-year sequence:

**First semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHDEV 1</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 10</td>
<td>3</td>
</tr>
</tbody>
</table>

**Second semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHDEV 11</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 62</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 83**</td>
<td>3</td>
</tr>
</tbody>
</table>

**Third semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHDEV 50</td>
<td>3</td>
</tr>
</tbody>
</table>

| Elective(s)* | 2-3 |

**Fourth semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHDEV 20</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 15 or 90</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Units Required in Major Courses ............... 24-28
**Electives include:**

- CHDEV 12 Parenting Seminar 2.5
- CHDEV 22 Behavior Management 2
- CHDEV 23 Positive Discipline for Young Child 1
- CHDEV 25 Creative Arts for the Young Child 2
- CHDEV 35 Science and Math for the Young Child 2
- CHDEV 45 Music and Movement for the Young Child 2
- CHDEV 53 Child Care Licensing Guidelines .5
- CHDEV 54 Computer Technology in ECE 1
- CHDEV 58 Exploring Early Childhood Environment 1
- CHDEV 60 Language and Literacy for the Young Child 2
- CHDEV 64 Outdoor Games & Activities for Children Ages 3-12 1
- CHDEV 65 Health, Safety and Nutrition 2
- CHDEV 77 Working with Drug-Exposed Children from Birth to 5 years of Age 2
- CHDEV 92 Adult Supervision/Mentor Teacher Training 2
- CHDEV 100 Fall Harvest Conference .5
- Total units required 40.5

Note: Additional college proficiencies are required for computer literacy, reading/writing, and math. Exam options are available for Child Development majors to fulfill the reading/writing and math competency requirements.

**This class requirement may be waived if you have been employed in a child care program for at least 6 months.**

**College Skills Certificates in Child Development**

The following College Skills Certificates are teaching certificates that meet requirements for the "Assistant Teacher" and "Associate Teacher levels of the California Child Development Permit Matrix. Upon completion, teaching permits can be applied for through the State of California Commission of Teacher Credentialing. Contact ext. 3183 for application assistance.

**Child Development Certificate: Associate Teacher Permit**

- CHDEV 1 Introduction to Early Childhood Studies 3
- CHDEV 10 Child Growth and Development 3
- Total units required 6

**Child Development Certificate: Associate Teacher Permit Coursework**

- CHDEV 1 Introduction to Early Childhood Studies 3
- CHDEV 10 Child Growth and Development 3
- CHDEV 20 Child, Family, and Community 3
- Total units required 12

The following College Skills Certificates are teaching certificates that meet requirements for the "Assistant Teacher" and "Associate Teacher levels of the California Child Development Permit Matrix. Upon completion, teaching permits can be applied for through the State of California Commission of Teacher Credentialing. Contact ext. 3183 for application assistance.

**College Skills Certificate: Specialization - Infant Toddler Care**

- CHDEV 40 Infant and Toddler Development 3
- CHDEV 41 Infant and Toddler Practicum 3
- Total units required 6

**College Skills Certificate: Specialization - Curriculum in Early Childhood Education**

Select 3 courses from the following:

- CHDEV 22 Discipline and Guidance for the Young Child 2
- CHDEV 25 Creative Arts for the Young Child 2
- CHDEV 35 Science and Math for the Young Child 2
- CHDEV 45 Music and Movement for the Young Child 2
- CHDEV 60 Language and Literacy for the Young Child 2
- CHDEV 65 Health, Safety and Nutrition 2
- Total units required 6

**College Skills Certificate: Specialization - Special Needs Care & Education**

- CHDEV 55 The Special Needs Child 3
- CHDEV 57 Methods and Materials for the Special Needs Child 3
- Total units required 6

**College Skills Certificate: Specialization - Director of Private Schools**

- CHDEV 95 Supervision and Administration Part 1 3
- CHDEV 96 Supervision and Administration Part 11 3
- Total units required 6

**College Skills Certificate: Specialization - School Age Child Care**

- CHDEV 32 The School Age Child 3
- CHDEV 33 School Age Practicum 3
- Total units required 6

**College Skills Certificate: Specialization - Art and the Creative Process**

- CHDEV 25 Creative Art for Children 2
- CHDEV 26 Art and Creative Process for Young Children 1
- CHDEV 27 Learning Environments that Support Young Children 2
- CHDEV 28 Art and the Creative Process 1
- Total units required 6
Graduation Requirements

Major Program Requirements

College Skills Certificate: Specialization - Working with Culturally Diverse Families in Early Childhood

CHDEV 50 Multicultural Education for Young Child 3
Choose from any ethnic/multicultural studies course from below:
MUSIC 12 Popular Music in American Culture 3
HIST 49 Native Americans in the 20th Century 3
HIST 52 Mexican American History 1900 – Present 3
ENGL 127 Mythology & Literature of Ethnic Americans 3
ANTHR 7 Anthropology of Cultural Change 3
Total units required ................................................. 6

Computer Science

Certificates: Certificate of Achievement - Computer Science: Microcomputer Systems Specialist
College Skills Certificate: Computer Science: Foundation
College Skills Certificate: Computer Science: Core Competencies
College Skills Certificate: Web Design
College Skills Certificate: Microsoft Applications
College Skills Certificate: PC Repair Technician

The Los Medanos College Computer Science Department offers a curriculum leading to a Certificate of Achievement as a Microcomputer Systems Specialist. The curriculum includes courses which provide extensive hands-on experience with up-to-date microcomputer equipment and programs. Courses provide students with real world experiences, and essential job related skills will be stressed in all classes. Courses are continuously updated to reflect current technology, and current events in the microcomputer field will be routinely discussed in all courses required in this program.

For the Certificate of Achievement in Computer Science, complete 33 units of coursework listed below as well as the Graduation Requirements in English, Math and Computer Competency. Consult a Los Medanos College counselor to develop your education plan for the Certificate of Achievement.

Required Courses: Units
Level One
COMSC 40 Introduction to Computers 4
COMSC 60 Emerging Microcomputer Technologies and Applications 4
COMSC 61 Advanced Microcomputer Applications 3
Level Two (requires completion of Level One)
COMSC 30 Web Site Development Part I 1.5
COMSC 31 Web Site Development Part II 1.5
COMSC 56 Programming Logic and Design 3
COMSC 80 A Survey of Operating Systems 3
One of the following programming courses:
COMSC 41 Visual Basic.net 3
COMSC 42 Alice Programming 3
COMSC 44 Introduction to C++ Programming Part I 3
And select a minimum of 10 units from any of the remaining Computer Science courses.
Total units required ................................................. 33

Specialization Options

Internet Web Design
Database Design Management
Computer Programming
Operating Systems Concepts/Application
A+ Certification

College Skills Certificate: Computer Science: Foundation
COMSC 40 Introduction to Computers 4
COMSC 60 Emerging Microcomputer Technologies and Applications 4
COMSC 61 Advanced Microcomputer Applications 3
11 Total Units

College Skills Certificate: Computer Science: Core Competencies
COMSC 30 Web Site Development Part I 1.5
COMSC 31 Web Site Development Part II 1.5
COMSC 41 VISUALBASIC.NET OR
COMSC 44 Introduction to C++ Programming OR
COMSC 51 Introduction to Java for Programmers 3
COMSC 80 A Survey of Operating Systems 3
12 Total Units

College Skills Certificate: Web Design
COMSC 30 Web Site Development Part I 1.5
COMSC 31 Web Site Development Part II 1.5
COMSC 40 Introduction to Computers 4
ART 80 Looking Good on the Web 1.5
ART 81 Looking Good on the Web, Part II 1.5
10 Total Units

College Skills Certificate: Microsoft Applications
COMSC 65 MS Access 1.5
COMSC 70 MS Excel 1.5
COMSC 75 MS Word 1.5
COMSC 76 MS PowerPoint 1.5
6 Total College Skills Certificate: PC Repair Technician
COMSC 90 PC Repair 3
COMSC 91 PC Repair – Software 3
COMSC 92 A+ Certification Exam Preparation 1.5
7.5 Total Units

2008 – 2009 Los Medanos College
Graduation Requirements

Cosmetology

Certificate: Certificate of Achievement - Cosmetology
Cosmetologist - Esthetician - Manicurist

Los Medanos College’s programs in cosmetology offer an excellent way to get the basic skills and knowledge necessary to enter this business field. Courses combine theory and practice as required by the State of California and prepare the student for the examination administered by the State. Students may prepare for careers as cosmetologists, estheticians, manicurists or instructors.

For the Certificate of Achievement in Cosmetology, complete 32 units of coursework listed below as well as the Graduation Requirements in English, Math and Computer Competency. Consult a Los Medanos College counselor to develop your education plan for the Certificate of Achievement.

**Required Courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COSME 10</td>
<td>Cosmetology–Theory, Principles, and Practice</td>
<td>.5-16</td>
</tr>
<tr>
<td>COSME 11</td>
<td>Cosmetology–Theory, Principles, and Practice</td>
<td>.5-16</td>
</tr>
</tbody>
</table>

**Total Units Required in Major Courses** ................. 32

Instruction is offered at three nearby locations:

**DELTA BEAUTY COLLEGE** trains Tuesday through Saturday. They operate mornings and afternoons.
320 H Street
Antioch, CA 94509
(925) 754-4992

**PARIS BEAUTY COLLEGE** trains Tuesday through Saturday, with Mondays available for making up absences. They operate mornings, afternoons, and evenings.
1655 Willow Pass Rd.
Concord, CA 94520
(925) 685-7600

**ROBINSON’S COSMETOLOGY** trains Tuesday through Saturday. They operate mornings and afternoons.
COSME 80 has evening hours Monday, Thursday and all day Saturday. Saturdays are mandatory for that schedule.
4330 Clayton Rd. Ste E-1
Concord, CA 94521
(925) 602-1040

Students attending our Beauty Schools pay the LMC units fee*, plus the purchase cost of an appropriate training kit:

<table>
<thead>
<tr>
<th>Kit Type</th>
<th>Paris</th>
<th>Delta</th>
<th>Robinson</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cosmetologist</td>
<td>$695</td>
<td>$397</td>
<td>$875</td>
</tr>
<tr>
<td>Instructor</td>
<td>$150</td>
<td>$150</td>
<td>$250</td>
</tr>
<tr>
<td>Manicurist</td>
<td>$545</td>
<td>$225</td>
<td>$425</td>
</tr>
<tr>
<td>Esthetician</td>
<td>$695</td>
<td>no kit</td>
<td>$775</td>
</tr>
</tbody>
</table>

* Students transferring between cosmetology schools are allowed to transfer completed hours. Unused financial credits can only be transferred with approval from the Dean.

When enrolling in another school, full enrollment fee costs will be required.

Cosmetology students may attend fulltime (40 hours per week) or parttime (minimum 20 hours per week). Flexible schedules and times may be accommodated as required. Only students without major work, home or personal demands should attempt more than 25 hours weekly.

Electrical / Electronic Technology

**Degrees:**
- Associate of Science – Electrical Technology
- Associate of Science – Industrial Electronics

**Certificates:**
- Certificate of Achievement - Electrical Technology
- Certificate of Achievement - Industrial Electronics

LMC is in a unique position to offer an outstanding, up-to-date curriculum that has been designed by industry for industry. No other college in this area provides similar education and training needed to obtain these high-skill, high-wage and high-demand jobs.

Our EETEC program offers you the opportunity to graduate with a Certificate of Achievement in four semesters (two years). There are two areas of specialization: Electrical Technician or Instrumentation Technician. The Electrical Technician specialization is designed to train electricians to maintain complex electrical automation systems used in the manufacturing and power generation industry. The Instrumentation technician specialization is designed to train instrument technicians to maintain the process measurement and control systems used in refineries, chemical plants, biotech plants, pharmaceutical plants, water and waste treatment plants.

**Certificate of Achievement**

Courses in the first three semesters are common to both areas of specialization. In the fourth semester, the courses for each specialization vary, with the Electrical Technicians concentrating on the skills needed for electrical maintenance while the Instrumentation Technicians concentrate on the measurement and control of processes.

For the Certificate of Achievement complete the coursework listed below as well as the Graduation Requirements in English, Math and Computer Competency. Consult a Los Medanos College counselor to develop your education plan for the Certificate of Achievement.
## Associate of Science Degree

For the Associate of Science Degree the coursework listed below as well as the LMC General Education and Graduation requirements. Consult a Los Medanos College counselor to develop your education plan for the Associate of Science Degree.

### Program Entry Skills:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 12</td>
<td>Pre-Algebra</td>
</tr>
<tr>
<td>ENGL 90</td>
<td>Integrated Reading, Writing, and Critical Thinking</td>
</tr>
</tbody>
</table>

### Required Courses:  

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td>EETEC 10 Direct Current Circuits</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>EETEC 12 Alternating Current Circuits</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MATH 25 Elementary Algebra</td>
<td>5</td>
</tr>
<tr>
<td>Second Semester</td>
<td>EETEC 20 Electric Motor Control</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>EETEC 22 Semiconductor Devices</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>EETEC 24 Digital Devices</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>PHYS 15 Introduction to Physics</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>EETEC 30 Programmable Logic Controllers</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>EETEC 32 Instrumentation Process Measurement</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>EETEC 34 Instrument Calibration</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>CHEM 6 Introduction to Inorganic and Physical Chemistry</td>
<td>4</td>
</tr>
</tbody>
</table>

(for Instrumentation Specialization only)

<table>
<thead>
<tr>
<th>Fourth Semester</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical Specialization</td>
<td>EETEC 40 National Electrical Code</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>EETEC 42 Wiring Methods and Code Application</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>EETEC 44 Power Distribution &amp; Transformers</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>EETEC 46 DC &amp; AC Motors &amp; Generators</td>
<td>3</td>
</tr>
<tr>
<td>Instrumentation Specialization</td>
<td>EETEC 50 Instrumentation Process Control</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>EETEC 52 Applied Process Control</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>EETEC 56 Code for Instrument Application</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>EETEC 58 Analytical Instrumentation</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>EETEC 59 System Integration &amp; Troubleshooting</td>
<td>2</td>
</tr>
</tbody>
</table>

| Total Units Required in Major Courses - Electrical Specialization | 42 |
| Total Units Required in Major Courses - Instrumentation Specialization | 45 |

## Emergency Medical Services

### Degree:

Associate of Science – Paramedic - Prehospital Emergency Care*

### Certificates:

Certificate of Achievement – Paramedic - Prehospital Emergency Care*

### College Skills Certificate

### College Skills Certificate in Emergency Medical Services

College Skills Certificate: Emergency Medical Technician I

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMS 10 Emergency Medical Technician I</td>
<td>6 Total Units</td>
</tr>
</tbody>
</table>

For the Associate of Science Degree in Paramedic - Prehospital Emergency Care, complete coursework listed below as well as the LMC General Education and Graduation requirements. Consult a Los Medanos College counselor to develop your education plan for the Associate of Science Degree.

For the Certificate of Achievement in Paramedic - Prehospital Emergency Care complete the coursework listed below as well as the Graduation Requirements in English, Math and Computer Competency. Consult a Los Medanos College counselor to develop your education plan for the Certificate of Achievement.

* EMS 24, 26 and 35 are no longer offered at Los Medanos College. The Associate of Science degree and the Certificate of Achievement degrees in Prehospital Emergency Care are offered to students who have completed these classes prior to the deletion of these classes.

### Required Courses:  

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMS 10 Emergency Medical Technician I</td>
<td>6</td>
</tr>
<tr>
<td>EMS 24 Paramedic - Didactic Phase I</td>
<td>16</td>
</tr>
<tr>
<td>EMS 26 Paramedic Clinical Rotations Phase 2</td>
<td>3</td>
</tr>
<tr>
<td>EMS 35 Paramedic Field Internship Phase 3</td>
<td>9-14</td>
</tr>
</tbody>
</table>

| Total Units Required in Major Courses | 34-39 |
Graduation Requirements

Engineering
Degree: Associate of Science – Engineering

Engineers design and oversee the construction of the structures, vehicles, devices, and processes that solve the technological problems facing society. Engineering is a profession with both licensing requirements and a code of ethics.

The LMC Engineering program offers a solid foundation for upper division studies in most engineering fields, including mechanical engineering, civil engineering, electrical engineering, aerospace engineering, industrial engineering, and many other engineering disciplines.

Students who complete the program will have finished most or all of the lower division courses required for transfer to fouryear engineering programs. Graduates of the Engineering Program at LMC will also be able to: identify and solve engineering problems, perform and interpret experiments, produce designs to meet various needs, demonstrate professional ethics, communicate effectively, judge how engineering projects affect society and the environment, engage in lifelong learning, and use the tools and techniques necessary for modern engineering practice.

For the Associate of Science Degree in Engineering, complete 55 units of coursework listed below as well as the LMC General Education and Graduation requirements. Consult a Los Medanos College counselor to develop your education plan for the Associate of Science Degree.

Required Courses: Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGIN 10</td>
<td>Intro to Engineering</td>
</tr>
<tr>
<td>ENGIN 20</td>
<td>Programming with C++ for Engineers and Scientists</td>
</tr>
<tr>
<td>ENGIN 22</td>
<td>Programming with MATLAB for Engineers and Scientists</td>
</tr>
<tr>
<td>ENGIN 25</td>
<td>Engineering Graphics</td>
</tr>
<tr>
<td>ENGIN 30</td>
<td>Materials Science</td>
</tr>
<tr>
<td>ENGIN 45</td>
<td>Engineering Circuits</td>
</tr>
<tr>
<td>CHEM 25</td>
<td>General College Chemistry</td>
</tr>
<tr>
<td>PHYS 40</td>
<td>Physics for Scientists and Engineers I</td>
</tr>
<tr>
<td>PHYS 41</td>
<td>Physics for Scientists and Engineers II</td>
</tr>
<tr>
<td>PHYS 42</td>
<td>Physics for Scientists and Engineers III</td>
</tr>
<tr>
<td>MATH 50</td>
<td>Calculus and Analytic Geometry</td>
</tr>
<tr>
<td>MATH 60</td>
<td>Calculus and Analytic Geometry</td>
</tr>
<tr>
<td>MATH 70</td>
<td>Calculus and Analytic Geometry</td>
</tr>
<tr>
<td>MATH 80</td>
<td>Differential Equations</td>
</tr>
</tbody>
</table>

Restricted electives (Students must complete two of the following four courses):

<table>
<thead>
<tr>
<th>Course</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGIN 36</td>
<td>Engineering Statics</td>
</tr>
<tr>
<td>ENGIN 38</td>
<td>Manufacturing Processes</td>
</tr>
<tr>
<td>ENGIN 46</td>
<td>Engineering Dynamics</td>
</tr>
<tr>
<td>MATH 75</td>
<td>Linear Algebra</td>
</tr>
</tbody>
</table>

Total Units Required in Major Courses: 55

The courses required for transfer vary depending on the transfer destination institution and the desired engineering discipline. IGETC is NOT appropriate for this major. Students interested in engineering should meet with a counselor to plan their schedules as soon as possible.

English as a Second Language

Certificates:
- College Skills Certificate: English: Intermediate
- College Skills Certificate: English: Advanced

College Skills Certificate: English: Intermediate

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESL 43</td>
<td>ESL Read, Writing, Speak, Listening III</td>
<td>3</td>
</tr>
<tr>
<td>ESL 44</td>
<td>ESL Read, Writing, Speak, Listening IV</td>
<td>3</td>
</tr>
<tr>
<td>ESL 45</td>
<td>ESL Read, Writing, Speak, Listening V</td>
<td>3</td>
</tr>
<tr>
<td>ESL 46</td>
<td>ESL Read, Writing, Speak, Listening VI</td>
<td>3</td>
</tr>
</tbody>
</table>

& one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESL 21</td>
<td>ESL Grammar II</td>
<td></td>
</tr>
<tr>
<td>ESL 31</td>
<td>Conversation/Pronunciation II</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units: 15.5

College Skills Certificate: English: Advanced

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESL 45</td>
<td>ESL Read, Writing, Speak, Listening V</td>
<td>3</td>
</tr>
<tr>
<td>ESL 46</td>
<td>ESL Read, Writing, Speak, Listening VI</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 50</td>
<td>Fund of English: Read, Writing for non-Native Speakers</td>
<td>5</td>
</tr>
</tbody>
</table>

& one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESL 21</td>
<td>ESL Grammar II</td>
<td></td>
</tr>
<tr>
<td>ESL 31</td>
<td>ESL Conversation/Pronunciation II</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units: 14

2008–2009 Los Medanos College
Environmental Sciences

Degree: Associate of Science – Environmental Sciences

The Associate in Science degree major in Environmental Science provides interdisciplinary preparation for students wishing to pursue knowledge and employment in the fields of environmental research, consulting, and regulatory oversight. The program provides excellent lower division preparation for students transferring to Environmental Science (and related) programs at four-year colleges and universities.

The goal of LMC’s new Environmental Science program is to create a signature magnet program that attracts students from all reaches of the county, involves teachers and professors from the region’s many feeder schools and universities, and builds bridges to the industries, government agencies, and institutes that are seeking an increased workforce.

For the Associate of Science Degree in Environmental Science, complete 39 units of coursework listed below as well as the LMC General Education and Graduation requirements. Consult a Los Medanos College counselor to develop your education plan for the Associate of Science Degree.

**Required Courses:**
- ENVSCI 1 Freshman Seminar 2
- BIOSC 26 Ecology Field Studies 1

**Required Math and Science Courses:**
- MATH 50 Calculus I 4
- BIOSC 20 Principles of Biology: Cellular 5
- BIOSC 21 Principles of Biology: Organismic 5
- CHEM 25 General College Chemistry I 5
- CHEM 26 General College Chemistry II 5
- PHYS 35 General College Physics I 4
- PHYS 36 General College Physics II 4

**Electives: (one course):**
- ENVSCI 10 Introduction to Environmental Sciences 4
- GEOL 20 Physical Geology 4
- GEOG 15 Physical Geography 4

**Total Units Required in Major Courses** ............... 39

Fire Technology

Degree: Associate of Science – Fire Technology

Certificates: Certificate of Achievement - Basic Academy
Certificate of Achievement - Fire Technology
College Skills Certificate: Basic Academy

Los Medanos College offers certificate and degree programs, and an academy program in fire technology. The programs are designed to provide educational opportunities for persons who are seeking employment or advancement in public or private fire protection agencies as well as persons who are pursuing a higher degree in fire administration or fire protection engineering.

For the Certificate of Achievement in Fire Technology, complete 21 units of coursework listed below as well as the Graduation Requirements in English, Math and Computer Competency. Consult a Los Medanos College counselor to develop your education plan for the Certificate of Achievement.

For the Associate of Science Degree in Fire Technology, complete 21 units of coursework listed below as well as the LMC General Education and Graduation requirements. Consult a Los Medanos College counselor to develop your education plan for the Associate of Science Degree.

**Required Courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRE 101</td>
<td>Fire Protection Organization</td>
</tr>
<tr>
<td>FIRE 102</td>
<td>Fire Behavior and Combustion</td>
</tr>
<tr>
<td>FIRE 103</td>
<td>Fire Protection Equipment &amp; Systems</td>
</tr>
<tr>
<td>FIRE 104</td>
<td>Building Construction for Fire Protection</td>
</tr>
<tr>
<td>FIRE 105</td>
<td>Fire Prevention</td>
</tr>
<tr>
<td>EMS 10</td>
<td>Emergency Medical Technician I</td>
</tr>
</tbody>
</table>

**Total Units Required in Major Courses** ............... 21

For the Certificate of Achievement in Basic Academy, complete 15 units of coursework listed below as well as the Graduation Requirements in English, Math and Computer Competency. Consult a Los Medanos College counselor to develop your education plan for the Certificate of Achievement.

The Basic Fire Academy class prepares students for the California State Firefighter certification. Prerequisites include 9 units from the Fire Technology required course list; meets National Fire Protection Association (NFPA) 1582 medical assessment; Satisfactory score on the Candidate Physical Agility (CPAT) test or equivalent; and a current Emergency Medical Technician (EMT) certification.

**College Skills Certificate in Fire Technology:**

<table>
<thead>
<tr>
<th>Certificate</th>
<th>Total Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Academy</td>
<td>15</td>
</tr>
</tbody>
</table>

2008 – 2009 Los Medanos College
Journalism

Degree: Associate of Art – Journalism

Journalism Associate Degree

This two-year program of study leads to transfer to a four-year college where students can continue their education and pursue a journalism or communication major. It can also prepare students desiring a more immediate entry into the workforce for an entry-level position with a community newspaper or other media organization.

For students following either pathway, the program provides practical training for careers in print and online journalism, broadcasting, advertising and public relations. The required courses for the major are listed below in a recommended sequence.

For the Associate of Art Degree in Journalism, complete 21 units of coursework listed below as well as the LMC General Education and Graduation requirements. Consult a Los Medanos College counselor to develop your education plan for the Associate of Art - Degree.

Requirements

(Major and elective courses in recommended sequence)

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Semester</td>
<td>JOURN 10 Writing for the Media</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>JOURN 35 Mass Communication</td>
<td>3</td>
</tr>
<tr>
<td>2nd semester</td>
<td>JOURN 15 Reporting Practicum*</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>JOURN 20 Publication Production I**</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ELECTIVE A Select from accompanying lists</td>
<td>3</td>
</tr>
<tr>
<td>3rd semester</td>
<td>JOURN 15 Reporting Practicum*</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>JOURN 30 Publication Production II</td>
<td>3</td>
</tr>
<tr>
<td>4th semester</td>
<td>JOURN 15 Reporting Practicum*</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>ELECTIVE B/C Select from accompanying lists</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Units Required for A.A. in Journalism.............21**

Three units of Reporting Practicum are required. One unit of Journalism 98: Independent Study in Journalism may count toward this requirement with the permission of the Journalism Department Chair.

**For those with previous publication experience, an additional three units of Publication Production II may be substituted for Publication Production I with the permission of the Journalism Department Chair.

Approved Electives for Journalism Majors

Students majoring in journalism must complete a minimum of three units from elective list A, and a minimum of three units from elective list B and/or C. A single three-unit course, or a combination of courses that add up to at least three units may be taken to fulfill these requirements. Additionally, in selecting electives from lists B and C, students may complete all three required units from list B, all three units from list C, or may select a combination of courses from lists B and C that equal or surpass the three-unit minimum.

**ELECTIVE A: Publishing for print and web**

(minimum of 3 units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 23</td>
<td>Page and Publication Design</td>
<td>2</td>
</tr>
<tr>
<td>ART 24</td>
<td>Advanced Page and Publication Design</td>
<td>2</td>
</tr>
<tr>
<td>ART 48</td>
<td>Publishing Software Concepts</td>
<td>1.5</td>
</tr>
<tr>
<td>ART 49</td>
<td>Advanced Publishing Software Concepts</td>
<td>1.5</td>
</tr>
<tr>
<td>ART 58</td>
<td>Desktop Typography and Font Management for the Macintosh</td>
<td>1.5</td>
</tr>
<tr>
<td>ART 80</td>
<td>Looking Good on the Web</td>
<td>1.5</td>
</tr>
<tr>
<td>ART 81</td>
<td>Looking Good on the Web, Part II</td>
<td>1.5</td>
</tr>
<tr>
<td>BUS 68</td>
<td>Introduction to Desktop Publishing on the PC</td>
<td>3</td>
</tr>
<tr>
<td>COMSC 31</td>
<td>Internet - Web Site Development</td>
<td>1.5</td>
</tr>
<tr>
<td>COMSC 34</td>
<td>XML - Web Programming</td>
<td>1.5</td>
</tr>
<tr>
<td>Or other related courses approved by Journalism Department Chair</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ELECTIVE B: Photography and graphic design**

(minimum of 3 units from B/C)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 13</td>
<td>Graphic Design</td>
<td>2</td>
</tr>
<tr>
<td>ART 33</td>
<td>Introduction to Digital Pre-press</td>
<td>2</td>
</tr>
<tr>
<td>ART 43</td>
<td>Introduction to Illustration</td>
<td>2</td>
</tr>
<tr>
<td>ART 52</td>
<td>Introduction to Adobe Photoshop on the Mac</td>
<td>1.5</td>
</tr>
<tr>
<td>ART 53</td>
<td>Adobe Photoshop 2</td>
<td>1.5</td>
</tr>
<tr>
<td>ART 55</td>
<td>Adobe Illustrator on the Macintosh</td>
<td>1.5</td>
</tr>
<tr>
<td>ART 59</td>
<td>Scanning Workshop</td>
<td>.5</td>
</tr>
<tr>
<td>ART 72</td>
<td>A Survey of Digital Photography</td>
<td>3</td>
</tr>
<tr>
<td>ART 73</td>
<td>Location Photography</td>
<td>1</td>
</tr>
<tr>
<td>Or other related courses approved by Journalism Department Chair</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ELECTIVE C: Research, writing and reporting skills**

(minimum of 3 units from B/C)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 111</td>
<td>Creative Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 83</td>
<td>Proofreading &amp; Sentence-Combining Skills</td>
<td>3</td>
</tr>
<tr>
<td>LIBST 14</td>
<td>Intro. to Library Resources</td>
<td>.5</td>
</tr>
<tr>
<td>LIBST 17</td>
<td>Intro. to Internet Information Resources</td>
<td>.5</td>
</tr>
<tr>
<td>LIBST 18</td>
<td>Internet Information Resources Advanced Search Techniques and Strategies</td>
<td>.5</td>
</tr>
<tr>
<td>BUS 51</td>
<td>Computer Keyboarding</td>
<td>1</td>
</tr>
</tbody>
</table>
**Liberal Arts**

**Degrees:**
- Associate of Arts – Liberal Arts: Arts and Humanities
- Associate of Arts – Liberal Arts: Behavioral Science and Social Science
- Associate of Arts – Liberal Arts: Math and Science

The Liberal Arts major provides a rich educational experience through coursework in a broad range of academic disciplines. Liberal Arts provides excellent preparation for university transfer and/or a wide range of careers.

Students graduating with a Liberal Arts major are able to: read critically and communicate effectively as a writer and a speaker; understand the connections among academic disciplines and apply interdisciplinary approaches to problem solving; think critically and creatively; consider the ethical implications of knowledge; and possess a worldview informed by diverse social, multicultural and global perspectives.

Therefore, the broad-based interdisciplinary nature of Liberal Arts provides a knowledge base and the communication and critical thinking skills necessary for many careers and occupations. The Liberal Arts major provides solid preparation for upper division work following transfer more specifically, for university programs in teaching and prelaw and for careers such as business, government and communication. With proper course selection (see a counselor), LMC's Liberal Arts major articulates with CSU's popular upper division Liberal Studies major, which is the path to a teaching credential program.

The Liberal Arts major incorporates many General Education requirements, so students need only to pass a few additional courses in order to complete the major. The major has three emphasis options: Arts and Humanities; Behavioral Science and Social Science; Math and Science.

**Liberal Arts: Arts and Humanities**

*At least 18 units to be chosen from:*

- Art 5, 6, 7, 8, 9 or any transferable Art course
- Chinese 30, 40
- Drama 15, 16, 30, 70, 71 or any transferable Drama course
- Education 5, 40, 50
- English 3, 100, 111, 127, 128, 129, 132, 133, 205
- 200, 201, 202, 220, 221, 230
- French 60, 61
- Humanities 3, 19, 20, 21, 22, 24
- Italian 60, 61
- Journalism 10, 35
- Music 10, 12, 15 or any transferable Music course
- Philosophy 2, 33, 40, 41, 42
- Recording Arts 10, 15
- Sign Language 65, 66, 67, 72
- Spanish 50, 51, 52, 53

**Liberal Arts: Behavioral Science and Social Science**

*At least 18 units to be chosen from:*

- Administration of Justice 120
- Anthropology 5, 6, 7
- Business 20
- Child Development 10, 20, 50
- Economics 5, 10, 11
- Education 5, 40, 50
- History 31, 34, 35, 36, 37, 38, 46, 47, 48, 49, 52
- Political Science 10, 20, 33, 43
- Psychology 10, 11
- Social Science 45
- Sociology 15, 16

**Liberal Arts: Math and Science**

*At least 18 units to be chosen from:*

- Astronomy 10, 11
- Biological Science 5, 7, 10, 20, 21, 26, 30, 40, 45, 50
- Chemistry 6, 7, 8, 25, 26, 27, 28, 29
- Computer Science 40
- Environmental Science 10
- Geography 15
- Geology 20
- Math 31, 33, 34, 35, 37, 38, 40, 50, 60, 70, 75, 80
- Nutrition 55
- Physical Science 5
- Physics 15, 35, 36, 40, 41, 42

**Management and Supervision**

**Degree:**
- Associate of Science – Management and Supervision

**Certificates:**
- Certificate of Achievement: Management and Supervision
- College Skills Certificate: Communication Skills for managers
- College Skills Certificate: Decision Making Skills for Managers
- College Skills Certificate: Human Resource Management Skills
- College Skills Certificate: Leaderships Skills for Managers
- College Skills Certificate: Planning Skills for Managers

The Management and Supervision Program is designed to provide students with comprehensive knowledge of supervisory principles and applications, knowledge of human relations, and communication skills. The curriculum is designed to prepare students for entry level positions in management/supervision and to prepare current lead workers, first line supervisors, and middle managers for promotion to higher level positions in business, industry, government, and/or nonprofit organizations.
Graduation Requirements

For the Certificate of Achievement in Management and Supervision, complete 24 units of coursework listed below as well as the Graduation Requirements in English, Math and Computer Competency. Consult a Los Medanos College counselor to develop your education plan for the Certificate of Achievement.

For the Associate of Science Degree in Management and Supervision, complete 24 units of coursework listed below as well as the LMC General Education and Graduation requirements. Consult a Los Medanos College counselor to develop your education plan for the Associate of Science Degree.

Required Courses:

- MANGT 50 A-C Introducing Supervision 3
- MANGT 55 A-C Communicating With Confidence 3
- MANGT 60 A-C Making Effective Decisions 3
- MANGT 65 A-C Mastering Management's Essential Tools 3
- MANGT 70 A-E Relating in Human Terms 3

And select a minimum of 9 units:

- BUS 18* Microsoft Excel for Windows 3
- BUS 27 Small Business Management 3
- BUS 35* Using Microsoft Office 3
- BUS 35 A/B/C/D* MS Word, Excel, PowerPoint or Access .15 each
- BUS 58** Business English 3
- BUS 59** Business Communications 3
- BUS 65* Introduction to Word Processing 3
- BUS 109 Introduction to Business (or Bus 20) 3
- BUS 294 Business Law (or Bus 34) 3
- COMSC 40* Introduction to Computers 4
- MANGT 75 A-C Managing Human Resources (each) 1
- MANGT 99 Cooperative Education 14
- PSYCH 10 Psychology: Indiv. & Soc. Process 3
- SPCH 40 Oral Communication 3

Or select other Business, Management, or Real Estate courses. Students should consult with a Business Program faculty advisor for help in selecting courses that will best suit their individual needs.

Total Units Required in Major Courses ..................24

* Also meets computer literacy competency requirement for Associate in Science Degree and Certificate of Achievement
** Also meets reading/writing competency requirement for Certificate of Achievement.

College Skills Certificates in Management and Supervision

College Skills Certificate: Communication Skills for Managers

- MANGT 50 A, B, C Introducing Supervision 3
- MANGT 55 A, B, C Communicating With Confidence 3

6 Total

College Skills Certificate: Decision Making Skills for Managers

- MANGT 50 A, B, C Introducing Supervision 3
- MANGT 60 A, B, C Make Effective Decisions 3

6 Total

College Skills Certificate: Human Resource Management Skills

- MANGT 50 A, B, C Introducing Supervision 3
- MANGT 75 A, B, C D, E Make Effective Decisions 3

6 Total

College Skills Certificate: Leadership Skills for Managers

- MANGT 50 A, B, C Introducing Supervision 3
- MANGT 70 A, B, C D, E Relating in Human Terms 3

6 Total

College Skills Certificate: Planning Skills for Managers

- MANGT 50 A, B, C Introducing Supervision 3
- MANGT 65 A, B, C Mastering Management's Essential Tools 3

6 Total

Mathematics

Degree Associate of Science– Mathematics

For the Associate of Science Degree in Mathematics, complete 22 units of coursework listed below as well as the LMC General Education and Graduation requirements. Consult a Los Medanos College counselor to develop your education plan for the Associate of Science Degree.

Required Courses:

- MATH 50 Calculus and Analytic Geometry 4
- MATH 60 Calculus and Analytic Geometry 4
- MATH 34 Probability and Statistics 4
- MATH 38 Statistics for Business or Economics 4
- PHYS* 4
- MATH 70 Calculus and Analytic Geometry 4
- MATH 75 Linear Algebra 3
- MATH 80 Differential Equations 3

Total Units Required in Major Courses ..................22

* If the student is oriented toward mathematics, physics, chemistry, or engineering, the engineering sequence (PHYS 40, 41, and 42) is recommended. Otherwise, the general physics sequence may be appropriate (PHYS 35 and 36).

Note: A course in computer use and operations such as COMSC 60 is strongly recommended. Some transfer institutions may require a programming class for a math major. Check with the college you plan to transfer to see if you will need to take a programming class.

The basic sequence of recommended courses is for students seeking a career in mathematics or in a related mathematics field. Students are advised to consult with a counselor or math instructor relative to specific requirements for particular transfer institutions.
Music

Degree:  Associate of Art – Music Certificates:

Certificate of Achievement: Music—Commercial – Business Management

Certificate of Achievement: Music—Commercial – Pedagogy

Certificate of Achievement: Music—Commercial – Performance

Associate of Art - Music

For the Associate of Art Degree in Music, complete 27-36 units of coursework listed below as well as the LMC General Education and Graduation requirements. Consult a Los Medanos College counselor to develop your education plan for the Associate of Art Degree.

Required Courses:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 5, 6, OR 7</td>
<td>Recital Class (2 semesters)</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 13</td>
<td>Musicianship I</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 14</td>
<td>Musicianship II</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 15</td>
<td>Basic Music (or pass theory placement exam)</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC 16</td>
<td>Fundamentals of Music Theory</td>
<td>4</td>
</tr>
<tr>
<td>MUSIC 17</td>
<td>Harmony</td>
<td>4</td>
</tr>
<tr>
<td>MUSIC 18</td>
<td>Advanced Harmony</td>
<td>4</td>
</tr>
<tr>
<td>MUSIC 31</td>
<td>Piano I</td>
<td>1.5</td>
</tr>
<tr>
<td>MUSIC 32</td>
<td>Piano II</td>
<td>1.5</td>
</tr>
<tr>
<td>MUSIC 81</td>
<td>Introduction to Improvisation</td>
<td>1</td>
</tr>
</tbody>
</table>

Music Major Ensemble Requirements

Select a minimum of three semesters of the following courses for music majors (see additional option* below for Advanced Guitar and Advanced Piano emphasis):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 33 A</td>
<td>Intermediate Piano</td>
<td>1.5</td>
</tr>
<tr>
<td>MUSIC 33 B</td>
<td>Advanced Piano</td>
<td>1.5</td>
</tr>
<tr>
<td>MUSIC 37</td>
<td>Advanced Guitar</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 40, 41, 42</td>
<td>Concert Band* (each)</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 60, 61, 62</td>
<td>College Chorus* (each)</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 298 E/F</td>
<td>Chamber Orchestra*</td>
<td>.5-1</td>
</tr>
</tbody>
</table>

And select three additional ensembles from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 34</td>
<td>Jazz/Rock Key Board</td>
<td>1.5</td>
</tr>
<tr>
<td>MUSIC 50, 51</td>
<td>Chamber Ensembles (each)</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 63</td>
<td>Oratorio and Cantata Chorus</td>
<td>.5-1</td>
</tr>
<tr>
<td>MUSIC 64</td>
<td>Oratorio and Cantata Chorus II</td>
<td>.5-1</td>
</tr>
<tr>
<td>MUSIC 66</td>
<td>Gospel Choir</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 70, 71, 72</td>
<td>Jazz Ensemble (each)</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 74, 75, 76</td>
<td>Jazz Studio (each)</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 77, 78, 79</td>
<td>Chamber Chorale (each)</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 82, 83, 84</td>
<td>Jazz/Funk/Latin Workshop (each)</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 250</td>
<td>Night Jazz Band</td>
<td>1</td>
</tr>
</tbody>
</table>

Total Units Required in Major Courses ............... 27-36

NOTE: Summer Ensembles will not fulfill the above requirements.

* Students with an Advanced Guitar or Advanced Piano emphasis may choose to fulfill the ensemble requirement by completing four semesters of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 33A/B</td>
<td>Intermediate/Advanced Piano</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td>MUSIC 37 Advanced Guitar</td>
<td></td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Select two additional semesters from any performance class.

NOTE: Summer ensembles will not fulfill the above requirements

Music Business Management Certificate of Achievement

Required Courses:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 186</td>
<td>Principles of Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BUS 27</td>
<td>Small Business Management</td>
<td>3</td>
</tr>
<tr>
<td>BUS 294</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC 12</td>
<td>Popular Musics in America</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC 13</td>
<td>Musicanship I</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 15</td>
<td>Basic Music (or pass theory placement exam)</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC 28</td>
<td>Songwriting I</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 30</td>
<td>Basic Keyboard Skills</td>
<td>1.5</td>
</tr>
<tr>
<td>MUSIC 81</td>
<td>Introduction to Improvisation</td>
<td>1</td>
</tr>
<tr>
<td>OR</td>
<td>MUSIC 82, 83, or 84 Jazz/Funk/Latin Workshop</td>
<td>(each) 1</td>
</tr>
<tr>
<td>MUSIC 89</td>
<td>Music Business Management</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 93</td>
<td>Intro to MIDI</td>
<td>2</td>
</tr>
<tr>
<td>RA 10</td>
<td>Recording Arts I</td>
<td>2</td>
</tr>
<tr>
<td>RA 21</td>
<td>Basic Session Producing</td>
<td>2</td>
</tr>
</tbody>
</table>

And select two of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 29</td>
<td>Songwriting II</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 34</td>
<td>Jazz/Rock Keyboard</td>
<td>1.5</td>
</tr>
<tr>
<td>MUSIC 65</td>
<td>Class Voice</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 67</td>
<td>Jazz and Popular Vocal Technique</td>
<td>1</td>
</tr>
</tbody>
</table>

Two additional group performance-oriented courses in addition to those completed for the core requirement.

Total Units Required in Major Courses ............... 34.5-38.5

Music Pedagogy Certificate of Achievement

For the Certificate of Achievement in Music—Commercial – Pedagogy, complete 35.5-39.5 units of coursework listed below as well as the Graduation Requirements in English, Math and Computer Competency. Consult a Los Medanos College counselor to develop your education plan for the Certificate of Achievement.
**Graduation Requirements**

### Major Program Requirements

**Required Courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 57</td>
<td>Private Lessons (2 semesters)</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 10</td>
<td>Music Literature</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC 12</td>
<td>Popular Musics in America</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC 13</td>
<td>Musicianship I</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 14</td>
<td>Musicianship II</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 15</td>
<td>Basic Music (or pass theory placement exam)</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC 16</td>
<td>Fundamentals of Music Theory</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC 17</td>
<td>Fundamentals of Music Harmony</td>
<td>4</td>
</tr>
<tr>
<td>MUSIC 28</td>
<td>Songwriting I</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 81</td>
<td>Introduction to Improvisation</td>
<td>1</td>
</tr>
</tbody>
</table>

**OR**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 82, 83, or 84</td>
<td>Jazz/Funk/Latin Workshop (each)</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 89</td>
<td>Music Business Management</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 93</td>
<td>Intro to MIDI</td>
<td>2</td>
</tr>
</tbody>
</table>

Any performance classes 48

(See list of music major ensemble requirements)

- Select a minimum of two semesters of level appropriate piano classes (total 3 units) MUSIC 30, 31, 32, 33a, 33b, plus MUSIC 30C Piano for families (1 unit).

**And select two of the following:**

- MUSIC 29, Songwriting II 1
- MUSIC 34, Jazz/Rock Keyboard 1.5
- MUSIC 65, Class Voice 1
- MUSIC 67, Jazz and Popular Vocal Technique 1

Two additional group performance-oriented courses in addition to those completed for the core requirement.

**Total Units Required in Major Courses** 35-39.5

**Music Performance Certificate of Achievement**

For the Certificate of Achievement in Music—Commercial – Music Performance, complete 32.5-36.5 units of coursework listed below as well as the Graduation Requirements in English, Math and Computer Competency. Consult a Los Medanos College counselor to develop your education plan for the Certificate of Achievement.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 10</td>
<td>Music Literature</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC 12</td>
<td>Popular Musics in America</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC 13</td>
<td>Musicianship I</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 15</td>
<td>Basic Music (or pass theory placement exam)</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC 16</td>
<td>Fundamentals of Music Theory</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC 28</td>
<td>Songwriting I</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 30</td>
<td>Basic Keyboard Skills</td>
<td>1.5</td>
</tr>
<tr>
<td>MUSIC 38</td>
<td>Studio Musicianship</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 81</td>
<td>Introduction to Improvisation</td>
<td>1</td>
</tr>
</tbody>
</table>

**OR**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 82, 83, or 84</td>
<td>Jazz/Funk/Latin Workshop (each)</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 89</td>
<td>Music Business Management</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 93</td>
<td>Intro to MIDI</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 94</td>
<td>Composition/MIDI/Synthesizer Workshop I</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 95</td>
<td>Composition/MIDI Workshop II</td>
<td>2</td>
</tr>
<tr>
<td>RA 10</td>
<td>Recording Arts I</td>
<td>2</td>
</tr>
</tbody>
</table>

Any performance classes 4-8

(See list of music major ensemble requirements)

**And select two of the following:**

- MUSIC 29, Songwriting II 1
- MUSIC 34, Jazz/Rock Keyboard 1.5
- MUSIC 65, Class Voice 1
- MUSIC 67, Jazz and Popular Vocal Techniques 1

Two additional group performance-oriented courses in addition to those completed for the core requirement.

**Total Units Required in Major Courses** 32.5-36.5

**Music career possibilities include:**

1. **Professional Musician** — conductor, concert artist, studio musician, symphony orchestra member, opera singer, composer, accompanist, arranger;
2. **Teaching music** — band director, orchestra director, choir director, private instructor, music teacher (elementary through college in public or private schools);
3. **Commercial** — instrument sales, instrument repair, pop singer, orchestrator, arranger, music publisher, music activities producer, agent-manager, songwriter;
4. **Radio, TV, recording industry** — disc jockey, recording artist, recording engineer, movie, TV, radio music director (see also Recording Arts section);
5. **Church-related** — minister of music, organist, choir director;
6. **Other** — music therapist, music librarian, piano tuner, acoustical engineer, music personnel manager, accompanist, music critic, music software writer/technician.

Students pursuing an associate degree will find it difficult to complete all of the general education requirements and the program requirements in two years. Students should budget time and plan carefully. Instructors in the music area will assist students in determining the proper sequence of classes.

---

**Nursing**

**Degrees:**

- ADN – Registered Nursing
- ADN – LVN to RN

**Certificate:** Certificate of Achievement - Vocational Nursing

All students who meet admissions requirements are eligible to apply to the nursing programs. Criteria and complete information on the selection process as well as the philosophy and objectives of each program are described in the Nursing Applicant Handbook, which is available in the LMC Bookstore. This information is available on the LMC web site (www.losmedanos.edu) – See Nursing Department, under classes and departments.

The handbook also contains complete information on all options for advanced placement. The handbook is more extensive and may contain updates to the following brief program outline.
Registered Nursing
The registered nursing program requires two academic years beyond completion of the prerequisite courses and general education requirements.

Completion of prerequisite courses is required for admission eligibility to the program. Only those students formally admitted to the program may enroll in registered nursing courses. Students may, however, enroll in other non-nursing courses designated as part of the registered nursing curriculum while awaiting admission to the program.

Completion of the registered nursing program at Los Medanos College qualifies students to take the state board examination (NCLEX-RN) for licensure as a registered nurse (RN).

ADN Program Curriculum

**Prerequisite Courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 100</td>
<td>3</td>
</tr>
<tr>
<td>MATH 15 or 18, 25 or 30</td>
<td>3-4</td>
</tr>
<tr>
<td>BIOSC 40</td>
<td>4</td>
</tr>
<tr>
<td>BIOSC 45</td>
<td>5</td>
</tr>
<tr>
<td>BIOSC 50</td>
<td>5</td>
</tr>
<tr>
<td>PSYCH 10 or 11</td>
<td>3</td>
</tr>
</tbody>
</table>

**Graduation Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMSC 49</td>
<td>1.5</td>
</tr>
<tr>
<td>POLSC 10 or 20</td>
<td>3</td>
</tr>
<tr>
<td>SPEECH 40</td>
<td>3</td>
</tr>
<tr>
<td>Social Science GE Course</td>
<td>3</td>
</tr>
<tr>
<td>Creative Arts GE Course</td>
<td>3</td>
</tr>
<tr>
<td>Ethnic Multicultural Course</td>
<td>3</td>
</tr>
<tr>
<td>PE (required for graduation)</td>
<td>2</td>
</tr>
</tbody>
</table>

Registered Nursing Curriculum

**First Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RNURS 22</td>
<td>9.5</td>
</tr>
<tr>
<td>RNURS 23</td>
<td>1</td>
</tr>
<tr>
<td>RNURS 24</td>
<td>1</td>
</tr>
</tbody>
</table>

**Second Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RNURS 26</td>
<td>9.5</td>
</tr>
<tr>
<td>RNURS 27</td>
<td>1</td>
</tr>
<tr>
<td>RNURS 28</td>
<td>1</td>
</tr>
</tbody>
</table>

**Third Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RNURS 31</td>
<td>9.5</td>
</tr>
<tr>
<td>RNURS 33</td>
<td>1</td>
</tr>
<tr>
<td>RNURS 34</td>
<td>1</td>
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</table>

**Fourth Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RNURS 30 Leadership/Management/Professionalism</td>
<td>1</td>
</tr>
<tr>
<td>RNURS 36 Nursing in Health &amp; Illness II</td>
<td>9.5</td>
</tr>
<tr>
<td>RNURS 38 Nursing Skills Simulation IV</td>
<td>1</td>
</tr>
<tr>
<td>RNURS 39 Pharmacology for RN Program IV</td>
<td>1</td>
</tr>
</tbody>
</table>

LVN to RN Program

The program for California Licensed Vocational Nurses requires successful completion of all prerequisites, the second-year RN curriculum, and general education requirements.

Admission eligibility to the LVN to RN program requires the completion of prerequisite courses. Only those students formally admitted to the program may enroll in the registered nursing courses. Students may, however, enroll in those non-nursing courses designated below as part of the registered nursing curriculum, while awaiting admission to the program.

Completion of the LVN to RN Program at Los Medanos College qualifies students to take the state board examination (NCLEX-RN) for licensure as Registered Nurse.

LVN to RN Program Curriculum

**Prerequisite Courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 100</td>
<td>3</td>
</tr>
<tr>
<td>MATH 15 or 18, 25 or 30</td>
<td>3-4</td>
</tr>
<tr>
<td>BIOSC 40</td>
<td>4</td>
</tr>
<tr>
<td>BIOSC 45</td>
<td>5</td>
</tr>
<tr>
<td>BIOSC 50</td>
<td>5</td>
</tr>
<tr>
<td>PSYCH 10 or 11</td>
<td>3</td>
</tr>
<tr>
<td>Social Science GE Course</td>
<td>3</td>
</tr>
<tr>
<td>Creative Arts GE Course</td>
<td>3</td>
</tr>
</tbody>
</table>

**Graduation Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMSC 49</td>
<td>1.5</td>
</tr>
<tr>
<td>POLSC 10 or 20</td>
<td>3</td>
</tr>
<tr>
<td>SPEECH 40</td>
<td>3</td>
</tr>
<tr>
<td>Social Science GE Course</td>
<td>3</td>
</tr>
<tr>
<td>Creative Arts GE Course</td>
<td>3</td>
</tr>
</tbody>
</table>

Registered Nursing Curriculum

**First Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RNURS 30</td>
<td>1</td>
</tr>
<tr>
<td>RNURS 31</td>
<td>9.5</td>
</tr>
<tr>
<td>RNURS 33</td>
<td>1</td>
</tr>
<tr>
<td>RNURS 34</td>
<td>1</td>
</tr>
</tbody>
</table>

**Third Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RNURS 30 Leadership/Management/Professionalism</td>
<td>1</td>
</tr>
<tr>
<td>RNURS 36 Nursing in Health &amp; Illness III</td>
<td>9.5</td>
</tr>
<tr>
<td>RNURS 38 Nursing Skills Simulation IV</td>
<td>1</td>
</tr>
<tr>
<td>RNURS 39 Pharmacology for RN Program IV</td>
<td>1</td>
</tr>
</tbody>
</table>

Vocational Nursing

The Vocational Nursing Program is three semesters in length. A grade of “C” or better must be earned in all courses to remain in the program. The Certificate of Achievement is awarded upon successful completion of the program and the competency requirements* (see Competency Requirements). Only those students formally admitted to the program may enroll in vocational nursing courses. Students may, however, enroll in those non-nursing courses while awaiting admission to the program.

Completion of the vocational nursing program qualifies students to take the state board examination (NCLEX-PN) for licensure as a vocational nurse (LVN).
Graduation Requirements

Vocational Nursing Certificate

**Prerequisite Courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOSC 30 Intro to Anatomy and Physiology</td>
<td>3</td>
</tr>
<tr>
<td>COMSC 49 Computer Literacy</td>
<td>1.5</td>
</tr>
<tr>
<td>ENGL 90 Integrated Reading, Writing, and Critical Thinking</td>
<td>5</td>
</tr>
<tr>
<td>MATH 15 or 18, 25 or 30 See LMC catalog for descriptions</td>
<td>3-4</td>
</tr>
<tr>
<td>NUTRI 55 Introduction to Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>VONUR 8 Medical Terminology</td>
<td>1</td>
</tr>
</tbody>
</table>

**First Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>VONUR 4 Introduction to Clinical Pharmacology</td>
<td>1</td>
</tr>
<tr>
<td>VONUR 5 Fundamentals of Vocational Nursing</td>
<td>6</td>
</tr>
<tr>
<td>VONUR 6 Fundamentals of Vocational Nursing Practice</td>
<td>5.5</td>
</tr>
<tr>
<td>VONUR 7 Vocational Nursing Role Relationships</td>
<td>1</td>
</tr>
</tbody>
</table>

**Second Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>VONUR 10 Intermediate Core Concepts in Clinical Pharmacology</td>
<td>1</td>
</tr>
<tr>
<td>VONUR 11 Medical Surgical Nursing</td>
<td>5</td>
</tr>
<tr>
<td>VONUR 12 Medical Surgical Nursing Practice</td>
<td>5.5</td>
</tr>
</tbody>
</table>

**Third Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>VONUR 15 Advanced Core Concepts in Clinical Pharmacology</td>
<td>1</td>
</tr>
<tr>
<td>VONUR 16 Family Centered Nursing</td>
<td>6</td>
</tr>
<tr>
<td>VONUR 17 Family Centered Nursing Practice</td>
<td>5.5</td>
</tr>
<tr>
<td>VONUR 18 Professional Issues in Vocational Nursing</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Required Courses:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTEC 10 Introduction to Process Technology</td>
<td>3</td>
</tr>
<tr>
<td>PTEC 12 Petrochemical Safety, Health and Environment</td>
<td>1</td>
</tr>
<tr>
<td>PTEC 24 Process Instrumentation</td>
<td>3</td>
</tr>
<tr>
<td>PTEC 25 Process Technology I – Equipment</td>
<td>3</td>
</tr>
<tr>
<td>PTEC 27 Applied Instrumentation</td>
<td>1</td>
</tr>
<tr>
<td>PTEC 35 Process Technology II – Systems</td>
<td>3</td>
</tr>
<tr>
<td>PTEC 45 Process Technology III – Operations</td>
<td>3</td>
</tr>
<tr>
<td>PTEC 48 Process Trouble Shooting</td>
<td>4</td>
</tr>
<tr>
<td>MATH 30* Intermediate Algebra</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 6 Introduction to Inorganic and Physical Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>CHEM 7 Introduction General, Organic and Biochemistry</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 15** Introduction to Physics</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total Units Required in Major Courses** ................. 33

* Math 30 also satisfies the Math requirement for the AS Degree.
** Physics 15 also satisfies the Physical Science requirement for the AS Degree.

**English and Computer Literacy Graduation Requirements for the Certificate:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 90</td>
<td>3</td>
</tr>
</tbody>
</table>

**Complete any one of these courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMSC 40 Introduction to Computers</td>
<td>4</td>
</tr>
<tr>
<td>COMSC 49 Computer Literacy</td>
<td>1.5</td>
</tr>
<tr>
<td>COMSC 60 Emerging Microcomputer Technologies and Applications</td>
<td>4</td>
</tr>
<tr>
<td>BUS 18 Microsoft EXCEL for Windows</td>
<td>3</td>
</tr>
<tr>
<td>BUS 65 Introduction to Word Processing</td>
<td>3</td>
</tr>
<tr>
<td>BUS 66 Intermediate Word Processing</td>
<td>3</td>
</tr>
<tr>
<td>BUS 67 or Advanced Word Processing</td>
<td>3</td>
</tr>
<tr>
<td>BUS 68 Intro to Desktop Publishing on the PC</td>
<td>3</td>
</tr>
</tbody>
</table>

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Process Technology

**Degree:** Associate of Science – Process Technology

**Certificate:** Certificate of Achievement - Process Technology

The Process Technology Program is designed to provide students with skills necessary to succeed in the chemical and refining industries. “Process Technicians” are skilled plant operators who safely run the refineries and chemical plants on a 24 hour per day / 365 days per year basis. The curriculum is a combination of hands-on laboratory experiences, classroom lectures, and industrial site visits.

For the Certificate of Achievement in Process Technology, complete 33 units of coursework and the Graduation Requirements in English, Math and Computer Competency listed below. Consult a Los Medanos College counselor to develop your education plan for the Certificate of Achievement.

For the Associate of Science Degree in Process Technology, complete 33 units of coursework listed below as well as the LMC General Education and Graduation requirements. Consult a Los Medanos College counselor to develop your education plan for the Associate of Science Degree.

**Program entry skills:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 25 Elementary algebra</td>
<td>5</td>
</tr>
<tr>
<td>ENGL 90 Integrated Reading, Writing, and Critical Thinking</td>
<td>5</td>
</tr>
</tbody>
</table>

**Required Courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTEC 10 Introduction to Process Technology</td>
<td>3</td>
</tr>
<tr>
<td>PTEC 12 Petrochemical Safety, Health and Environment</td>
<td>1</td>
</tr>
<tr>
<td>PTEC 24 Process Instrumentation</td>
<td>3</td>
</tr>
<tr>
<td>PTEC 25 Process Technology I – Equipment</td>
<td>3</td>
</tr>
<tr>
<td>PTEC 27 Applied Instrumentation</td>
<td>1</td>
</tr>
<tr>
<td>PTEC 35 Process Technology II – Systems</td>
<td>3</td>
</tr>
<tr>
<td>PTEC 45 Process Technology III – Operations</td>
<td>3</td>
</tr>
<tr>
<td>PTEC 48 Process Trouble Shooting</td>
<td>4</td>
</tr>
<tr>
<td>MATH 30* Intermediate Algebra</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 6 Introduction to Inorganic and Physical Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>CHEM 7 Introduction General, Organic and Biochemistry</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 15** Introduction to Physics</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total Units Required in Major Courses** ................. 33

* Math 30 also satisfies the Math requirement for the AS Degree.
** Physics 15 also satisfies the Physical Science requirement for the AS Degree.

**English and Computer Literacy Graduation Requirements for the Certificate:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 90</td>
<td>3</td>
</tr>
</tbody>
</table>

**Complete any one of these courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMSC 40 Introduction to Computers</td>
<td>4</td>
</tr>
<tr>
<td>COMSC 49 Computer Literacy</td>
<td>1.5</td>
</tr>
<tr>
<td>COMSC 60 Emerging Microcomputer Technologies and Applications</td>
<td>4</td>
</tr>
<tr>
<td>BUS 18 Microsoft EXCEL for Windows</td>
<td>3</td>
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<tr>
<td>BUS 65 Introduction to Word Processing</td>
<td>3</td>
</tr>
<tr>
<td>BUS 66 Intermediate Word Processing</td>
<td>3</td>
</tr>
<tr>
<td>BUS 67 or Advanced Word Processing</td>
<td>3</td>
</tr>
<tr>
<td>BUS 68 Intro to Desktop Publishing on the PC</td>
<td>3</td>
</tr>
</tbody>
</table>

---

Psychology

**Degree:** Associate of Arts – Psychology

The Psychology major is designed to meet the wide variety of needs of students interested in the field of Psychology. This major can be used for the purpose of enhancing job success or as preparation for further study at a four-year institution. It particularly provides background education for students wishing to qualify for jobs in Mental Health or Social Science agencies as a paraprofessional.

For the Associate of Art Degree in Psychology, complete 18-19 units of coursework listed below as well as the LMC General Education and Graduation requirements. Consult a Los Medanos College counselor to develop your education plan for the Associate of Art Degree.
College Skills Certificate in Real Estate

These career certificates are designed to help students develop employment skills and provide them with recognition in the short-term while they work towards achieving their long-term goals.

College Skills Certificate: Real Estate Broker

REAL 10  Legal Aspects of Real Estate  3
REAL 15  Real Estate Appraising  3
REAL 20  Real Estate Practice  3
REAL 25  Real Estate Finance  3
Elective choose from:
REAL 45, or BUS 18/181/186/45/294  3
15 Total Units

College Skills Certificate: Real Estate Sales

REAL 5  Real Estate Principles  3
REAL 20  Real Estate Practice  3
Elective choose from:
REAL 10/15/25/45 or
BUS 18/181/186/45/294  3
9 Total Units

Recording Arts

Degree:  Associate of Arts – Recording Arts
Certificate:  Certificate of Achievement – Recording Arts

The Recording Arts Program at LMC is the finest of its kind in the U.S.A. Curriculum is designed in cooperation with audio engineers, producers, and other recording arts professionals. The interdisciplinary program includes courses in music, audio engineering, and business. Faculty, comprised of recording engineers and other prominent professionals from the audio industry, prepare students technically and intellectually to compete in the recording industry job market.

For the Certificate of Achievement in Recording Arts, complete 32 units of coursework listed below as well as the Graduation Requirements in English, Math and Computer Competency. Consult a Los Medanos College counselor to develop your education plan for the Certificate of Achievement.

For the Associate of Art Degree in Recording Arts, complete 32 units of coursework listed below as well as the LMC General Education and Graduation requirements. Consult a Los Medanos College counselor to develop your education plan for the Associate of Art Degree.

Required Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RA 10</td>
<td>3</td>
</tr>
<tr>
<td>RA 12</td>
<td>3</td>
</tr>
<tr>
<td>RA 15</td>
<td>3</td>
</tr>
</tbody>
</table>

* Required for California Recording Arts I License
** Electives for California Recording Arts License
*** Required for California Recording Arts II License
## Graduation Requirements

### MAJOR PROGRAM REQUIREMENTS

#### 2008–2009

Los Medanos College

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RA 20</td>
<td>Applied Recording Theory</td>
<td>3</td>
</tr>
<tr>
<td>RA 21</td>
<td>Basic Session Producing</td>
<td>2</td>
</tr>
<tr>
<td>RA 25</td>
<td>Basic Tracking Sessions</td>
<td>3</td>
</tr>
<tr>
<td>RA 30</td>
<td>Advanced Studio Procedure</td>
<td>3</td>
</tr>
<tr>
<td>RA 32</td>
<td>Recording Arts Workshop (min)</td>
<td>1</td>
</tr>
<tr>
<td>RA 35</td>
<td>Protools Production &amp; Editing</td>
<td>3</td>
</tr>
<tr>
<td>RA 40</td>
<td>Audio for Video Post</td>
<td>3</td>
</tr>
</tbody>
</table>

**And select a minimum of 2 electives:**

- EETEC 10 Basic Electricity 3
- MUSIC 15 Basic Music 3
- MUSIC 89 Music Business Management 2
- MUSIC 93 Introduction to MIDI/Synthesizers 2
- MUSIC 94 Composition/MIDI Workshop I 2
- MUSIC 95 Composition/MIDI Workshop II 2
- RA 16 Recording Studio Management 2
- RA 17 Recording Industry Employment Strategies 2
- RA 18 Introduction to Video Production 2.5
- RA 33 Summer Recording Arts Workshop 3

*Electives approved by Recording Arts Department Chair*

**Total Units Required in Major Courses** ............ **29-32**

---

### Sign Language

**Certificates:** College Skills Certificate - American Sign Language

**College Skills Certificate: American Sign Language**

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIGN 65</td>
<td>American Sign Language I</td>
<td>3</td>
</tr>
<tr>
<td>SIGN 66</td>
<td>American Sign Language II</td>
<td>3</td>
</tr>
<tr>
<td>SIGN 67</td>
<td>American Sign Language III</td>
<td>3</td>
</tr>
<tr>
<td>SIGN 68</td>
<td>American Sign Language IV</td>
<td>3</td>
</tr>
<tr>
<td>SIGN 70</td>
<td>Finger spelling I</td>
<td>.5</td>
</tr>
<tr>
<td>SIGN 71</td>
<td>Finger spelling II</td>
<td>.5</td>
</tr>
</tbody>
</table>

13 Total Units

---

### Sociology

**Degree:** Associate Degree - Sociology

Sociology is the study of society — the forms, institutions and functions of human groups. Specifically, sociology examines society, culture, social institutions, collective behavior and social interaction. LMC’s approach to Sociology emphasizes the basic concepts, techniques and ethical issues of sociological investigation and includes generation of solutions to identified problems. Sociology courses offer excellent preparation for transfer or for enhancement of existing job skills. The program also provides the background education for students entering jobs in the human services professions — such as education, mental health and social services agencies — at the sub-professional level as aides working with those with professional degrees.

For the Associate of Science Degree in Sociology, complete 18-19 units of coursework listed below as well as the LMC General Education and Graduation requirements. Consult a Los Medanos College counselor to develop your education plan for the Associate of Science Degree.

#### Required Courses: **Units**

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTHR 5*</td>
<td>General Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>OR</td>
<td>ANTHR 6*</td>
<td>Cultural Anthropology</td>
</tr>
<tr>
<td>PSYCH 10*</td>
<td>Psychology: Individual and Social Processes</td>
<td>3</td>
</tr>
<tr>
<td>OR</td>
<td>PSYCH 11*</td>
<td>General Psychology</td>
</tr>
<tr>
<td>SOcio 15</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SOcio 16</td>
<td>Introduction to Social Problems</td>
<td>3</td>
</tr>
</tbody>
</table>

**And select a minimum of 2 elective courses:**

- ADJUS 120 Introduction to the Criminal Justice System 3
- ANTHR 5* | General Anthropology | 3     |
- OR | ANTHR 6* | Cultural Anthropology | 3     |
- ANTHR 7 | Anthropology of Culture Change | 3     |
- MATH 34 | Probability and Statistics | 4     |
- PSYCH 10* | Psychology: Individual and Social Processes | 3     |
- OR | PSYCH 11* | General Psychology | 3     |
| PSYCH 14 | Psychology of Human Sexuality | 3     |

*Courses cannot be used to meet both required and elective categories.

**Total Units Required in Major Courses** ............ **18-19**

---

### Spanish

**Certificates:** College Skills Certificate - Spanish

**College Skills Certificate: Spanish**

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 52</td>
<td>Intermediate Spanish I</td>
<td>5</td>
</tr>
<tr>
<td>SPAN 53</td>
<td>Intermediate Spanish III</td>
<td>5</td>
</tr>
</tbody>
</table>

10 Total Units
Travel Marketing

Degree: Associate of Science – Travel Marketing
Certificate: Certificate of Achievement – Travel Marketing
College Skills Certificate: Travel Marketing
College Skills Certificate: Home-Based Travel Specialist
College Skills Certificate: Cruise Specialist

Travel Marketing Associate Degree and Certificate of Achievement

This 21-unit certificate provides a well-rounded education and includes a selection of courses designed to prepare students for placement in a position as a travel professional in the travel industry. Opportunities include employment as a full-service travel consultant in a travel agency or a travel specialist in the selected area of specialization. This certificate can be completed in two semesters.

In addition to the 21 units of courses in the Travel Marketing Certificate of Achievement, complete the Los Medanos College General Education requirements for an Associate of Science Degree in Travel Marketing. This degree can lead to placement in positions of greater responsibility in the travel industry. Consult a Los Medanos College counselor to develop your personal education plan for the A.S. Degree.

Required Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRAVL 72 Introduction to Travel</td>
<td>3</td>
</tr>
<tr>
<td>TRAVL 76 Travel Sales and Marketing</td>
<td>3</td>
</tr>
<tr>
<td>TRAVL 77 Customized Vacation Planning</td>
<td>2</td>
</tr>
<tr>
<td>TRAVL 95 Advanced Travel Concepts</td>
<td>.3</td>
</tr>
</tbody>
</table>

Select 3 units of Destination Specialist Geography courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRAVL 74 North American Destination Specialist</td>
<td>3</td>
</tr>
<tr>
<td>TRAVL 75 Western Europe Destination Specialist</td>
<td>3</td>
</tr>
<tr>
<td>TRAVL 83 Hawaii Destination Specialist</td>
<td>1.5</td>
</tr>
<tr>
<td>TRAVL 84 Caribbean Destination Specialist</td>
<td>1.5</td>
</tr>
<tr>
<td>TRAVL 85 South Pacific Destination Specialist</td>
<td>1.5</td>
</tr>
<tr>
<td>TRAVL 86 East Asia Destination Specialist</td>
<td>1.5</td>
</tr>
</tbody>
</table>

And select a minimum of 3 elective units:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRAVL 82 All About Cruising</td>
<td>3</td>
</tr>
<tr>
<td>TRAVL 83 Hawaii Destination Specialist</td>
<td>1.5</td>
</tr>
<tr>
<td>TRAVL 84 Caribbean Destination Specialist</td>
<td>1.5</td>
</tr>
<tr>
<td>TRAVL 85 South Pacific Destination Specialist</td>
<td>1.5</td>
</tr>
<tr>
<td>TRAVL 86 East Asia Destination Specialist</td>
<td>1.5</td>
</tr>
<tr>
<td>TRAVL 72 Introduction to Travel</td>
<td>3</td>
</tr>
<tr>
<td>TRAVL 76 Travel Sales and Marketing</td>
<td>3</td>
</tr>
<tr>
<td>TRAVL 95 Advanced Travel Concepts</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units Required in Major Courses ................. 21

* TRAVL 900 courses do not necessarily transfer to four-year colleges and universities (please see a counselor regarding transfer information and degree applicability).

College Skills Certificate in Travel Marketing

This 12-unit certificate provides a good foundation for placement in an entry-level position in the travel industry, such as a travel assistant in a travel agency. This certificate can be completed in one semester.

Required Courses (9 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRAVL 72 Introduction to Travel</td>
<td>3</td>
</tr>
<tr>
<td>TRAVL 76 Travel Sales and Marketing</td>
<td>3</td>
</tr>
<tr>
<td>TRAVL 95 Advanced Travel Concepts</td>
<td>3</td>
</tr>
</tbody>
</table>

And select a minimum of 3 elective units:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRAVL 74 North American Destination Specialist</td>
<td>3</td>
</tr>
<tr>
<td>TRAVL 75 Western Europe Destination Specialist</td>
<td>3</td>
</tr>
<tr>
<td>TRAVL 77 Customized Vacation Planning</td>
<td>2</td>
</tr>
<tr>
<td>TRAVL 82 All About Cruising</td>
<td>3</td>
</tr>
<tr>
<td>TRAVL 83 Hawaii Destination Specialist</td>
<td>1.5</td>
</tr>
<tr>
<td>TRAVL 84 Caribbean Destination Specialist</td>
<td>1.5</td>
</tr>
<tr>
<td>TRAVL 85 South Pacific Destination Specialist</td>
<td>1.5</td>
</tr>
<tr>
<td>TRAVL 86 East Asia Destination Specialist</td>
<td>1.5</td>
</tr>
<tr>
<td>TRAVL 75 Western Europe Destination Specialist</td>
<td>3</td>
</tr>
<tr>
<td>TRAVL 76 Travel Sales and Marketing</td>
<td>3</td>
</tr>
<tr>
<td>TRAVL 95 Advanced Travel Concepts</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units Required in Major Courses ................. 12

College Skills Certificate: Home-Based Travel Specialist

This 17-unit certificate is the first of its kind in the country. As the number of home-based travel professionals grows, the demand for education also grows. Required courses for this certificate will address critical issues and considerations for students who are planning to establish a home-based travel business. This certificate can be completed in two semesters.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRAVL 72 Introduction to Travel</td>
<td>3</td>
</tr>
<tr>
<td>TRAVL 76 Travel Sales and Marketing</td>
<td>3</td>
</tr>
<tr>
<td>TRAVL 72 Introduction to Travel</td>
<td>3</td>
</tr>
<tr>
<td>TRAVL 76 Travel Sales and Marketing</td>
<td>3</td>
</tr>
<tr>
<td>TRAVL 101 Home-Based Travel – Is it for You?</td>
<td>.5</td>
</tr>
<tr>
<td>TRAVL 102 Establishing a Home-Based Travel Business</td>
<td>.5</td>
</tr>
<tr>
<td>TRAVL 103 Marketing and Promoting a Home Based Travel Business</td>
<td>.5</td>
</tr>
<tr>
<td>TRAVL 104 Resources for the Home-Based Travel Professional</td>
<td>.5</td>
</tr>
<tr>
<td>TRAVL 105 Business and Financial Plans for Home-Based Travel</td>
<td>.5</td>
</tr>
<tr>
<td>TRAVL 106 Home-Based Travel and the Law</td>
<td>.5</td>
</tr>
<tr>
<td>TRAVL 120 Certified Travel Associate (CTA)</td>
<td>3</td>
</tr>
<tr>
<td>TRAVL 900* Selected Topics in Travel</td>
<td>.3 - .3</td>
</tr>
</tbody>
</table>

Total Units Required in Major Courses ................. 21

* TRAVL 900 courses do not necessarily transfer to four-year colleges and universities (please see a counselor regarding transfer information and degree applicability).
Graduation Requirements

Professional  .5
TRAVL 105 Business and Financial Plans for Home-Based Travel  .5
TRAVL 106 Home-Based Travel and the Law  .5

Total Units Required in Major Courses  9

Select 3 units of Destination Specialist Geography courses:
TRAVL 74 North American Destination Specialist 3
TRAVL 75 Western Europe Destination Specialist 3
TRAVL 83 Hawaii Destination Specialist 1.5
TRAVL 84 Caribbean Destination Specialist 1.5
TRAVL 85 South Pacific Destination Specialist 1.5
TRAVL 86 East Asia Destination Specialist 1.5

And select a minimum of 5 elective units:
TRAVL 74 North American Destination Specialist 3
TRAVL 75 Western Europe Destination Specialist 3
TRAVL 77 Customized Vacation Planning 2
TRAVL 82 All About Cruising 3
TRAVL 83 Hawaii Destination Specialist 1.5
TRAVL 84 Caribbean Destination Specialist 1.5
TRAVL 85 South Pacific Destination Specialist 1.5
TRAVL 86 East Asia Destination Specialist 1.5
TRAVL 95 Advanced Travel Concepts 3
TRAVL 120 Certified Travel Associate (CTA) 3
TRAVL 900* Selected Topics in Travel .3 –3

Total Units Required in Major Courses 17

College Skills Certificate: Cruise Specialist
This 8-unit certificate prepares the student to specialize in selling cruises. Employment possibilities include working for a full-service or a cruise-only travel agency, or operating a home-based travel business. Required courses are not offered every semester, so careful planning will minimize the amount of time to complete this certificate.

Required Courses:  Units
TRAVL 82 All About Cruising 3
TRAVL 76 Travel Sales and Marketing 3
TRAVL 77 Customized Vacation Planning 2

Total Units Required in Major Courses  8

Note that it is practical to work toward multiple certificates at the same time. This will allow students to personalize their education and tailor it to meet their individual goals.

For information regarding specific course requirements, contact the Travel Department chair or inquire in the Counseling Center. You may also check online at www.losmedanos.edu/centram/index.html.

Welding Technology

Degree  Associate of Science – Welding Technology
Certificate  Certificate of Achievement – Welding Technology

The program in Welding Technology offers instruction in the principles and practices of welding processes. Successful completion of the program provides sufficient training for entry level into the field of production type welding. Students have access to the latest instructional and practical experiences in a spacious, modern shop facility.

For the Certificate of Achievement in Welding Technology, complete 24 units of coursework listed below as well as the Graduation Requirements in English, Math and Computer Competency. Consult a Los Medanos College counselor to develop your education plan for the Certificate of Achievement.

For the Associate of Science Degree in Welding Technology, complete 24 units of coursework listed below as well as the LMC General Education and Graduation requirements. Consult a Los Medanos College counselor to develop your education plan for the Associate of Science Degree.

Required Courses:  Units
WELD 10 Basic Arc Welding Theory 3
WELD 11 Basic Arc Welding Practice 3
WELD 15 Basic Oxyacetylene Welding 2
WELD 16 Advanced Oxyacetylene Welding 1
WELD 21 Advanced Arc Welding Practice 3
WELD 31 TIG, MIG and FCA Welding Practice 3
WELD 35 Blueprint Reading for Welders 3
WELD 40 TIG, MIG and FCA Welding Theory 3
WELD 41 Pipe Welding Practice 3

Total Units Required in Major Courses  24

Note: A reading/writing exam option is available for Welding Technology majors to fulfill the reading/writing competency requirement.
Administration of Justice

At the completion of the program, the student will be able to:

1. Be academically prepared to obtain an entry-level or mid-level position within the Criminal Justice System.
2. Apply critical thinking to research evaluate, analyze and synthesize criminal justice information.
3. Demonstrate the skills and knowledge necessary to take and pass local, state, and federal law enforcement entry level examination or career advancement examinations.
4. Appropriately apply the hands-on and technological skills necessary to succeed in the field of criminal justice.
5. Demonstrate excellent communication skills (oral and/or written) that need to be demonstrated in these carried professions.
6. Demonstrate professional and ethical responsibility in their decisions.

Art/Humanities

At the completion of the program, the student should be able to:

1. Identify the integral subjects that comprise the Humanities (philosophy, religion, history, literature, art and music).
2. Define and discuss the characteristics of human culture and the rise and fall of civilizations through history.
3. Discuss the arc of humanity's attempt to understand and explain itself and the cosmos through intellectual history, from the ancient through contemporary worlds.
4. Connect the commonalities and distinguish the differences between divinely revealed religion, human philosophical constructs and science.
5. Explain the connection between the trends and events of history with those of the visual, literary and performing arts.
6. Relate the study of humanities to the development of the skills necessary to create responsible and useful civic participation in the political life of contemporary society.

Appliance Service Technology

At the completion of the program, the student should be able to:

1. Be able to diagnose a system problem, determine what type of test equipment to use and make an estimate of what will have to be done to complete the repair.
2. Demonstrate problem solving techniques used in troubleshooting to determine whether you have an electrical or mechanical failure and how to isolate the cause.
3. Using written or oral service directions that are used in the appliance field be able to demonstrate mechanical knowledge by diagnosing the failure, and locating and replacing the proper component.
4. Be able to locate service materials electronically to diagnose an electrical problem using a schematic diagram and sequence chart.
5. Be able to demonstrate the skills and knowledge necessary to take and pass the federal EPA exam required for employment in the Appliance field.
6. Be prepared for entry level employment in the appliance field by passing an industry employment test (NCEE) and obtaining a job in that field.

Art/Fine Arts

At the completion of the program, the student should be able to:

1. Choose appropriate tools and materials for specific needs.
2. Demonstrate safe practices in various two- and three-dimensional media and studios.
3. Demonstrate problem-solving techniques in the process of design and execution.
4. Present, explain and justify their conceptual design solutions in a professional manner.
5. Critique the solutions of others in a positive, constructive manner.
6. Devise their own strategies for solving visual construction problems.
7. Identify and discuss artwork and styles from a wide range of historic eras and geographic locations.
8. Identify and discuss specific artists whose work they respond positively to, and how these works contribute to this positive response.
Art/Graphic Communications
At the completion of the program, the student should be able to:
1. Choose appropriate tools and materials, including hardware, software and media, for specific needs.
2. Use software and hardware in an appropriate and efficient manner.
3. Demonstrate problem-solving techniques, both on the computer and in the process of design and execution.
4. Present, explain and justify their conceptual design solutions in a professional manner.
5. Critique the solutions of others in a positive, constructive manner.
6. Devise their own strategies for solving visual construction problems.
7. Explain the applications of computer-aided art and design for industry uses.

Automotive Technology
At the completion of the program, the student will be able to:
1. Be prepared to enter the automotive repair field at the apprentice level or higher.
2. Have the skills to properly use hand tools, diagnostic equipment, repair manuals and maintenance equipment.
3. Obtain the vocabulary and knowledge to effectively explain the systems and components to customers and other technicians.
4. Apply their training and skills to successfully confirm, diagnose and properly repair failed systems to factory standards.
5. Have the ability to pass the standard ASE (automotive service excellence) tests, also be prepared or have received licensing including the California licensing.

Astronomy
At the completion of the program, the student should be able to:
1. Read critically sections of the text and demonstrate an understanding of the major conceptions of the universe and modern astronomy in class discussions and in writing.
2. Write effectively in text readings, in-class responses, observing assignments, planet reports, and essays to show a grasp of the overall characteristics of the universe as understood by astronomers and the process and mode of inquiry by which the conceptions are derived.
3. Speak effectively in class discussions and in oral reports about planets, astronomical techniques, culture reports, and/or other topics.
4. Apply interdisciplinary connections and approaches from other sciences and/or the humanities to solve problems. Topics explored might be the conflict between the scientific and Biblical accounts of Creation, the search for life in the universe, or astronomical events, such as cosmic rays and asteroid impacts, that affect the evolutionary history of life on Earth.
5. Think critically and creatively to answer questions and solve problems about modern astronomical concepts and the process of scientific inquiry by which they have been derived, including:
   - Patterns and cycles of observational astronomy
   - Structure and motions in the solar system
   - Tools and methods
   - Physical characteristics of solar system
   - The nature and life cycle of stars
   - Galaxies and cosmology
6. Discuss the ethical implications of issues such as spending public money on astronomy, revealing our presence on Earth, cross-planet contamination, terraforming another planet, human vs. robotic space exploration, and the Search for Extraterrestrial Intelligence.
7. Discuss the practice of astronomy and the contributions to astronomy of diverse cultures.

Behavioral Sciences
(Anthropology, Psychology, Sociology)
At the completion of the Los Medanos College general education programs the student will:
1. Understand connections among disciplines and apply interdisciplinary approaches to problem solving.
2. Think critically and creatively.
3. Possess a worldview informed by diverse social, multicultural and global perspectives.

Biological Science
At the completion of the program our students should be able to:
1. Be able to distinguish a scientific hypothesis from a nonscientific idea.
2. Be aware of the chemical nature of life and apply chemical principles to everyday concepts such as diet and health.
3. Be able to find common ground between the functions of their own bodies and the functions of other life forms on Earth.
4. Be able to use a microscope so they can see that the living world is full of life forms (such as cells and bacteria) that are too small for them to see with their unaided eyes.
5. Be able to describe a few different ways that humans or other living organisms maintain internal homeostasis.
6. Be able to describe the basic relationship between DNA, proteins, and the transmission and evolution of hereditary traits.
Business

Accounting/Business Administration/Transfer

At the completion of the program, the student will:

1. Be academically prepared to obtain an entry-level position in business
2. Use critical thinking to research, analyze and synthesize information to solve common business problems.
3. Demonstrate strong oral and written skills necessary to effectively collaborate and communicate from a global perspective with diverse groups of people.
4. Apply business communication skills (written and/or oral) by appropriately using terminology and the business language.
5. Demonstrate knowledge of the technological skills required to succeed in the modern office and/or business environments.

Office Administration/Small Business Management/Management & Supervision

At the completion of the program, the student should be able to:

1. Be academically prepared to obtain an entry-level position in business
2. Use critical thinking to research, analyze and synthesize information to solve common business problems.
3. Demonstrate strong oral and written skills necessary to effectively collaborate and communicate from a global perspective with diverse groups of people.
4. Apply business communication skills (written and/or oral) by appropriately using terminology and the business language.
5. Demonstrate knowledge of the technological skills required to succeed in the modern office and/or business environments.

Chemistry

At the completion of the program, the student be able to:

1. Applied scientific methodology, in all its explicit steps, to either:
   • solve a complex problem posed in the classroom, or
   • complete a significant laboratory analysis, or
   • carry out an extensive study at one of LMC’s field stations.
2. Solved problems concerning the atomic and molecular structure of matter, using the periodic table plus quantum mechanics as the organizing and predictive models for this analysis.
3. Solved stoichiometric problems, including those complicated by the presence of limiting reagents.
4. Correctly predicted the products of standard inorganic, organic, biochemical, or nuclear reactions.
5. Applied the principles of thermodynamics and kinetics to solve problems:
6. Involving energy and entropy changes characteristic of chemical and physical reactions
   • concerning rates and mechanisms of chemical reactions
   • involving the principles of equilibrium
7. Demonstrated an understanding of electromagnetic radiation (i.e., light energy) and its interactions with matter, by carrying out spectroscopic analyses of atoms and compounds.
8. Conducted laboratory or field analyses using modern, professional technologies, selected from colorimetric, titrimetric, gravimetric, electrochemical, spectrometric, and chromatographic equipment and instruments.
9. Engaged in at least one hands-on research or restoration activity at a field site of LMC or a community partner, in order to utilize the distinct opportunity provided by having the California Delta in our backyard, and to appreciate the effort needed to act as good stewards of our local watersheds.

Child Development

At the completion of the program, the student will be able to:

1. Obtain, maintain, and advance in permit licensure and/or prepare for upper division transfer through appropriate academic preparation.
2. Apply critical thinking to research, observe, assess, evaluate, analyze, and synthesize early learning and child development information.
3. Utilize effective written and verbal communication techniques to ensure optimum communication with children, families, and professional colleagues.
4. Select, develop, and/or use educational equipment, curriculum, assessments, materials, technology, and environments that are culturally relevant and developmentally appropriate.
5. Demonstrate the skills and knowledge necessary to obtain employment or advancement in early care and education careers.
Computer Science

At the completion of the program, the student should be able to:

1. Apply their knowledge of general computer hardware and software concepts to the description, configuration and operation of modern microcomputers.
2. Demonstrate a professional level of technological proficiency with a broad array of computer applications software.
3. Demonstrate the ability to configure a new microcomputer, install operating systems software, and install and configure an array of applications software.
4. Use techniques and skills learned in the program to diagnose, troubleshoot and repair a variety of common microcomputers.
5. Communicate (oral and/or writing) effectively with other Computer personnel, in a multitude of technical environments.
6. Demonstrate the ability to analyze problems, and develop effective solutions.
7. Apply their knowledge of systems analysis and design to the analysis of requirements for developing computerized systems, and develop action plans for implementing a solution, utilizing an appropriate programming environment.
8. Be technologically proficient to obtain entry-level or mid-level positions and pass certification exams in the Information Technology industry.

Cosmetology

– Currently Being Developed

Drama

At the completion of the program, the student should be able to:

1. Critically evaluate a film and/or play by writing an essay which synthesizes social and historical events and important themes in the films and plays.
2. Effectively communicate onstage as a performer or direct others in scenes to create a dramatic statement. This is evaluated through clear and projected speech, body fluidity and movement and specific, conscious choices a student makes.
3. Write a short screenplay or play which has at least 2 characters in conflict with one another that deals with interpersonal, social or political issues in a way which shows creativity and innovation. Or critically evaluate a short screenplay or play or a full length screenplay or play in an essay which shows the student understands the essential elements of dramatic writing.
4. Show appreciation for a stage production by writing an essay or critique which reflects on the qualities which make for excellence on the stage and which draws upon historical knowledge and understanding of the entire theatrical process.
5. Write, shoot and direct a short documentary film which is coherent and shows creativity of thought and process. Or write an essay or answer questions which shows an appreciation of the documentary film.
6. Observe, monitor and evaluate strengths and weaknesses of oneself, then apply feedback to improve skills and learning.

Electrical/Electronic Technology

– Currently Being Developed

Emergency Medical Services

At the completion of the program, the student will be able to:

1. Be academically prepared to obtain an entry-level position in the Emergency Medical Services Industry.
2. Demonstrate the skills and knowledge necessary to take and pass the national Registry EMT exam, as well as entry level exams for Paramedic Programs.
3. Apply critical thinking to research, evaluate, analyze and synthesize EMS related information.
4. Demonstrate excellent communication skills (oral and/or written) as well as excellent manipulative skills in an EMS field related environment.
5. Demonstrate knowledge of EMS industry manipulative skills and equipment, and ability to apply the skills necessary to succeed in the EMS industry.

Engineering

At the completion of the program, the student will be able to:

1. Apply knowledge of math, science, and engineering to identify, formulate, and solve engineering problems.
2. Design and perform experiments, as well as to analyze and interpret data.
3. Design a system, component, or process to meet desired needs.
4. Demonstrate professional ethical responsibility.
5. Communicate effectively and perform on multi-disciplinary teams.
6. Judge the effects of engineering projects on society and the environment.
7. Engage in life-long learning and explain contemporary issues.
8. Use the techniques, skills, and modern engineering tools necessary for engineering practice.
**English (Transfer)**

At the completion of the program, the student will be able to:

1. Read independently for a variety of purposes in college-level materials
2. Read using a critical thinking, a problem-solving approach
3. Respond coherently to text in critical, creative and personal ways
4. Write logical, coherent, developed academic essays
5. Use writing independently as a tool for learning and communicating.
6. Engage in writing as a recursive process.
7. Observe, monitor and evaluate strengths and weaknesses, then apply feedback to improve skills and learning
8. Use college resources to expand learning effectiveness.

**English (Developmental)**

At the completion of the program, the student will be able to:

1. Read independently for a variety of purposes in college-level materials
2. Read using a critical thinking, problem-solving approach
3. Respond coherently to text in critical, creative and personal ways
4. Write logical, coherent, developed academic essays
5. Observe, monitor and evaluate strengths and weaknesses, then apply feedback to improve skills and learning
6. Use college resources to increase learning effectiveness.

**Environmental Sciences**

- Currently Being Developed

**Fire Technology/Fire Academy**

- Currently Being Developed

**Foreign Language**

1. **Communication**
   - Manage conversations in a culturally appropriate way
     - Provide and obtain information; express feelings and emotions; exchange opinions
     - Understand interpret the written and spoken language at the cultural or figurative level
     - Present information, concepts, and ideas on a variety of topics, moving from memorized to creative use of language.

2. **Cultures**
   - Analyze the relationship between the practices—the “what” and perspectives the “why” of the target language culture, and use that understanding to interpret events in the modern world.
   - Examine and analyze their own culture more objectively.

3. **Connections**
   - Go beyond personal survival or literary topics to further their understanding of other disciplines through the target language.
   - Recognize the distinctive viewpoints that are available only through the target language and its many cultures, thereby becoming better informed citizens of the United States and of the world.
4. **Comparisons**  
   Compare English and the target language in order to identify and appreciate the unique way language is used to carry out specific tasks and functions, and to deepen their understanding of the structure and vocabulary of English.

5. **Communities**  
   Use the target language for personal enjoyment and enrichment.

**Humanistic Studies/Philosophy**  
*At the completion of a philosophy course students should:*  
1. Be able to apply theoretical concepts to the world they live in,  
2. To identify ethical values and moral implications inherent in course content,  
3. To analyze and present arguments clearly in both writing and speech.

**Journalism**  
*At the completion of the program, the student should be able to:*  
1. Be academically prepared to transfer to a journalism program at a four-year university or to obtain an entry-level job in journalism or a related field.  
2. Demonstrate the knowledge, attitudes and skills necessary for careers in journalism and related fields.  
3. Possess a portfolio of published work suitable for internship/job applications and interviews.

**Liberal Arts**  
*Currently Being Developed*

**Management and Supervision**  
*At the completion of the program, the student should be able to:*  
1. Be academically prepared to obtain an entry-level position in business.  
2. Use critical thinking to research, analyze and synthesize information to solve common business problems.  
3. Demonstrate strong oral and written skills necessary to effectively collaborate and communicate from a global perspective with diverse groups of people.  
4. Apply business communication skills (written and/or oral) by appropriately using terminology and the business language.  
5. Demonstrate knowledge of the technological skills required to succeed in the modern office and/or business environments.

**Mathematics (Transfer)**  
*Students completing transfer-level math courses at LMC will demonstrate:*  
1. **Preparation and Mathematical Maturity:** Be prepared for the mathematical reasoning required in upper division work in their major, including the ability to generalize mathematical concepts and comprehend increasing levels of mathematical abstraction.  
2. **Mathematical Literacy:**  
   Communicate using mathematics:  
   a. Read with comprehension documents having mathematical content and participate cogently in discussions involving mathematics;  
   b. Clearly articulate mathematical information accurately and effectively, using a form, structure and style that suit the purpose (including written and face-to-face presentation).  
3. **Problem-Solving Ability:**  
   a. Reason with and apply mathematical concepts, principles and methods to solve problems or analyze scenarios in real-world contexts relevant to their major;  
   b. Use technology effectively to analyze situations and solve problems;  
   c. Estimate and check answers to mathematical problems in order to determine reasonableness, identify alternatives, and select optimal results.  
4. **Modeling Ability:**  
   a. Construct and interpret mathematical models using numerical, graphical, symbolic and verbal representations with the help of technology where appropriate in order to draw conclusions or make predictions;  
   b. Recognize and describe the limits of mathematical and statistical methods.  
5. **Effective Learning Skills:**  
   a. Independently acquire further mathematical knowledge without guidance, take responsibility for their own learning, and function effectively in different learning environments.  
   b. Succeed in different learning environments, particularly in a group setting of working collaboratively with others.
Mathematics (Developmental)

At the completion of the Developmental Education Math program:

1. Students will read, write, listen to, and speak mathematics with understanding.
2. Students will use mathematical reasoning to solve problems and a generalized problem solving process to work word problems.
3. Students will demonstrate the ability to use verbal, graphical, numerical, and symbolic representations of mathematical ideas to solve problems.
4. Students will recognize and apply math concepts in a variety of relevant settings and demonstrate the math skills and knowledge necessary to succeed in subsequent courses.
5. Students will demonstrate the characteristics of an effective learner.

Music

At the completion of the program, the student will be able to:

1. Understand and be able to apply the fundamentals of music theory, aural, and have a working knowledge of harmonic progression, musical forms and structures.
2. Have knowledge and understanding of the historical development of music, its historical periods, genres, instrumentation and composers, within their cultural context.
3. Have practical knowledge of performance practice in their particular ensemble performing styles.
4. Have proficiency of solo repertoire and technical studies in their major instrumental or vocal area of study.
5. Be competent with music technology in its various forms for composition, teaching, and professional pursuits.
6. Be able to work independently on varieties of musical problems by combining their capabilities in performance, aural, verbal and visual analysis, composition, repertoire, knowledge, and music history.
7. Have writing skills with the ability to independently utilize research tools and resources (library, internet, etc.)

Nursing

Vocational Nursing

At the completion of the program, the student should be able to:

1. Be academically prepared to take and pass the NCLEX-PN examination for licensure as a licensed vocational nurse (LVN).
2. Be academically prepared to secure an entry-level position as a licensed vocational nurse (LVN).
3. Demonstrate theoretical knowledge and application of technical skills to obtain an entry-level position as a licensed vocational nurse (LVN).
4. Apply critical thinking skills in the care of medical/surgical, maternity, pediatric, and/or psychiatric clients in various clinical settings.
5. Utilize therapeutic communication skills (oral and written) in a clinical setting that assist the client and family to cope with and resolve problems.
6. Determine the effects of nursing interventions on the status of clients cared for.

Registered Nursing

At the completion of the program, the student should be able to:

1. Be academically and clinically prepared to obtain employment as a neophyte registered nurse.
2. Apply the nursing process to research, evaluate, analyze, and synthesize information.
3. Utilize appropriate written and verbal communication techniques to ensure optimal communication with patients, family members, and other members of the healthcare team.
4. Implement nursing interventions utilizing current technology based upon scientific rationales.
5. Demonstrate skills and knowledge necessary to take and pass the National Council’s Licensure Examination (NCLEX-RN).

Physical Education

At the completion of the program, the student should be able to:

1. Be able to apply activities learned in specific fitness modes to improve cardiovascular and muscular endurance, strength and flexibility for life long fitness.
2. Be able to demonstrate knowledge in team sport activities which include rules, skills, etiquette and their application in life long recreational activities.
3. Be able to demonstrate knowledge of dance technique and form its rhythmic application, and gain a greater appreciation of the arts.
Physics

Students who have completed the Physics program will be able to:

1. Explain both the concerns and the main ideas of the major subfields of physics (including Mechanics, Waves and Optics, Electromagnetism, Thermodynamics and Statistical Physics, Quantum Mechanics, and other topics of Modern Physics).

2. Apply critical thinking skills to solve physics problems using theoretical, experimental, and computational techniques.

3. Explain how the ideas of physics apply to everyday situations encountered by individuals (e.g. How a heat engine works) as well as issues facing society (e.g. How does global warming occur?).

4. Show how important physics ideas are represented, derived, and connected to each other through the language of mathematics.

5. Perform both qualitative and quantitative reasoning, along with knowledge of the relative magnitudes of physical quantities, to estimate the magnitude of certain effects upon the situation under study.

6. Design and perform simple experiments, interpret the results, and give estimates of uncertainties.

7. Synthesize multiple ideas of physics to solve problems.

8. Apply the ideas of physics to astronomy, chemistry, medicine, engineering, and/or other disciplines.

9. Discuss examples of alternate belief systems that exist now or did exist.

10. Describe several examples of scientific developments that have produced a major change in the culture, controversial scientific research and three cultural trends based on present technological progress.

11. Discuss how science relates to society and to religion.

Process Technology

At the completion of the program, the student should be able to:

1. Be academically and experientially prepared to obtain an entry-level position in the chemical, refining, oil and gas production, water, waste management, food, and related manufacturing industries.

2. Apply critical thinking to research, evaluate, analyze and synthesize information to solve problems related to process equipment, instruments, systems, and operations within the chemical, refining, oil and gas production, water, waste management, food, and related manufacturing industries.

3. Demonstrate excellent communications skills (oral and written) to ensure optimal communication with shift co-workers, first line supervisors, maintenance personnel, safety personnel, contractors, and other members of the manufacturing site team.

4. Demonstrate knowledge of the process technology and apply the technical skills necessary to operate complex process equipment and systems such as distillation, fired boiler, refrigeration, cooling tower, reactor, and similar unit operations.

Real Estate

– Currently Being Developed

Recording Arts

At the completion of the program, the student should be able to:

1. Be able to transfer to a 4-year recording industry program, with advanced standing.

2. Be qualified for entry-level positions in the field.

3. Be positioned to begin entrepreneurial freelance work.
Social Sciences
(Economics, History, Political Science)

At the completion of the program, the student should be able to:

1. At the completion of course work in the Social Sciences, the student should be proficient in formulating, analyzing and synthesizing arguments on social, political and economic issues.

2. At the completion of course work in the Social Sciences, the student should be proficient in interpreting information and communicating it effectively in writing and speech.

3. At the completion of course work in the Social Sciences, the student should proficient in evaluating the implications of multi cultural diversity and global interdependence.

Speech

At the completion of the program, the student should be able to:

1. Read critically and communicate effectively as a writer and speaker. Use critical thinking skills to research, organize, and develop a speech that is clear, focused, direct and interesting.

2. Utilize active listening and critical thinking skills by writing critiques of formal and informal communication exchanges.

3. Demonstrate an interdisciplinary approach to problem solving by synthesizing textual resources, source documents, and interdisciplinary research in small groups.

4. Use critical thinking and creativity in developing criteria to make group sessions work and in researching a societal issue. Use introspection as a mode of inquiry for self-analysis.

5. Evaluate elements in persuasive speaking and ethics inherent in evaluating persuasive messages.

6. Be aware of diversity in critical perspective. Gain exposure to the role that culture, race, age, gender etc. play in communication outcomes.

Travel Marketing

At the completion of the program, the student should be able to:

1. Be academically prepared to obtain an entry-level or a mid-level position in the travel industry.

2. Demonstrate the skills and knowledge necessary to take and pass national travel industry certification exams for career advancement in the travel industry.

3. Apply critical thinking to research, evaluate, analyze and synthesize travel-related information.

4. Demonstrate excellent communication skills (oral and/or written) as well as excellent soft-skills in a sales and business environment.

5. Demonstrate knowledge of travel industry technology and apply the technological skills necessary to succeed in the travel industry.

Welding Technology

At the completion of the program, the student should be able to:

1. Be able to know and have an appreciation for the safety knowledge required in the welding trade.

2. Demonstrate the ability and theory to effectively solve problems encountered while welding or cutting as per job requirement.

3. Demonstrate step by step the procedure required to perform at the skill level dictated per job-fab standards.

4. Be able to understand the variables involved at the performance level stage as a welder.

5. Foster the importance of proper training and preparation for today's employment qualification requirements.

6. Be prepared to pass the required National Certification Exam, essential for employment as a welder.
Understanding the Course Descriptions

The course descriptions provide information believed to be true and correct as of the publication of this college catalog. Courses described may not be offered every term or every academic year. Check the Schedule of Classes for our current listings of LMC course offerings.

Courses are listed alphabetically by department and numerically within the departmental sequence.

Any course may be offered during any term, evening or day hours, on or off campus, when there is evidence of sufficient numbers of students to justify offering the class. Any course listed in the Schedule of Classes may be canceled when the enrollment is too low to justify offering the class or if an instructor is not available.

Course Codes/Descriptors

Class Hours
References the number of lecture, lab, and/or activity hours of class meeting time per week or total hours that a course will meet over the duration of the term.

Units (of Credit)
The measure of how much credit may be earned for any given course. Unit totals are determined by the type of instruction associated with the course (i.e. lecture, lab) and the total number of hours the course will meet. See the “Guidelines on Units of Credits” section for further information.

Prerequisites/Co-requisites/Advisories
Prerequisites, co-requisites, and advisories are listed for certain courses in the college catalog and class schedules. Prerequisites are courses or other requirements that a student must have completed and have verified in the Admissions Office prior to enrolling in a given course. Prerequisites are required for classes when there is a need for a specific skill level or knowledge in order to be successful in the desired class. Co-requisites are courses that must be taken concurrently with the desired course, in order to provide additional knowledge, skills, or lab time. Advisories are associated with particular classes to indicate the desired knowledge or skill level for successful course completion. Advisories are not required classes, but are recommended for student success.

Course Repeatability
Not all courses may be repeated, once they have been successfully completed (with a grade of “CR”, “C” or better). If a course is repeatable, it will be stated at the end of the course description. If there is no statement regarding repeatability, a course may only be repeated one time if the first grade received was substandard (“NC”, “D”, or “F”). See the “Standards of Scholarship” section of the catalog for further information about the Course Repetition Policy.

Grading Information
Courses may be graded with letter grades (A – F), or by student choice (SC). If a class is graded by pass/no pass, P/NP will appear at the end of the course description. If the student has a choice as to receiving a letter grade or credit/no credit, SC will appear at the end of the course description. No designation at the end of the course description means that the class is letter graded only.

If a student wishes to initiate the student choice option, they must complete a petition by the posted time line in the Admissions and Records Office (the deadline for short-term classes will vary, depending upon the length of the class). See the “Standards of Scholarship” section for further information.

Associate Degree Requirements
Courses may be identified as meeting a General Education requirement or a Graduation and Competency requirement Courses that fulfill an LMC General Education requirement. These courses will be coded with an “LMC: GE: ” and the appropriate area requirement it meets. If the course fulfills an LMC Graduation and Competency requirement, the course will be coded with “LMC: GCR: ” and the appropriate area requirement it meets. See page 37 for a listing of courses that are required to meet the standard Associate of Arts/Associate of Science path.

Degree Applicability
Courses are either identified as degree applicable or non degree applicable. If a course is degree applicable, it will be coded with “DA” below the course description and will apply toward the completion of requirements for an associate degree. If a course is non degree applicable, it will be coded with “NDA” and cannot be applied to units required for an associate degree.

Transfer Status Designations
CSU transferable (CSU): Courses identified with the CSU code are transferable to campuses of the CSU system. However, they may only be transferable as an elective. Students should check with their counselor or the Transfer Center for complete information about the transferability of courses toward meeting general education breadth requirements or major requirements.

CSU General Education Breadth Requirements (CSU GE): Courses identified with the CSU GE code are transferable to campuses of the CSU system. These courses meet the general education breadth requirements of the CSU system.

UC transferable (UC): Courses identified with the UC code are transferable to UC campuses. A course must be on the transfer course agreement (TCA) at the time it taken to be transferable to UC. Lists of UC transferable courses are available at www.assist.org.

IGETC
Intersegmental General Education Transfer Curriculum (IGETC): Courses identified with the IGETC code are part of a comprehensive pattern of courses prospective transfer students from the California Community Colleges may complete to satisfy lower-division General Education requirements at both the University of California and the California State University.
Guidelines on Units of Credits

The college unit is an arbitrary measure, but arbitrary measures should also have consistent meaning. This guideline establishes a unit/hour ratio that describes the method of instruction and the type of learning activity in the various course offerings at Los Medanos College.

<table>
<thead>
<tr>
<th>Type of Teaching Method and Learning Activity</th>
<th>Expected Hours of Outside Preparation Per Class</th>
<th>Ratio of Units to In-Class Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture or English Composition or Laboratory or Independent study or PE/Activity or Cooperative work experience Field work</td>
<td>2 hours</td>
<td>1 unit: 1 hour per week 18 hours per semester</td>
</tr>
<tr>
<td></td>
<td>2 hours</td>
<td>1 unit: 1 hour per week 18 hours per semester</td>
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<tr>
<td></td>
<td>1 hour</td>
<td>1 unit: 3 hours per week 54 hours per semester</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>1 unit: 3 hours per week 54 hours per semester</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>1 unit: 5 hours per week per semester</td>
</tr>
</tbody>
</table>

Classes of less than one semester in length will be assigned units proportional to semester hours.
Administration Of Justice

ADJUS-005  Basic Law Enforcement Academy
912 total hours lab  17 Units
Prerequisite: It is recommended that students must be at least 18 years of age. Each student must have a valid driver's license and show proof of vehicle insurance at the first class meeting. Each student must complete an academy application and supply a statement from a physician indicating his/her ability to engage in strenuous physical activity. In addition each student must pass the POST (Peace Officer Standards and Training) exam and obtain clearance with the Department of Justice and sign a felony disclaimer.
Co-requisite: ADJUS 7 and 8
Advisory: It is recommended that students be at least 18 years of age. Each student must have a valid driver's license and show proof of vehicle insurance at the first class meeting.
Basic Law Enforcement meets the requirements for basic certification by the Commission on Peace Officer Standards and Training (P.O.S.T.). It is a fundamental course which covers criminal law, evidence, procedure, investigation, firearms, defensive tactics, use of chemical agents, physical training, and other related police subjects. Interested students must contact the Office of the Sheriff, Contra Costa County by calling 1-877-4-DEPUTY or the Academy Director at (925) 427-8238, 340 Marina Blvd., Pittsburg to register for the Academy. "An optional material fee may be applied." May not be repeated. P/NP
LMC: DA

ADJUS-007  FIRST AID and CPR for Basic Law Enforcement Academy
22.5 total hours lecture  1 Unit
Prerequisite: Students must be accepted into the Basic Police Academy.
Co-requisite: ADJUS 5 and 8
A course which meets requirements of Title 22 for first responders in law enforcement. The Emergency Services System and the American Heart Association guidelines specifying peace officers as healthcare providers specify and approve this curriculum. Meets the requirement for successful completion of Basic Law Enforcement Academy POST Certificate. "An optional material fee may be applied." May not be repeated. P/NP
LMC: DA

ADJUS-008  Lifetime Fitness for Basic Law Enforcement Academy
18 total hours lecture, 46 total hours activity  2 Units
Prerequisite: Students must be accepted into the Basic Police Academy.
Co-requisite: ADJUS 5 and 7
P.O.S.T. requirement for completion of the Basic Police Academy. Students learn the necessity of lifetime fitness for career success in law enforcement. Meets the graduation requirement for physical education. "An optional material fee may be applied." May not be repeated. P/NP
LMC: DA

ADJUS-042  Introduction to Corrections
3 hours lecture  3 Units
Prerequisite: ADJUS 120
Advisory: Eligibility for ENGL 90
This course is a survey of the field of correctional science. The historical development, current concepts and practice, explanations of criminal behavior, functions and objectives of the criminal justice system concerned with institutional, probation, and parole processes as they modify the offender's behavior, survey of professional career opportunities in public and private agencies will be studied. May not be repeated. LR
LMC: DA

ADJUS-043  Parole and Probation
3 hours lecture  3 Units
Prerequisite: ADJUS 120
Advisory: Eligibility for ENGL 90
This course will study specific processes of rehabilitation and release of inmates into society. The student will learn the applicability of probation along with diversion programs and intermediate sanctions such as community service and restitution. Parole, early release and reentry will be critically analyzed. Preparation of the inmate to reentry into society will be studied and the effect these programs have on communities will be closely examined. Characteristics of parolees will be identified. The course will examine specific issues to parole, early release and reentry as it pertains to the parolee and the communities they affect. May not be repeated. SC
LMC: DA

ADJUS-050  Advanced Law Enforcement Training
18 total hours lecture or 54 total hours lab per unit .3-6 Units
Prerequisite: Employment in law enforcement or completion of ADJUS 5 with a credit grade
Advisory: College-level English, Psychology and Sociology
A study of new laws, court decisions, changes in law enforcement policies, and concepts designed to keep officers current in knowledge needed to carry out those duties. Course may vary with content presentation. Course subtitle describes content. This course meets the requirements for Advance Officer Training Certification by the Commission on P.O.S.T. May be repeated nine times. P/NP
LMC: NDA

ADJUS-051  Technical Law Enforcement Training
9 total hours lecture or 27 total hours lab per half unit .3-4 Units
Prerequisite: Employment in law enforcement or completion of ADJUS 5 with a credit grade
A study of specific technical areas in law enforcement. This course provides information for officers assigned to specialized areas; e.g., traffic accident investigation, crime scene investigation, etc. Course may vary with content presentation. Course subtitle describes content. May be repeated nine times. P/NP
LMC: NDA
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Prerequisite</th>
<th>Advisory</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJUS-055</td>
<td>Basic Law Enforcement Supervision</td>
<td>2-4</td>
<td>ADJUS 5 and 50</td>
<td></td>
<td>Designed to introduce law enforcement supervisors to the duties and responsibilities of the first-line supervisor on the management team. Through the interactions of lecture and demonstration, theories of supervisors will be combined with practical skills and techniques. This course meets the requirements for Supervisor Training Certification by the Commission on P.O.S.T. May not be repeated. P/NP</td>
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<tr>
<td>ADJUS-098</td>
<td>Independent Study in Administration of Justice</td>
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<td>Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC</td>
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<td>LMC:</td>
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<td>Independent Study courses may be DA or transferable depending on specific course. See your counselor.</td>
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<td>Transfer:</td>
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<td>Cooperative Education in Administration of Justice</td>
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<td></td>
<td>Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC</td>
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<tr>
<td>ADJUS-120</td>
<td>Introduction to the Criminal Justice System</td>
<td>3</td>
<td>Eligibility for ENGL 90</td>
<td></td>
<td>This course involves a comprehensive look at the origin, development, and philosophy of criminal law and the substantive law commonly enforced in California. It includes a detailed examination of legal definitions, classifications of laws, corpus delicti, parties to a crime, defenses to crime, and a brief introduction to laws of arrest and judicial procedure. Students will be required to research legal briefs/decisions. May not be repeated. SC</td>
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<td>GE: Social Science; DA</td>
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<tr>
<td>ADJUS-121</td>
<td>Criminal Law</td>
<td>3</td>
<td>ADJUS 120</td>
<td>Eligibility for ENGL 100</td>
<td>This course is an in-depth study of the concepts, historical development, and philosophy of criminal law and the substantive law commonly enforced in California. It includes a detailed examination of legal definitions, classifications of laws, corpus delicti, parties to a crime, defenses to crime, and a brief introduction to laws of arrest and judicial procedure. Students will be required to research legal briefs/decisions. May not be repeated. SC</td>
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<tr>
<td>ADJUS-122</td>
<td>Criminal Procedures</td>
<td>3</td>
<td>ADJUS 120</td>
<td>Eligibility for ENGL 90</td>
<td>This course involves a comprehensive look at the origin, development, and philosophy of criminal law and the substantive law commonly enforced in California. It includes a detailed examination of legal definitions, classifications of laws, corpus delicti, parties to a crime, defenses to crime, and a brief introduction to laws of arrest and judicial procedure. Students will be required to research legal briefs/decisions. May not be repeated. SC</td>
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<tr>
<td>ADJUS-130</td>
<td>Cultural Issues in Public Service</td>
<td>3</td>
<td>Eligibility for ENGL 90</td>
<td></td>
<td>A theoretical and conceptual overview of multicultural concepts and issues, including those relating to gender, age, and sexual preference; an application of those concepts and issues to the four public safety disciplines (Corrections, Environmental Technology/Hazardous Materials, Fire Technology, and Law Enforcement); identification of problems related to our increasingly diverse population; and examination of strategies to overcome those problems particularly in relation to the maintenance of social order. May not be repeated. SC</td>
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<tr>
<td>ADJUS-150</td>
<td>Criminal Investigations</td>
<td>3</td>
<td>ADJUS 120</td>
<td>Eligibility for ENGL 90</td>
<td>The student will be able to identify proper investigative techniques and determine their appropriate applications. From criminal data given to them in investigative scenarios, the student will be able to reconstruct crimes and formulate a hypothesis to what occurred. The students will correctly demonstrate basic evidence gathering techniques and evidence chain-of-command. May not be repeated. SC</td>
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</tbody>
</table>
Anthropology

**ADJUS-151 Basic Drug Laws and Investigation**

3 hours lecture  
3 Units

**Advisory:** ADJUS 120, and eligibility for ENGL 90

The student will be introduced to the evolution of current drug laws. The student will be able to define licit and illicit drugs, and be able to recognize and evaluate the symptoms of people under the influence of drugs and narcotics. Given descriptions of behavior and physical conditions, the student will be able to demonstrate proper under-the-influence testing procedures. After analyzing mock investigation reports, the student will create and evaluate appropriate basic investigative procedures. May not be repeated. SC

LMC: DA  
Transfer: CSU

**ADJUS-152 Gang Theory, Practice and Suppression**

3 hours lecture  
3 Units

**Prerequisite:** ADJUS 120  
**Advisory:** Eligibility for ENGL 90

This course covers issues dealing directly with gang theory including understanding and explaining the differences between prison and street gangs and the violence related to these disruptive groups. The student will be able to explain gang practices, communications and their structures. The effect that gangs have had on the United States criminal justice system will be analyzed. Finally, the course will explain basic techniques that law enforcement uses to suppress gang violence and investigate unique criminal cases. May not be repeated. SC

LMC: DA  
Transfer: CSU

**ADJUS-221 Introduction to Evidence**

3 hours of lecture  
3 Units

**Prerequisite:** ADJUS 120  
**Advisory:** Eligibility for ENGL 90; ADJUS 121

Origin, development, philosophy, and legal basis of evidence; types and ways of presenting evidence; judicial decisions and statutory rules of evidence governing the admissibility of testimony, writings, and material objects at a criminal trial; constitutional and procedural considerations affecting searches and seizures, admissions and confessions, and methods of identification. May not be repeated. SC

LMC: DA  
Transfer: CSU

**ADJUS-222 Juvenile Law and Procedures**

3 lecture hours  
3 Units

**Advisory:** ADJUS 120 and ENGL 100

This course will explain the differences between the techniques of handling juvenile offenders and victims; prevention and repression of delinquency; diagnosis and referral, and the organization of community services. The specifics of juvenile law and procedures will be taught in depth. May not be repeated. SC

LMC: DA

**ADJUS-260 Patrol Procedures**

3 hours lecture  
3 Units

**Advisory:** Eligibility for ENGL 90

This course will focus on the responsibilities, purpose, and methods of police patrol as well as on the community effects of decision-making and judgment. The use and recording of complaint, incident, and miscellaneous crime reports will be discussed. May not be repeated. SC

LMC: DA  
Transfer: CSU

**ADJUS-270 Personal Self-Defense and Firearms Training**

29 total hours lecture, 30 total hours lab  
2 Units

This course is designed for those interested in training in the area of armed or unarmed self-defense. Although originally designed for law enforcement personnel, the course will benefit anyone desiring proficiency in the area of firearms or self-defense. May be repeated three times. P/NP

LMC: NDA

**ADJUS-900s Selected Topics in Administration of Justice**

DA varies with course content.

**ANTHR-005 General Anthropology**

3 hours lecture  
3 Units

**Advisory:** Eligibility for ENGL 90

(Formerly ANTHR 5LS) An introduction and general overview of anthropology which is the study of people. Topics center on the variety of characteristics which are a product of human existence everywhere. These include: the uniqueness of human learning abilities, evolution of cultural and physical variation, varieties of lifestyles and adaptations around the globe, human language and communication, social and family organization, as well as religious and artistic expression. Opportunities for the development of skills in critical thinking, problem-solving, and effective learning will be provided throughout the course. May not be repeated. LR

LMC: GE: Behavioral Science; DA  
Transfer: UC, CSU Gen. Ed. Area D1, IGETC Area 4A
ANTHR-006 Cultural Anthropology
3 hours lecture 3 Units
Advisory: Eligibility for ENGL 90
(Formerly ANTHR 6LS) An introduction to the study of cultural anthropology which focuses on a broad view of the learned aspects of human life. The course includes the observation and analysis of cultural traditions, i.e. child-rearing processes, lifestyle types and adaptations, social and family organization, creative elements of human life, and basic anthropological theories and concepts. Students will be exposed to divergent cultures and to the status of today’s vanishing cultures. Opportunities for the development of skills in critical thinking, problem-solving and effective learning will be provided throughout the course. May not be repeated. (CAN ANTH 4) SC
LMC: GE: Behavioral Science; DA
Transfer: UC, CSU Gen. Ed. Area D1, IGETC Area 4A

ANTHR-007 The Anthropology of Culture Change
3 hours lecture 3 Units
Advisory: Eligibility for ENGL 90
(Formerly ANTHR 7LS) This course focuses on the tremendous impact of culture change experienced worldwide both in industrialized and non-industrialized societies. The content deals with the processes of change, problems which arise due to change and controversial issues such as deculturation and assimilation. Students will have the opportunity to understand and approach change from a psychological, social, economic, political, and environmental perspective. May not be repeated. LR
LMC: GE: Behavioral Science; DA
Transfer: UC, CSU Gen. Ed. Area D1, E, IGETC Area 4A

ANTHR-008 Independent Study in Anthropology
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC
LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.
Transfer: Independent Study courses may be DA or transferable depending on specific course. See your counselor.

ANTHR-099 Cooperative Education in Anthropology
Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC
LMC: DA
Transfer: CSU

ANTHR-900s Selected Topics in Anthropology
DA varies with course content.

Appliance Service Tech

APPLI-013 Beginning Electrical Appliances Tech I
3 hours lecture 3 Units
Advisory: Concurrent enrollment in APPLI 20, 35 or 36; eligibility for ENGL 90; concurrent or prior enrollment in EETEC 4 (Formerly EETEC 10)
This is an introductory course in electrical appliances and is recommended to all students interested in pursuing a career in appliance technology. The course focuses on theory and practice in the diagnosis and repair of major brands of washers, electric dryers, electric ranges, dishwashers and disposers. Detail will be given to understanding the mechanical and electrical parts of these appliances, as well as troubleshooting, estimating and proper procedure in making repairs. Material that is covered in the lecture will be put into practice in the accompanying lab/shop practice class. May not be repeated. SC
LMC: DA
Transfer: CSU

APPLI-014 Advanced Electrical Appliances Tech I
3 hours lecture 3 Units
Advisory: Concurrent enrollment in APPLI 20, 35 or 36; eligibility for ENGL 90; concurrent or prior enrollment in EETEC 4 (Formerly EETEC 10)
This course is a continuation of APPLI 13 and is designed to give the student a strong background in the repair of electrical appliances. Students majoring in appliance repair take this course to complete the electrical appliance part of the program. The course focuses on theory and practice in the diagnosis and repair of major brands of washers, gas dryers, gas ranges, dishwashers, and trash compactors. Detail will be given to understanding the mechanical and electrical parts of the appliances as well as troubleshooting, estimating, and proper procedures in making repairs. Material that is covered in the lecture will be put into practice in the accompanying lab class. May not be repeated. SC
LMC: DA
Transfer: CSU

APPLI-015 Electrical Appliances I
4 hours lecture, 1 hour lab 4 Units
Advisory: Concurrent enrollment in APPLI 20, 35 or 36; eligibility for ENGL 90; concurrent or prior enrollment in EETEC 4 (Formerly EETEC 10)
This course is designed to teach the principles of operation and repair of electrical appliances. Related information on job safety, shop practices, repair orders, employers, troubleshooting, maintenance, and service techniques with application under simulated industry-type shop conditions. May not be repeated. LR
LMC: DA
Transfer: CSU
APPLI-016  Electrical Appliances II
4 hours lecture, 1 hour lecture  4 Units
Advisory: Concurrent enrollment in APPLI 20, 35 or 36; eligibility for ENGL 90; concurrent or prior enrollment in EETEC 4 (Formerly EETEC 10)
A continuation of APPLI 15 covering different brands of appliances. Emphasis will be on troubleshooting and diagnosing of both gas and electrical appliances. Servicing techniques will cover the use of wiring diagrams and schematics with application under simulated industry-type conditions. May not be repeated. LR
LMC: DA
Transfer: CSU

APPLI-020  Electrical Appliance Shop Practice
54 total hours lab per unit  1-5 Units
Advisory: Concurrent enrollment in APPLI 13, 14, 15 or 16
Application of shop practices in making diagnostic tests and repair of washers, dryers, ranges and dishwashers. Students learn by working on actual projects in a lab setting. May be repeated three times. LR
LMC: DA
Transfer: CSU

APPLI-023  Basic Refrigeration Tech I
3 hours lecture  3 Units
Advisory: Concurrent enrollment in APPLI 20, 35 or 36; eligibility for ENGL 90; concurrent or prior enrollment in EETEC 4 (Formerly EETEC 10)
This is an introductory course designed for students in the Appliance Program or anyone wanting to acquire refrigeration theory and diagnosing skills. Basic refrigeration principles and electrical circuits will be covered. Servicing of compressor type refrigeration units and troubleshooting electrical circuits are the major content of this course. Special emphasis will be given to understanding the mechanical and electrical parts of refrigeration systems. Proper use of test equipment will be covered in troubleshooting and diagnosing of refrigeration units. Material that is covered in the lecture will be put into practice in the accompanying lab class. May not be repeated. SC
LMC: DA
Transfer: CSU

APPLI-024  Advanced Refrigeration Tech I
3 hours lecture  3 Units
Advisory: Concurrent enrollment in APPLI 20, 35 or 36; eligibility for ENGL 90; concurrent or prior enrollment in EETEC 4 (Formerly EETEC 10)
This course is a continuation of APPLI 23 and is designed for students who are majoring in Appliance Technology. Refrigeration material presented in this course is a must for technicians entering the appliance repair field. Theory and practice in the diagnosis and repair of major brands of refrigerators will be covered. Detail will be given to understanding the mechanical and electrical component operation. Troubleshooting and diagnosing of both mechanical and electrical problems will be emphasized. EPA rules and regulations regarding refrigerants containing CFC will be presented. Material that is covered will be put into practice in the accompanying lab/shop practice class. May not be repeated. LR
LMC: DA
Transfer: CSU

APPLI-025  Refrigeration I
4 hours lecture, 1 hour lab  4 Units
Advisory: Concurrent enrollment in APPLI 20, 35 or 36; eligibility for ENGL 90; concurrent or prior enrollment in EETEC 4 (Formerly EETEC 10)
This course emphasizes basic refrigeration principles and theories, and the function and operation of components. Emphasis will be on the service, repair, installation, and troubleshooting of electrical and mechanical systems of domestic refrigerators, and freezers. Service techniques learned will be applied in a simulated industry-type shop condition. May not be repeated. LR
LMC: DA
Transfer: CSU

APPLI-026  Refrigeration II
4 hours lecture, 1 hour lab  4 Units
Advisory: Concurrent enrollment in APPLI 20, 35 or 36; eligibility for ENGL 90; concurrent or prior enrollment in EETEC 4 (Formerly EETEC 10)
A continuation of APPLI 25 covering different brands of refrigeration equipment. Emphasis will be placed on troubleshooting, diagnosing, and how to function as a Refrigeration Technician. EPA laws and regulations concerning refrigerant handling will be covered. May not be repeated. LR
LMC: DA
Transfer: CSU

APPLI-030  Refrigeration Shop Practice
54 total hours lab per unit  1-5 Units
Advisory: Concurrent enrollment in APPLI 23, 24, 25, or 26
This course is designed to give a beginning student the necessary shop skill to make mechanical, system, and electrical repairs on refrigeration units. Troubleshooting will be done in an environment that simulates conditions in the appliance repair field. Students will work on various brands of refrigerators, freezers, and window air conditioners. May be repeated three times. SC
LMC: DA
Transfer: CSU

APPLI-035  Appliance Shop Practice Intermediate
54 total hours lab per unit  1-5 Units
Prerequisite: Satisfactory completion of APPLI 20 and 30
Advisory: Eligibility for ENGL 90
Diagnostic testing and repair of domestic and commercial gas and electrical appliances; further experience in estimating, report writing, customer relations. May be repeated three times. SC
LMC: DA
Transfer: CSU

APPLI-036  Appliance and Refrigeration Shop
**Practice Advanced**

54 total hours lab per unit 1-5 Units

**Prerequisite:** Satisfactory completion of APPLI 20 and 30

**Advisory:** Eligibility for ENGL 90

Advanced diagnostic testing and major appliance repair. Designed to provide updated training for new developments in major appliance equipment. May be repeated three times. SC

**LMC:** DA

**Transfer:** CSU

**APPLI-046** Principles and Repair of Microwave Ovens

8 total hours lecture, 12 total hours lab .5 Unit

**Advisory:** APPLI 15 or 16; eligibility for ENGL 90

Covers principles of microwave ovens. Designed to teach students how to service microwave ovens. May be repeated two times. SC

**LMC:** DA

**Transfer:** CSU

**APPLI-098** Independent Study in Appliance Service Technology

Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC

**LMC:** Independent Study courses may be DA or transferable depending on specific course. See your counselor.

**Transfer:** Independent Study courses may be DA or transferable depending on specific course. See your counselor.

**APPLI-099** Cooperative Education in Appliance Service Technology

Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC

**LMC:** DA

**Transfer:** CSU

**APPLI-0900s** Selected Topics in Appliance Service Technology

DA varies with course content.

**Art**

**ART-003** Open Studio

4 hours lab 1 Unit

**Advisory:** Concurrent enrollment in any other art course.

Open studio is an opportunity to access the space, tools, equipment and advice necessary to complete their assignments in other art courses in a safe, supervised environment. Instruction in studio is available to students on an individualized, informal, and as-needed basis. May be repeated three times. P/NP

**LMC:** DA

**ART-005** The Visual Arts

3 hours lecture 3 Units

**Advisory:** Eligibility for ENGL 100

(Formerly ART 5LS) An interdisciplinary course that focuses on the creative process as it applies to life in general, and the visual arts in particular. Course content provides an overview of art from historical, thematic and technical perspectives, from a variety of cultures. The course addresses the process of art, and provides students with the means to evaluate its products, in both cultural and personal terms. Meets Creative Arts requirements for general education. Required for all art majors and students enrolled in the Graphic Communications Certificate Program. May not be repeated. LR

**LMC:** GE: Creative Arts; DA

**Transfer:** UC, CSU Gen. Ed. Area C1, IGETC Area 3A

**ART-006** Western Art History I: Art of the Prehistoric and Ancient World (to 350 CE)

3 hours lecture 3 Units

**Advisory:** Eligibility for ENGL 100

(Formerly ART 6LS) Presents art as an aspect of cultures and civilizations from around the world, focusing on the period from prehistory to 350 A.D. An interdisciplinary course that investigates how art and architecture reflect the religious, political and philosophical perspectives of the artists and societies that created them. Includes Egypt and ancient Africa, Mesopotamia and Persia, Greece and the Aegean and Rome. Meets Creative Arts requirements for general education. Three units of art history are required for all art majors (students may choose from ART 6, 7 8 or 9) May not be repeated. LR

**LMC:** GE: Creative Arts; DA

**Transfer:** UC, CSU Gen. Ed. Area C1, IGETC Area 3A
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>ART-007</td>
<td>Western Art History II: Art of the Developing World (350 to 1550)</td>
</tr>
<tr>
<td></td>
<td>3 hours lecture 3 Units</td>
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<td>Advisory: Eligibility for ENGL 100</td>
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<tr>
<td></td>
<td>(Formerly ART 7LS) Presents art as an aspect of cultures and civilizations from around the world, focusing on the period from 350 to 1550. An interdisciplinary course that investigates how art and architecture reflect the religious, political and philosophical perspectives of the artists and societies that created them. Includes Late Roman, Byzantine, Early Medieval, Romanesque, Gothic, Renaissance and Islamic Art. Meets Creative Arts requirements for general education. Three units of art history are required for all art majors (students may choose from ART 6, 7, 8 or 9.) May not be repeated. LR</td>
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<td>LMC: GE: Creative Arts; DA</td>
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<td>Transfer: UC, CSU Gen. Ed. Area C1, IGETC Area 3A</td>
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<tr>
<td>ART-008</td>
<td>Western Art History III: Art of the Modern World (1550 A.D. to 1920)</td>
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<td>3 hours lecture 3 Units</td>
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<td>Advisory: Eligibility for ENGL 100</td>
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<td>(Formerly ART 8LS) Presents art as an aspect of cultures and civilizations from Western Europe and the United States, focusing on the period from 1550 to 1920. An interdisciplinary course that investigates how art and architecture reflect the religious, political and philosophical perspectives of the artists and societies that created them. Includes Baroque, Neoclassical, Romantic, Realist, Impressionist, Post-Impressionist and Early Modern Art. Meets Creative Arts requirements for general education. Three units of art history are required for all art majors (students may choose from ART 6, 7, 8 or 9.) May not be repeated. LR</td>
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<td>LMC: GE: Creative Arts; DA</td>
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<td>Transfer: UC, CSU Gen. Ed. Area C1, IGETC Area 3A</td>
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<tr>
<td>ART-009</td>
<td>Western Art History IV - Art of the Contemporary World (1920-Present)</td>
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<td>3 hours lecture 3 Units</td>
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<td>Advisory: Eligibility for ENGL 100</td>
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<td></td>
<td>(Formerly ART 9LS) Presents art as an aspect of cultures and civilizations around the world, focusing on the period from 1920 to the present. An interdisciplinary course that investigates how art and architecture reflect the religious, political, and philosophical perspectives of the artists and societies that created them. Three units of art history are required for all art majors; students may choose from ART 6, 7, 8 or 9. Meets LMC General Education requirement for Humanities. May not be repeated. LR</td>
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<tr>
<td></td>
<td>LMC: GE: Creative Arts; DA</td>
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<tr>
<td></td>
<td>Transfer: UC, CSU Gen. Ed. Area C1</td>
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<tr>
<td>ART-010</td>
<td>Introduction to Two-Dimensional Design</td>
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<td>2 hours lecture, 4 hours lab 3 Units</td>
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<td>A foundation course upon which all other courses in the curriculum are based. Presents the process and discipline of design as applied in two-dimensional forms such as drawing, painting, and collage. The methods, tools, and materials of two-dimensional form presented in theoretical, historical, and cultural contexts. An in-depth exploration of the visual elements, including line, shape, space, texture, value, and color. Required for all art majors. &quot;An optional material fee may be applied.&quot; May not be repeated. LR</td>
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<td>LMC: DA</td>
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<td></td>
<td>Transfer: UC, CSU</td>
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<tr>
<td>ART-011</td>
<td>Introduction to Three-Dimensional Design</td>
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<td>2 hours lecture, 4 hours lab 3 Units</td>
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<td>An introduction to the visual elements in a three-dimensional design context, including line, mass, volume, color, texture and, most importantly, space. An introduction to the methods and materials of three-dimensional form, including carving, casting, modeling, and construction, in cardboard, plaster, clay, wood, and stone. This is a foundation course, presenting the fundamentals of art upon which all other courses are based. Required for all art majors. &quot;An optional material fee may be applied.&quot; May not be repeated. LR</td>
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<td>LMC: DA</td>
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<td></td>
<td>Transfer: UC, CSU</td>
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<tr>
<td>ART-012</td>
<td>Design Drawing</td>
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<td>2 hours lecture, 4 hours lab 3 Units</td>
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<td>An art foundation course that introduces drawing as a visualization tool used in the process of design. Focuses on perspective drawing as a means to build the skills necessary for rapid and intuitive, but accurate drawing with application to two or three-dimensional design and problem solving, particular useful for students majoring in product, environmental/architectural and graphic design. Required foundation course for art majors and Certificate of Achievement in Graphic Communications. May be repeated three times. SC</td>
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<td>LMC: DA</td>
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<td></td>
<td>Transfer: UC, CSU</td>
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<tr>
<td>ART-013</td>
<td>Graphic Design</td>
</tr>
<tr>
<td></td>
<td>1 hour lecture, 2 hours lab 2 Units</td>
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<td>Advisory: Completion of, or concurrent enrollment in, ART 10 or ART 12</td>
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<td>Studies and practice in two dimensional graphic design with emphasis on the definition, research and solution of applied design problems. Special emphasis will be placed on conceptualizing and integrating visual and verbal information into unified communication concepts. Course assignments progressively develop the skills necessary to visualize and execute concepts as finished art. May not be repeated. LR</td>
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<tr>
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<td>LMC: DA</td>
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<td></td>
<td>Transfer: CSU</td>
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</tbody>
</table>
ART-021 Advanced Drawing
2 hours lecture, 4 hours lab 3 Units
Prerequisite: ART 20
Advisory: ART 30
Continuation of development of representational drawing skills. Line, form, value, texture and spatial manipulation will be further explored using various dry and wet drawing media as well as mixed media. Emphasis will be on using fundamental skills to develop a personal approach to drawing. Slides and lecture will reflect contemporary and historical uses of drawing as an art form as well as multicultural perspectives, including drawing by women and other traditionally under-represented groups. One hour per week will be devoted to individual projects to assure time for in-depth study of personal concerns as related to drawing. May not be repeated. SC
LMC: DA
Transfer: UC, CSU

ART-023 Page and Publication Design
2 hours lecture, 1 hour lab 2 Units
Advisory: ART 10, ART 12, ART 13, ART 33
Studies and practice in the design and layout of advertising and promotional materials for printed media, with emphasis on the requirements of working with the client, the art director, the illustrator or photographer, and the production artists. Studies and practice in the techniques, tools, materials and methodology of layout, with special emphasis on copyfitting, type indication, proofreading, specification and markup. Instruction is computer-based. May not be repeated. LR
LMC: DA
Transfer: CSU

ART-024 Advanced Page and Publication Design
2 hours lecture, 1 hour lab 2 Units
Prerequisite: ART 23
Advanced studies and practice in the design and layout of advertising and promotional materials for printed media. Special emphasis will be placed on developing students' confidence and personal initiative through progressively more independent and complex activities and projects. Studies and practice in specific communication forms, including magazines, newspapers, books, brochures, and charts and graphs. Instruction is computer-based. May not be repeated. LR
LMC: DA
Transfer: CSU

ART-026 Landscape Sketching on Location
8 total hours lecture, 16 total hours lab .5 Unit
Advisory: ART 12 or ART 20 or equivalent
Studies and practice in sketching a variety of East County landscapes that incorporate scenic views of the hills and valleys of Black Diamond Mines Regional Park, Mt. Diablo, the San Joaquin River and the Delta. Studies focus on the process of sketching related to a variety of drawing media and techniques. Students will work on composition, value relationships and creating a focal point. In addition, students will learn the techniques artists can use to sketch skies, clouds, standing and running water, and trees, grasses and shrubbery. Students may use pencil, pastel, charcoal, pen and ink, or watercolor media. May be repeated three times. P/NP
LMC: DA
Transfer: UC, CSU

ART-027 Introduction to Cartooning
2 hours lecture, 3 hours lab 3 Units
Advisory: ART 12, 20 and eligibility for ENGL 90
This introductory course will present and offer practical experience in the basic elements of the cartoon process as it relates to the entertainment industry. Topics include character development, perspective, backgrounds, light and shadow, cartoon anatomy, facial features, emotions, expressions and dynamic movement. Students will also explore the various ways in which cartoons and graphic illustrations are utilized in today's publishing, graphic arts, comic book, toy, and movie industries. May not be repeated. SC
LMC: DA
Transfer: UC, CSU
ART-028  Intermediate Cartooning
2 hours lecture, 3 hours lab  3 Units
Prerequisite: ART 27
Advisory: ART 12, ART 20; eligibility for ENGL 90
Intermediate Cartooning is the second of three courses in the cartooning sequence. This course develops skills presented in the introductory course and focuses on character development. Student work will be directed towards a professional level and can be used to create a portfolio for presentation to publishers in the comic art/illustration field. This course addresses the needs of the current graphic communications industry and students who presently are employed or seek employment in it. Students will continue to explore the various ways in which cartoons and graphic illustrations are utilized in today’s publishing, graphic arts, comic book, toy, and movie industries. May be repeated one time. SC
LMC: DA
Transfer: CSU

ART-030  Life Drawing
2 hours lecture, 4 hours lab  3 Units
Advisory: Completion of ART 12 or ART 20
The focus of this course is the human figure. Students will study structure and anatomy and develop skills in the accurate representation of the figure and its environment. Emphasis will be given to the cultural and historical use of the human form as subject matter. May not be repeated. LR
LMC: DA
Transfer: UC, CSU

ART-033  Introduction to Digital Pre-Press
2 hours lecture, 1 hour lab  2 Units
Advisory: ART 10, 12, 48 and 55
Studies and practice in full preparation of reproducible art, with special emphasis on the practical and technical requirements of working with the art director, the client, the illustrator or photographer, and the printer. Studies and practice in the computer-based and aesthetic skills necessary to obtain employment in this professional field. Emphasis will be on the exacting industrial standards that must be met in attitude, procedures, materials, presentation and results. Instruction is computer-based. May not be repeated. LR
LMC: DA
Transfer: CSU

ART-034  Advanced Digital Pre-Press
2 hours lecture, 1 hour lab  2 Units
Prerequisite: ART 33
Advanced studies and practice in full preparation of reproducible art. Special emphasis will be placed on developing the students’ confidence and personal initiative through progressively more independent and complex activities and projects. Advanced studies and practice in principles of typography, prepress operations, printing and bindery processes. Instruction is computer-based. May not be repeated. LR
LMC: DA
Transfer: CSU

ART-040  Introduction to Painting
2 hours lecture, 4 hours lab  3 Units
Advisory: ART 10, 12 or 20
An introduction to the tools, materials and techniques of painting in oil and acrylic media. The student will select the medium of preference. This course emphasizes the process of painting, through rigorous exercises as well as longer-term assignments that apply principles presented in lectures and readings. Coursework includes studies and practice in still life and landscape painting, applied light and color theory and composition. Lectures focus on painting from cultural, historical and contemporary perspectives. May not be repeated. LR
LMC: DA
Transfer: UC, CSU

ART-042  Watercolor Painting
2 hours lecture, 4 hours lab  3 Units
Introduction to the materials, tools and techniques of transparent watercolor. Students will learn traditional approaches, but will be encouraged to experiment with this “spontaneous” medium. May not be repeated. SC
LMC: DA
Transfer: UC, CSU

ART-043  Introduction to Illustration
2 hours lecture, 1 hour lab  2 Units
Advisory: ART 10, ART 24 strongly recommended
An introduction to two-dimensional illustration techniques in the graphic arts. Emphasis will be directed to the development of techniques for technical, editorial, fashion, and commercial illustration. Instruction will be given in use of traditional and new materials used in the production and manipulation of a two-dimensional surface. Projects for professional portfolio development will be developed and discussed. Course will also investigate current trends in field of illustration. May not be repeated. LR
LMC: DA
Transfer: UC, CSU

ART-045  Advanced Painting
2 hours lecture, 4 hours lab  3 Units
Prerequisite: ART 40
Advanced studies and practice in tools, materials and techniques of painting in oil, acrylic and watercolor media. Special emphasis will be placed on developing students’ confidence and personal initiative through progressively more independent and complex activities and projects. Students will investigate painting from cultural, historical and contemporary perspectives. May be repeated two times. SC
LMC: DA
Transfer: UC, CSU
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Prerequisites</th>
<th>Advisory</th>
<th>Transfer</th>
</tr>
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<tbody>
<tr>
<td>ART-046</td>
<td>Landscape Painting on Location</td>
<td>1</td>
<td>8 total hours lecture, 40 total hours lab</td>
<td>Basic computer proficiency</td>
<td>CSU</td>
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<tr>
<td>ART-047</td>
<td>Color Dynamics in Painting</td>
<td>1</td>
<td>16 total hours lecture, 20 total hours lab</td>
<td>ART 40 or equivalent</td>
<td>CSU</td>
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<td>ART-048</td>
<td>Adobe InDesign: Publishing Software Concepts</td>
<td>1.5</td>
<td>16 total hours lecture, 32 total hours lab</td>
<td>Basic computer proficiency</td>
<td>CSU</td>
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<tr>
<td>ART-049</td>
<td>Adobe InDesign: Advanced Publishing Software Concepts</td>
<td>1.5</td>
<td>16 total hours lecture, 32 total hours lab</td>
<td>ART 48</td>
<td>CSU</td>
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<tr>
<td>ART-054</td>
<td>Adobe Photoshop</td>
<td>3</td>
<td>2 hours lecture, 3 hours lab</td>
<td>Eligibility for ENGL 90</td>
<td>CSU</td>
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<tr>
<td>ART-055</td>
<td>Adobe Illustrator on the Macintosh</td>
<td>1.5</td>
<td>16 total hours lecture, 24 total hours lab</td>
<td>Basic computer proficiency</td>
<td>CSU</td>
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<tr>
<td>ART-056</td>
<td>Adobe Illustrator Workshop</td>
<td>1.5</td>
<td>16 total hours lecture, 24 total hours lab</td>
<td>ART 55</td>
<td>CSU</td>
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<tr>
<td>ART-057</td>
<td>Desktop Typography and Font Management for the Macintosh</td>
<td>1.5</td>
<td>16 total hours lecture, 24 total hours lab</td>
<td>ART 55 or ART 52</td>
<td>CSU</td>
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**Advisory:**
- Basic computer proficiency
- ART 26 or ART 40 or equivalent
- ART 8, 2 or ART 0 or equivalent
- Eligibility for ENGL 90
- Basic computer proficiency
- ART 55
- ART 48, 52 or 55
- ART 55

**Transfer:**
- CSU
- DA
## Art

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Prerequisite</th>
<th>Advisory</th>
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<tbody>
<tr>
<td>ART-060</td>
<td>Introduction to Sculpture</td>
<td>3</td>
<td>ART 11 or ART 66</td>
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<tr>
<td></td>
<td>2 hours lecture, 4 hours lab</td>
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<tr>
<td>ART-063</td>
<td>Raku Workshop</td>
<td>1</td>
<td>ART 2 or equivalent</td>
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<td></td>
<td>9 total hours lecture, 39 total hours lab</td>
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<tr>
<td>ART-066</td>
<td>Introduction to Ceramics</td>
<td>3</td>
<td>ART 11</td>
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<td></td>
<td>2 hours lecture, 4 hours lab</td>
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<tr>
<td>ART-067</td>
<td>Intermediate Ceramics</td>
<td>3</td>
<td>ART 66 or equivalent course</td>
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<td></td>
<td>2 hours lecture, 4 hours lab</td>
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<tr>
<td>ART-069</td>
<td>Figurative Ceramic Sculpture</td>
<td>3</td>
<td>ART 66</td>
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<td></td>
<td>2 hours lecture, 4 hours lab</td>
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<tr>
<td>ART-072</td>
<td>Photo 1: Survey of Digital Photography</td>
<td>3</td>
<td>ART 72 or equivalent</td>
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<td></td>
<td>2 hours lecture, 3 hours lab</td>
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<tr>
<td>ART-073</td>
<td>Location Photography</td>
<td>1</td>
<td>ART 72 or equivalent</td>
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<tr>
<td></td>
<td>16 total hours lecture, 20 total hours lab</td>
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<tr>
<td>ART-074</td>
<td>Photo II: Developing a Personal Vision</td>
<td>3</td>
<td>ART 72</td>
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<td>2 hours lecture, 3 hours lab</td>
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</tbody>
</table>
ART-080 Looking Good on the Web
18 total hours lecture, 27 total hours lab 1.5 Units
Advisory: Eligibility for ENGL 90 and basic computer literacy strongly recommended
This course provides students the technical and graphic foundation necessary to create visually exciting, technically sound Web pages using Dreamweaver. The emphasis for this class is on visually organizing information and effective presentation on the Web. Covers basic HTML and WYSIWYG HTML editors. May not be repeated. LR
LMC: DA
Transfer: CSU

ART-081 Looking Good on the Web, Part II
18 total hours lecture, 27 total hours lab 1.5 Units
Advisory: ART 80; eligibility for ENGL 90 and basic computer literacy recommended
This short-term course is the logical extension of ART 80. It provides students the technical and graphic foundation necessary to create visually exciting, technically sound Web pages. The focus for this class is advanced study and practice of visually organizing information and creating graphic elements for the World Wide Web. Covers advanced HTML using Dreamweaver as well as image creation using Photoshop, Imageready, and other Web-oriented image editing applications and image creation. May not be repeated. LR
LMC: DA
Transfer: CSU

ART-082 Animating the Web with Macromedia Dreamweaver
36 hours lecture, 54 hours lab 3 Units
This course will prepare students for working in the field of design for the World Wide Web using Flash, a vector animation program. It will introduce students to current industry practices and give them a foundation in theory on which to build as technology advances. This class is a required component of the Art Department’s Digital Publishing program. May be repeated three times. SC
LMC: DA
Transfer: CSU

ART-085 Intro to Animation
2 hours lecture, 4 hours lab 3 Units
Studies and practice in three-dimensional computer-based animation with emphasis on the definition of, research for, and solutions to animation problems. Includes basic history of animation. Using industry standard routines and analyses, this course develops students’ understanding of motion and visual effects generated in 3D scenes. Special emphasis will be placed on animation styles, production pipelines, and story development. May be repeated three times. SC
LMC: DA

ART-090 Digital Communications Portfolio
4.5 hours lab 1.5 Units
Designed for Digital Publishing and Graphic Communications students, this class provides students with the opportunity to solve real world problems and develop a portfolio under the close supervision of a faculty member. The class will encourage students to inter-relate and integrate the technical, aesthetic, and scholastic skills they have developed in previous courses. May not be repeated. SC
LMC: DA
Transfer: CSU

ART-098 Independent Study in Art
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC
LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.
Transfer: Independent Study courses may be DA or transferable depending on specific course. See your counselor.

ART-099 Cooperative Education in Art
Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC
LMC: DA
Transfer: CSU

ART-900s Selected Topics in Art
DA varies with course content.

Astronomy

ASTRO-010 Introduction to Astronomy
3 hours lecture, 1 hour lab 3 Units
(Formerly ASTRO 10LS) A survey of current concepts of the universe and their historical evolution from an intradisciplinary approach. Emphasis is placed on the creative process of scientific inquiry by which current scientific understanding has been achieved, on the aesthetics of science, and on the limitations and implications of scientific knowledge. The material is presented throughout with the aid of the planetarium sky and the auto-tutorial method of instruction. Opportunities for the development of skills in critical thinking, problem solving, and effective learning will be provided throughout the course. May not be repeated. LR
LMC: GE: Physical Sciences; DA
Transfer: UC, CSU Gen. Ed. Area B1 & B3, IGETC Area 5A
ATH-008 Strength and Weight Training for Athletes
1.5-3 hours activity .5-1 Unit
Advisory: High school athletic experience.
This course includes instruction in all elements of weight training as it pertains to individual sports. The athlete will learn proper techniques, safety procedures, warm up and cool down to improve the overall fitness level. This course meets the Graduation Requirement for Physical Education. May be repeated three times. SC
LMC: DA
Transfer: UC, CSU

ATH-010 Cardiovascular and Muscular Endurance Training for Athletes
1.5-3 hours activity .5-1 Unit
Advisory: High school athletic experience.
A method used in an equipped lab setting to train athletes to help them attain applicable cardiovascular and muscular fitness for their specific sport. This course meets the Graduation Requirement for Physical Education. May be repeated three times. SC
LMC: DA
Transfer: UC, CSU

ATH-014 Advanced Volleyball Skills for Athletes
1.5-3 hours activity .5-1 Unit
This course is designed to help the athlete further develop volleyball skills such as serving, blocking, digging, setting, and spiking. Emphasis will be placed on knowledge of rules and team strategies. This course meets the Graduation Requirement for Physical Education. May be repeated three times. SC
LMC: DA
Transfer: UC, CSU

ATH-026 Advanced Soccer Skills for Athletes
1.5-3 hours activity .5-1 Unit
Advisory: High school athletic experience.
This course assists the athlete in working on the soccer skills such as kicking, trapping, throwing, and teamwork. Knowledge of the rules and strategies will be discussed. This course meets the Graduation Requirement for Physical Education. May be repeated three times. SC
LMC: DA
Transfer: UC, CSU

ATH-027 Offensive Football Skills and Conditioning
1.5-3 hours activity .5-1 Unit
Advisory: Designed for intercollegiate football participants.
An introduction to fundamentals, techniques and procedures of intercollegiate football. Offensive philosophies will be introduced. Area skills will be covered. This course meets the Graduation Requirement for Physical Education. May be repeated three times. SC
LMC: DA
Transfer: UC, CSU

Athletics / Physical Education

ATH-006 Fitness for Athletic Competition
1.5-3 hours activity .5-1 Unit
Advisory: High school athletic experience.
Designed to introduce the athlete to the elements, understanding and knowledge of athletic physical training for competition. Course activities will include endurance running, interval sprinting, weight training and plyometric training to improve one’s level of fitness for the upcoming athletic season. This course meets the Graduation Requirement for Physical Education. May be repeated three times. SC
LMC: DA
Transfer: UC, CSU

ATH-008 Strength and Weight Training for Athletes
1.5-3 hours activity .5-1 Unit
Advisory: High school athletic experience.
This course includes instruction in all elements of weight training as it pertains to individual sports. The athlete will learn proper techniques, safety procedures, warm up and cool down to improve the overall fitness level. This course meets the Graduation Requirement for Physical Education. May be repeated three times. SC
LMC: DA
Transfer: UC, CSU

ATH-010 Cardiovascular and Muscular Endurance Training for Athletes
1.5-3 hours activity .5-1 Unit
Advisory: High school athletic experience.
A method used in an equipped lab setting to train athletes to help them attain applicable cardiovascular and muscular fitness for their specific sport. This course meets the Graduation Requirement for Physical Education. May be repeated three times. SC
LMC: DA
Transfer: UC, CSU

ATH-014 Advanced Volleyball Skills for Athletes
1.5-3 hours activity .5-1 Unit
This course is designed to help the athlete further develop volleyball skills such as serving, blocking, digging, setting, and spiking. Emphasis will be placed on knowledge of rules and team strategies. This course meets the Graduation Requirement for Physical Education. May be repeated three times. SC
LMC: DA
Transfer: UC, CSU

ATH-026 Advanced Soccer Skills for Athletes
1.5-3 hours activity .5-1 Unit
Advisory: High school athletic experience.
This course assists the athlete in working on the soccer skills such as kicking, trapping, throwing, and teamwork. Knowledge of the rules and strategies will be discussed. This course meets the Graduation Requirement for Physical Education. May be repeated three times. SC
LMC: DA
Transfer: UC, CSU

ATH-027 Offensive Football Skills and Conditioning
1.5-3 hours activity .5-1 Unit
Advisory: Designed for intercollegiate football participants.
An introduction to fundamentals, techniques and procedures of intercollegiate football. Offensive philosophies will be introduced. Area skills will be covered. This course meets the Graduation Requirement for Physical Education. May be repeated three times. SC
LMC: DA
Transfer: UC, CSU

Athletics / Physical Education

ATH-006 Fitness for Athletic Competition
1.5-3 hours activity .5-1 Unit
Advisory: High school athletic experience.
Designed to introduce the athlete to the elements, understanding and knowledge of athletic physical training for competition. Course activities will include endurance running, interval sprinting, weight training and plyometric training to improve one’s level of fitness for the upcoming athletic season. This course meets the Graduation Requirement for Physical Education. May be repeated three times. SC
LMC: DA
Transfer: UC, CSU

ATH-008 Strength and Weight Training for Athletes
1.5-3 hours activity .5-1 Unit
Advisory: High school athletic experience.
This course includes instruction in all elements of weight training as it pertains to individual sports. The athlete will learn proper techniques, safety procedures, warm up and cool down to improve the overall fitness level. This course meets the Graduation Requirement for Physical Education. May be repeated three times. SC
LMC: DA
Transfer: UC, CSU

ATH-010 Cardiovascular and Muscular Endurance Training for Athletes
1.5-3 hours activity .5-1 Unit
Advisory: High school athletic experience.
A method used in an equipped lab setting to train athletes to help them attain applicable cardiovascular and muscular fitness for their specific sport. This course meets the Graduation Requirement for Physical Education. May be repeated three times. SC
LMC: DA
Transfer: UC, CSU

ATH-014 Advanced Volleyball Skills for Athletes
1.5-3 hours activity .5-1 Unit
This course is designed to help the athlete further develop volleyball skills such as serving, blocking, digging, setting, and spiking. Emphasis will be placed on knowledge of rules and team strategies. This course meets the Graduation Requirement for Physical Education. May be repeated three times. SC
LMC: DA
Transfer: UC, CSU

ATH-026 Advanced Soccer Skills for Athletes
1.5-3 hours activity .5-1 Unit
Advisory: High school athletic experience.
This course assists the athlete in working on the soccer skills such as kicking, trapping, throwing, and teamwork. Knowledge of the rules and strategies will be discussed. This course meets the Graduation Requirement for Physical Education. May be repeated three times. SC
LMC: DA
Transfer: UC, CSU

ATH-027 Offensive Football Skills and Conditioning
1.5-3 hours activity .5-1 Unit
Advisory: Designed for intercollegiate football participants.
An introduction to fundamentals, techniques and procedures of intercollegiate football. Offensive philosophies will be introduced. Area skills will be covered. This course meets the Graduation Requirement for Physical Education. May be repeated three times. SC
LMC: DA
Transfer: UC, CSU
ATH-028 Defensive Football Skills and Conditioning
1.5-3 hours activity .5-1 Unit
Advisory: Designed for intercollegiate football participants.
Introduction to defensive fundamentals, techniques and procedures of intercollegiate football. Defensive philosophies will be introduced. Area skills will be covered. This course meets the Graduation Requirement for Physical Education. May be repeated three times. SC
LMC: DA
Transfer: UC, CSU

ATH-030 Fastpitch Softball
3 hours activity 1 Unit
Advisory: High school softball experience or collegiate experience
This course is designed to explore all the areas of fastpitch softball. Provides the student with the physical skills necessary to compete at the advanced level in fastpitch softball. May be repeated three times. SC
LMC: DA
Transfer: UC, CSU

ATH-046 Advanced Basketball Skills for Athletes
1.5-3 hours activity .5-1 Unit
Advisory: High school athletic experience.
This course is designed to enhance the playing level for intercollegiate basketball athletes. The intent of the course will be to engage the athletes in the practice of all the skills through individual and group drills. This course meets the Graduation Requirement for Physical Education. May be repeated three times. SC
LMC: DA
Transfer: UC, CSU

ATH-050 Advanced Theory of Basketball
1 hour lecture, 3 hours activity 2 Units
Advisory: Recommended: previous high school or college basketball study
This course is designed to explore all the theoretical areas of basketball. Provides the student with integrated knowledge of concepts, technical skills, and methods used in the offensive and defensive game of basketball. Prepares student athlete who participates to perform in a more knowledgeable manner. May be repeated two times. SC
LMC: DA
Transfer: UC, CSU

ATH-056 Football Theory - Defensive
1 hour lecture, 3 hours activity 2 Units
Advisory: Prior experience in playing football
Course designed to explore all the theoretical areas of football defense. Provides the student with integrated knowledge of concepts, technical skills, and methods used in the defensive game of football. Prepares student athlete who participates to perform in a more knowledgeable manner. May be repeated two times. SC
LMC: DA
Transfer: UC, CSU

ATH-060 Advanced Theory of Softball
1 hour lecture, 3 hours activity 2 Units
Advisory: Recommended: previous high school or college softball study
This course is designed to explore, in depth, all theoretical areas of softball directed toward increasing the students' knowledge. It will prepare those who wish to participate to perform in a more knowledgeable and skillful manner. May be repeated two times. SC
LMC: DA
Transfer: CSU

ATH-062 Advanced Baseball Skills and Conditioning
1.5-3 hours activity .5-1 Unit
Advisory: High school baseball experience or college baseball study.
This course is designed to condition the student both physically and mentally, in order to prepare him to compete in the demanding game of baseball. Conditioning, body control, offensive and defensive strategy and theory, along with individual techniques will be taught. This course meets the Graduation Requirement for Physical Education. May be repeated three times. SC
LMC: DA
Transfer: UC, CSU

ATH-064 Advanced Theory of Baseball
1 hour lecture, 3 hours activity 2 Units
Advisory: Previous high school or college baseball study recommended.
This course is designed to explore, in depth, all theoretical areas of baseball directed toward increasing the students' knowledge, therefore, preparing those who wish to perform in a more knowledgeable and skillful manner. May be repeated two times. SC
LMC: DA
Transfer: UC, CSU
### Athletics/Physical Education

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Prerequisites/Advisory</th>
</tr>
</thead>
</table>
| ATH-067     | Introduction to Sports Medicine & Athletic Training    | 3     | 2 hours lecture, 3 hours lab  
Advisory: BIOSC 30 or equivalent; eligibility for ENGL 90  
Are you interested in Medicine? How about Athletics? Then why not take this class and blend the two into the exciting field of Sports Medicine and Athletic Training. This class is an introduction to the growing field of Athletic Training and Sports Medicine. Topics to be covered include basic anatomy, athletic injury terminology, recognition and evaluation of injuries, first aid and emergency procedures, reconditioning and protective taping and wrapping techniques. This is designed for the prospective coach, athletic trainer, physical therapist, and health and physical educator. May not be repeated. LR  
LMC: DA  
Transfer: UC, CSU |
| ATH-068     | Athletic Conditioning                                  | .5-1  | 1.5-3 hours activity  
Advisory: Being a participant on an athletic team  
Training methods used to enhance fitness for athletic competition. Training methods to include strength, flexibility, and endurance at a more intense level. This course meets the Graduation Requirement for Physical Education. May be repeated three times. SC  
LMC: DA  
Transfer: UC, CSU |
| ATH-069     | Passing Skills                                         | .5-1  | 1.5-3 hours activity  
Advisory: Permission of Coach.  
A course designed to review basic passing skills and introduce techniques and strategies in the area of offensive and defensive football. This course meets the Graduation Requirement for Physical Education. May be repeated three times. SC  
LMC: DA  
Transfer: UC, CSU |
| ATH-076     | Intercollegiate Volleyball                             | 3     | 10 hours activity  
Advisory: Permission of Coach.  
This course provides the opportunity for competition as a member of the intercollegiate volleyball team in the athletic conference, including championships and playoffs. Includes daily practice throughout the season. Meets graduation requirement for Physical Education. May be repeated two times. LR  
LMC: DA  
Transfer: UC, CSU |
| ATH-077     | Intercollegiate Football                               | 3     | 10 hours activity  
Advisory: High school football experience/Permission of Coach  
This course provides the opportunity for competition as a member of the intercollegiate football team in the athletic conference, including championships and playoffs. Includes daily practice throughout the season. Meets graduation requirement for Physical Education. May be repeated two times. LR  
LMC: DA  
Transfer: UC, CSU |
| ATH-079     | Intercollegiate Basketball for Men                     | 3     | 10 hours activity  
Advisory: High school basketball experience.  
This course provides the opportunity for competition as a member of the intercollegiate basketball team in the athletic conference, including championships and playoffs. Includes daily practice throughout the season. Meets graduation requirement for Physical Education. May be repeated two times. SC  
LMC: DA  
Transfer: UC, CSU |
| ATH-081     | Intercollegiate Baseball                               | 3     | 10 hours activity  
Advisory: Two years high school experience and/or by audition try-outs.  
This course provides the opportunity for competition as a member of the intercollegiate baseball team in the athletic conference, including championships and playoffs. Includes daily practice throughout the season. Meets graduation requirement for Physical Education. May be repeated two times. SC  
LMC: DA  
Transfer: UC, CSU |
| ATH-089     | Intercollegiate Soccer                                 | 3     | 10 hours activity  
This course provides the opportunity for competition as a member of the intercollegiate soccer team in the athletic conference, including championships and playoffs. Includes daily practice throughout the season. Meets graduation requirement for Physical Education. May be repeated two times. LR  
LMC: DA  
Transfer: UC, CSU |
| ATH-090     | Intercollegiate Basketball for Women                   | 3     | 10 hours activity  
Advisory: High school basketball experience / permission of coach.  
This course provides the opportunity for competition as a member of the intercollegiate basketball team in the athletic conference, including championships and playoffs. Includes daily practice throughout the season. Meets graduation requirement for Physical Education. May be repeated two times. SC  
LMC: DA  
Transfer: UC, CSU |
| ATH-092     | Intercollegiate Softball                               | 3     | 10 hours activity  
Advisory: High school softball experience.  
This course provides the opportunity for competition as a member of the intercollegiate softball team in the athletic conference, including championships and playoffs. Includes daily practice throughout the season. Meets graduation requirement for Physical Education. May be repeated two times. SC  
LMC: DA  
Transfer: UC, CSU |
ATH-098 Independent Study in Athletics
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC
LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.
Transfer: Independent Study courses may be DA or transferable depending on specific course. See your counselor.

ATH-099 Cooperative Education in Athletics
Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC
LMC: DA
Transfer: CSU

ATH-900s Selected Topics in Athletics
DA varies with course content.

Automotive Technology

AUTO-035 Automotive Fundamentals
3 hours lecture, 4 hours lab 4 Units
Advisory: Eligibility for ENGL 90
The course is designed to provide students the knowledge and opportunity to rebuild and diagnose four stroke engines. The skills gained in machining, engine rebuilding, and their service and repair. This course is designed for the student seeking a career as an automotive technician as well as the home mechanic who wants to learn about his/her automobile. May be repeated three times. SC
LMC: DA
Transfer: CSU

AUTO-037 Automotive Engine Machining
1 hour Lecture, 5 hours lab 2.5 Units
Advisory: AUTO 35
The course will teach students how to diagnose rebuild and machine a modern automotive engine. This course is designed for the student seeking a career as an automotive technician, as well as the home mechanic who wants to learn about the car engine. It will prepare the student for the A.S.E. M1, M2, and M3 Examinations. May be repeated three times. SC
LMC: DA
Transfer: CSU

AUTO-040 Automotive Engine Diagnosis I
2 hours lecture, 6 hours lab 4 Units
This course will provide the requisite knowledge and experience necessary for the student who wishes to pursue a career in the automotive industry by providing a practical background in the theory, operation, and testing of automotive engine systems and emission control components. This course is the first in a two part series (AUTO 40 and 41) on tune-ups and diagnostics to familiarize the student with engine systems. May be repeated three times. SC
LMC: DA
Transfer: CSU

AUTO-041 Automotive Engine Diagnosis II
2 hours lecture, 6 hours lab 4 Units
Advisory: AUTO 40 or prior experience, background or work skills
This advanced course is the second in a series on tune-ups and diagnostics. The course is designed to give the student the requisite knowledge and opportunity to gain and refine skills necessary to perform engine tune-ups, and diagnostic techniques on late model vehicles. The course places emphasis on manufacturers' standards, and procedures required to keep the automobile engine performing within state and federal specifications. This course is the second in a two part series (AUTO 40 and 41) on tune-ups and diagnostics. This course will prepare the student for the ASE A-8 Examination. May be repeated three times. SC
LMC: DA
Transfer: CSU

AUTO-042 Automotive Brakes
2 hours lecture, 6 hours lab 4 Units
This course is designed to give students knowledge, and practical skills necessary to troubleshoot, diagnose and repair modern automotive brake and ABS systems. The course places emphasis on manufacturers' standards, and procedures required to keep the brakes performing within state and federal specifications. This course will prepare the student for the State of California Brake Installer's License exam and ASE A-5 Examination. May be repeated three times. SC
LMC: DA
Transfer: CSU

AUTO-042A Automotive Brakes Essentials
2 hours lecture, 3 hours lab 3 Units
Advisory: Prior automotive work experience
This course is designed to give students basic knowledge and practical skills necessary to troubleshoot, diagnose and repair modern automotive brake and ABS systems. This course will prepare the student for a State of California Brake Installer's License exam and the ASE A-5 Examination. May be repeated three times. SC
LMC: DA
AUTO-043 Automotive Suspension and Steering
2 hours lecture, 6 hours lab 4 Units
The course is designed for students to gain and refine the skills necessary to diagnose and repair wheels, tires, shocks, steering, suspension systems and alignment procedures. The course places emphasis on the manufacturers' standards and procedures. This course will prepare students for the ASE A-4 Examination. May be repeated three times. SC
LMC: DA
Transfer: CSU

AUTO-043A Automotive Suspension and Steering Essentials
2 hours lecture, 3 hours lab 3 Units
Advisory: Prior automotive work experience
This course is designed to give students basic knowledge, and practical skills necessary to troubleshoot, diagnose and repair suspension systems and alignment procedures. The course places emphasis on the manufacturers' standards and procedures. This course will prepare students for the ASE A-4 Examination. May be repeated three times. SC
LMC: DA

AUTO-045 Automotive Laboratory Practice
4 hours of lab 1.5 Units
This course is designed for students who want to improve their existing skills. More lab time is very valuable in improving skills to gain employment in the automotive field. Projects will vary depending on the student's need. Work can include electrical and mechanical diagnosis and repair. Students must be able to perform repairs based on their current knowledge of the repair, with supervision from the instructor. May be repeated three times. P/NP
LMC: DA
Transfer: CSU

AUTO-046 Automotive Electricity and Electronics
3 hours lecture, 6 hours lab 4 Units
The course is designed to give students the ability to understand electrical principles, read wiring diagrams, diagnose electronic components, and use meters/lab scopes. This course is designed for students seeking a career as automotive technicians as well as the existing technicians who want to expand their knowledge. This course will prepare students for the California Automotive Lamp Installer's license and the ASE A-6 Examination. May be repeated three times. SC
LMC: DA
Transfer: CSU

AUTO-046A Automotive Electricity and Electronics Essentials
2 hours lecture, 3 hours lab 3 Units
Advisory: Prior automotive work experience
This course is designed to give students basic knowledge, and practical skills necessary to troubleshoot, diagnose and repair automotive electrical systems and read wiring diagrams. The course places emphasis on the manufacturers' standards and procedures. This course is designed for students seeking a career as automotive technicians as well as the existing technicians who want to expand their knowledge. This course will prepare students for the California Automotive Lamp, Installer's license test and ASE A-6 Examination. May be repeated three times. SC
LMC: DA

AUTO-047 Automotive Heating and Air Conditioning
2 hours lecture, 3 hours lab 3 Units
This course is designed to provide students with the knowledge and skills needed to succeed in the field of automotive heating and air conditioning and the retrofit of R12 to R143A systems. The course also prepares students for the federal exam for the Refrigerant Handling license and the ASE Examination A-7. May be repeated three times. SC
LMC: DA
Transfer: CSU

AUTO-048 Automatic Transmission and Transaxles
36 total hours lecture, 96 total hours lab 4 Units
This course is designed to provide students with the knowledge and skills to maintain and repair automotive transmission and transaxles, and prepare students for ASE A-2 Examination. May be repeated three times. SC
LMC: DA
Transfer: CSU

AUTO-049 Manual Transmission and Differential
2 hours lecture, 5 hours lab 4 Units
The course is designed to provide students with the knowledge and opportunity to diagnose and rebuild a manual transmission, clutch, transaxle, driveshaft and differential. Students will gain knowledge and skill in the theory, operation and inspection of manual transmission and transaxle systems. Students will gain diagnostic skills necessary to troubleshoot, repair and adjust most modern manual transmission and transaxle systems. May be repeated three times. SC
LMC: DA
Transfer: CSU
**AUTO-055** Clean Air Car Course + OBD II  
2 hours lecture, 3 hours lab  
3 Units  
**Advisory:** AUTO 40 and 41  
This course is designed for the student seeking a career as a smog technician. Instruction will include troubleshooting, diagnostics, and adjustment of automobile emissions systems to meet the requirements of the California State (Smog) Inspection and Maintenance Program. The Clean Air Car Course is required by the state prior to registration for the State Smog License examination. May be repeated three times. SC  
LMC: DA

**AUTO-057** Smog Update  
8 hours lecture, 12 hours lab  
.5 Units  
**Advisory:** AUTO 55, eligibility for ENGL 90  
The State of California mandates that all smog technicians renew their licenses every two years. This course is the latest update offered by the California Bureau of Automotive Repair for smog technicians who need to renew their license. May be repeated three times. P/NP  
LMC: DA

**AUTO-098** Independent Study in Automotive Technology  
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC  
LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.  
**Transfer:** Independent Study courses may be DA or transferable depending on specific course. See your counselor.

**AUTO-099** Cooperative Education in Automotive Technology  
Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC  
LMC: DA  
**Transfer:** CSU

**AUTO-900s** Selected Topics in Automotive Technology  
DA varies with course content.

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**Biological Science**

**BIOSC-005** Health Biology  
3 hours lecture, 1 hour lab  
3 Units  
(Formerly BIOSC 5S) This is an introductory course that covers the biological concepts and principles underlying human health and fitness. The course content includes the basic functions of the human cardiovascular, respiratory, nervous, digestive, immune, and reproductive systems, and the effects of diet, exercise, certain drugs, and stress on these systems. The course includes up-to-date information on biological and medical discoveries related to human health. Issues related to mental health, addiction, and sexually transmitted diseases will also be emphasized. Hands-on mini-lab assignments will serve to demonstrate the alive, exciting concepts. This course meets the General Education Graduation Requirement for Health. May not be repeated. LR  
LMC: GE: Biological Sciences; GCR: Health Education; DA  
**Transfer:** UC, CSU Gen. Ed. Area E1

**BIOSC-007** Environmental Biology  
3 hours lecture, 3 hours lab  
4 Units  
(Formerly BIOSC 7LS) An introduction to the biological concepts, principles, and laws underlying ecology. An interdisciplinary approach will be used to develop an understanding of the significant relationships existing between organisms and the environment. The creative process of scientific inquiry, the aesthetics of science, the limitation and implications of scientific knowledge will be emphasized. Problem solving, and effective learning will be emphasized throughout this course. This course meets the General Education Graduation Requirement for Science. May not be repeated. LR  
LMC: GE: Biological Sciences; DA  
**Transfer:** UC, CSU Gen. Ed. Area B2, B3, IGETC Area 5B

**BIOSC-010** General Biology  
3 hours lecture, 4 hours lab  
4 Units  
(Formerly BIOSC 10LS) An integrated study with laboratory techniques and methods of the biological concepts, principles, and laws pertaining to life processes. An interdisciplinary approach will be used to develop an understanding of living organisms in terms of these processes, especially the human species. The creative process of scientific inquiry, the aesthetics of science, and the implications of scientific knowledge will be emphasized. Throughout the course, critical thinking, problem solving, and effective learning will be emphasized. This course meets the General Education Requirement for Science. May not be repeated. LR  
LMC: GE: Biological Sciences; DA  
**Transfer:** UC, CSU Gen. Ed. Area B2, B3, IGETC Area 5B
BIOSC-020  Principles of Biology: Cellular
3 hours lecture, 6 hours lab  5 Units
Prerequisite: Intermediate Algebra
Advisory: High school Biology, Chemistry, BIOSC 10, or 21
Formerly BIOSC 20LS An integrated study with laboratory methods and techniques of the fundamental concepts, principles, and laws underlying plant and animal life processes on the molecular and cellular levels. An interdisciplinary approach will be used to treat cytology, biochemical cycles, genetics, reproduction, and embryonic development. The creative process of scientific inquiry, the aesthetics of science, and the implications of scientific knowledge will be emphasized. Skills in critical thinking, problem solving, and effective learning will be emphasized throughout the course. Required for biological science majors. This course is offered in the fall only. This course meets the General Education Requirement for Science. May not be repeated. (CAN BIOL 2, CAN BIOL SEQ A)  LR
LMC: GGE: Biological Sciences; DA
Transfer: UC, CSU Gen. Ed. Area B2, B3, IGETC Area 5B

BIOSC-021  Principles of Biology: Organismic
3 hours lecture, 6 hours lab  5 Units
Prerequisite: Intermediate Algebra
Advisory: High School biology, or chemistry, or BIOSC 10 or BIOSC 20
An integrated study of biological processes and principles that lead to increasing higher levels of organization. The course focuses on three major areas of study: Evolutionary principles, Unity and Diversity of Life and Ecology. Major topics will include: Origin of Life, evolutionary mechanisms, evidence of evolution, speciation, diversity of life; plant form and function; population and community ecology; ecosystems and environmental concerns. Skills in critical thinking, problem solving and effective learning will be presented throughout the course. Laboratory methods, techniques and field work will be included with all major topics. May not be repeated. (CAN BIOL SEQ A)  LR
LMC: DA
Transfer: UC, CSU Gen. Ed. Area B2, B3, IGETC Area 5B

BIOSC-026  Ecology Field Studies
1 hour lecture or 3 hours lab per unit  1 Unit
The practicum will allow students the opportunity to explore a series of principles from the field of ecology using a variety of instructional strategies. Course content varies with each semester. The subtitle of the course describes the content. May be repeated for different subtitles.  SC
LMC: DA
Transfer: CSU

BIOSC-030  Introduction to Anatomy and Physiology
3 hours lecture, 3 hours lab  3 Units
This course is designed to cover basic human anatomy and physiology. The emphasis will be on macroscopic, rather than microscopic structures and the functional relationships between the systems of the body. All systems will be briefly covered during this one semester course. The audio-tutorial method of presentation is used, and students will work on their own with supervision. May not be repeated.  LR
LMC: DA
Transfer: CSU

BIOSC-040  Human Anatomy
3 hours lecture, 6 hours lab  5 Units
Advisory: BIOSC 30 or equivalent course with a grade of “C” or better
A comprehensive exploration of gross and microscopic anatomy: from cellular to systems that presents the human body as an integrated organism. Extensive dissections of human cadavers and preserved animal organs will constitute the bulk of the lab. May not be repeated.  LR
LMC: DA
Transfer: UC, CSU Gen. Ed. Area B2, B3, IGETC Area 5B

BIOSC-045  Human Physiology
3 hours lecture, 6 hours lab  5 Units
Advisory: BIOSC 40 and CHEM 7 (or another college-level chemistry course)
A comprehensive exploration of general human physiology beginning with a discussion of the molecular and cellular basis of physiology, followed by an analysis of molecular, cellular, and tissue functions as they relate to each of the systems of the body and the total human organism. Critical and quantitative thinking and problem solving will be emphasized, and modern physiological recording instruments will be utilized extensively to analyze human physiological function. May not be repeated.  LR
LMC: DA
Transfer: UC, CSU Gen. Ed. Area B2, B3, IGETC Area 5B

BIOSC-050  Introduction to Microbiology
2 hours lecture, 6 hours lab  4 Units
Prerequisite: CHEM 6 or 7 or 8 or 20 or 21 or 25, or equivalent.
(Formerly BIOSC 50LS) An introduction to the fundamental principles of bacteria, viruses, and other microorganisms. An interdisciplinary approach will be taken to explore the microbial world with emphasis on bacteria and their role in disease. Basic areas to be studied in the classroom and laboratory include microbial characteristics, microbial metabolism, microbial growth and its control, microbial genetics and biotechnology, interactions between microbes and host, microorganisms and human disease, and industrial and environmental applications of microbiology. The creative process of scientific inquiry, the aesthetics of science, and the limitations of scientific knowledge will be emphasized. Opportunities for reading, writing, critical thinking, and problem solving will be interwoven throughout the course. May not be repeated.  LR
LMC: GE: Biological Sciences; DA
Transfer: UC, CSU Gen. Ed. Area B2, B3, IGETC Area 5B
BIOSC-098  Independent Study in Biological Science
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) SC
LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.
Transfer: Independent Study courses may be DA or transferable depending on specific course. See your counselor.

BIOSC-099  Cooperative Education in Biological Science
Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC
LMC: DA
Transfer: CSU

BIOSC-900s  Selected Topics in Biological Science
DA varies with course content.

Business

BUS-003  Business Math
3 hours lecture, 1 hour lab 3 Units
This course provides an introduction to the mathematical concepts and applications needed to succeed in business or to support further business study. Students will learn how to use mathematics to solve typical business problems. Included among the topics covered are credit and interest, trade and cash discounts, markup, commissions, depreciation, stocks and bonds, and business financial statements. This course satisfies the Mathematics Competency requirement for a Certificate of Achievement. May not be repeated. SC
LMC: DA

BUS-027  Small Business Management
3 hours lecture 3 Units
Advisory: Eligibility for ENGL 90
A review of the organization and operation of small business in this country, with particular attention to the overview of small business, starting a new venture, and managing the ongoing venture. The course is designed for those students who desire to enter or who are now involved in small business management. The emphasis is on the practical, "real world" aspects of planning, setting up, and operating a small business. May not be repeated. SC
LMC: DA
Transfer: CSU

BUS-029  QuickBooks
36 total hours lecture, 18 total hours lab 2 Units
Advisory: BUS 181 (Formerly BUS 10) or BUS 186 (Formerly BUS 16), BUS 185 (Formerly BUS 12), and BUS 18
This two-unit course introduces QuickBooks accounting software. QuickBooks is an easy-to-use commercial accounting system for small businesses. Topics include how to invoice customers for services and merchandise; how to order and track products; how to enter and pay vendors' bills; how to make deposits and reconcile bank accounts; how to generate company reports and graphs; and how to set up a new company or to computerize an existing company. May be repeated three times. SC
LMC: DA
Transfer: CSU

BUS-035  Using Microsoft Office
2 hours lecture, 3 hours lab 3 Units
This is a survey of three of the basic parts of Microsoft Office: Word, Excel, and PowerPoint and their interconnectivity, plus a unit on the Internet. This course is designed to provide students the skills necessary to use the office suite software. May be repeated two times. SC
LMC: GCR: Computer Literacy; DA
Transfer: CSU

BUS-035A  Microsoft Word
18 total hours lecture, 36 total hours lab 1.5 Units
(Formerly COMSC 75) This course is for students who want to learn the basic functions of Microsoft Word, a powerful word processing program which is part of Microsoft Office. Course will always use the current version of this software. Prepares students for Microsoft MOS certification testing, and is part of the LMC Microsoft Office Applications Certificate of Completion. May be repeated two times. SC
LMC: DA
Transfer: CSU
BUS-035B  Microsoft Excel  
18 total hours lecture, 27 total hours lab  1.5 Units  
Advisory: Completion of COMSC 60, or prior microcomputer applications experience  
(Formerly COMSC 70) A specialized microcomputer applications course in electronic spreadsheet using Microsoft Excel, a component of Microsoft Office. Course will focus on spreadsheet fundamentals, and will introduce students to spreadsheet creation, data entry and editing, formatting, data analysis tools, report generation, and spreadsheet automation. May be repeated three times. SC  
LMC: DA  
Transfer: CSU  

BUS-035C  Microsoft Powerpoint  
18 total hours lecture, 36 total hours lab  1.5 Units  
(Formerly COMSC 76) This course is for students who want to learn the Microsoft PowerPoint program, an electronic presentation tool. Course includes coverage of slide show construction, layout tools, presentation formats, importing sound, graphics and animation, creating and using custom templates. Course will always use the current version of this software. Prepares students for Microsoft MOS Certification testing, and is part of the LMC Microsoft Office Applications Certificate of Completion. May be repeated two times. SC  
LMC: DA  
Transfer: CSU  

BUS-035D  Microsoft Access  
18 total hours lecture, 27 total hours lab  1.5 Units  
Advisory: Completion of COMSC 60, or prior microcomputer applications experience  
(Formerly COMSC 65) A specialized microcomputer applications course in database management using Microsoft Access, a component of Microsoft Office. Course will focus on data structures, and will introduce students to database creation, data entry and editing, query operations, report generation, and database automation utilizing macros and Visual Basic. May be repeated three times. SC  
LMC: DA  
Transfer: CSU  

BUS-045  Office Accounting Essentials  
3 hours lecture, 1 hour lab  3 Units  
Manual and computerized entry level accounting skills for the office: Accounts Payable (A/P), Accounts Receivable (A/R), Payroll, State and Federal forms, ten key, and basic math review. Upon completion of the course the student will have marketable employment skills in the areas of general office accounting essential in today’s office. May not be repeated. SC  
LMC: DA  
Transfer: CSU  

BUS-047  Office Procedures  
3 hours lecture  3 Units  
Advisory: Prior or concurrent enrollment in BUS 51  
Covers basic procedures: time management, organizational skills, telephone etiquette, business correspondence, job search techniques, resume writing and job interviews. Introduces word processing, spreadsheet, database, presentation software, and the use of the Internet and telecommunications. May not be repeated. SC  
LMC: DA  
Transfer: CSU  

BUS-051  Computer Keyboarding  
9 total hours lecture, 18 total hours lab  1 Unit  
This nine-week course enables the student to develop the necessary skills to operate the video display terminal keyboard with ease and speed by “touch”, and to develop a net typing speed of 25 words per minute. Acquaints students with basic terminology and operation of basic function keys on the PC. May be repeated three times. P/NP  
LMC: NDA  

BUS-055  Typing Speed/Accuracy Development  
9 total hours lecture, 18 total hours lab  1 Unit  
Advisory: Knowledge of keyboard  
This nine-week course is designed to improve typing skills (keyboard proficiency, typing speed, and accuracy) through specialized drills. Includes numerous five minute timed writings to prepare students for “pre-employment” testing. May be repeated three times. P/NP  
LMC: NDA  

BUS-058  Business English  
3 hours lecture  3 Units  
Advisory: Eligibility for ENGL 90 or 100  
This course emphasizes grammar, spelling and vocabulary as applied to business communication. It prepares students to write and communicate effectively by developing written skills in sentence and paragraph structures, as well as longer written formats such as letters, memos, and other routine business correspondence. May not be repeated. SC  
LMC: DA  
Transfer: CSU  

BUS-059  Business Communications  
3 hours lecture  3 Units  
Advisory: Prior or concurrent enrollment in BUS 58 or equivalent; eligibility for ENGL 90  
Presents theory and practical application of effective written, oral and graphic communications; students learn to compose e-mail, memos, and reports; prepare application letters, resumes, and follow-up letters for the employment search; utilize on line employment resources; and learn effective interviewing techniques. May not be repeated. SC  
LMC: DA  
Transfer: CSU
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
<th>Credits</th>
<th>Advisory</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>BUS-065</td>
<td>Introduction to Word Processing</td>
<td>2</td>
<td>3</td>
<td>BUS 51 or knowledge of keyboard</td>
<td>An advanced project-based word processing course requiring students to use the skills that they have acquired to work individually in a self-paced environment to create documents required in a &quot;real world&quot; office environment. Students will also explore such advanced concepts as desktop publishing, integrating Office applications, creating documents for the Internet and other advanced topics. May be repeated one time. Satisfies Computer Literacy requirement. SC</td>
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<td>Transfer: CSU</td>
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<tr>
<td>BUS-067</td>
<td>Advanced Word Processing</td>
<td>2</td>
<td>3</td>
<td>BUS 65 or 66 and/or BUS 51 or knowledge of keyboard</td>
<td>Learn to use the microcomputer for fundamentals of word processing using Microsoft Word software. This beginning level word processing course covers such topics as creating, editing, formatting and printing documents setting tabs, creating tables and more. May be repeated three times. Satisfies Computer Literacy Requirement. SC</td>
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<td>Transfer: CSU</td>
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<tr>
<td>BUS-068</td>
<td>Introduction to Desktop Publishing on the PC</td>
<td>2</td>
<td>3</td>
<td>Knowledge of keyboard</td>
<td>A class in document layout where students will learn to produce reports, manuscripts, newsletters, flyers, brochures and/or newsletters utilizing layout-intensive applications. Capturing, sizing, and integrating graphics produced by other programs will be presented along with changing document-wide formatting. Multiple formats and printers will be introduced. Also, presents a broad range of computer concepts and terminology to enable students to become more computer literate. May be repeated three times. Satisfies Computer Literacy Requirement. SC</td>
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<td>Transfer: CSU</td>
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<tr>
<td>BUS-071B</td>
<td>eBay: Beyond the Basics</td>
<td>12</td>
<td>1</td>
<td>Prior experience on eBay or completion of BUS 71A</td>
<td>Learn from an eBay PowerSeller how to take your eBay business to the next level by improving your auctions and increasing your sales. Covers advanced selling techniques, eBay Seller's Assistant Pro Auction Management software, eBay Stores and the new integrated eBay/Half.com site. May be repeated one time. SC</td>
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<td>BUS-071C</td>
<td>Starting an Online Business</td>
<td>12</td>
<td>1</td>
<td>email account and ability to use the World Wide Web</td>
<td>Learn how to build and implement a business strategy for the Internet, including business specific considerations, online marketing and eCommerce strategies. May be repeated one time. SC</td>
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<tr>
<td>BUS-071D</td>
<td>Legal Essentials for Your Online Business</td>
<td>12</td>
<td>1</td>
<td>Concurrent enrollment in ENGL 90 or 90A/B, or eligibility for or completion of ENGL 100</td>
<td>Learn about the practical and legal issues involved in starting a business on the Internet. Find out how to obtain your business license and resale certificate to take advantage of wholesale pricing, how to protect your website with copyrights and how to trademark your domain name. Learn your sales tax requirements, the laws governing Internet and mail order sales and where to find legal resources online. May be repeated one time. SC</td>
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<td>LMC: DA</td>
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<td>BUS-077</td>
<td>Community Service and Social Responsibility</td>
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<td>3</td>
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<td>Same as SOCSC 77. This interdisciplinary course provides an introduction to the theory and practice of community service for citizens and businesspeople. Students will learn through experience while serving in community projects sponsored by local organizations and business firms. May not be repeated. SC</td>
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<td>BUS-080</td>
<td>Ten-Key / Data Entry Skills</td>
<td>12</td>
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<td>This course is designed to enable students to develop proper ten-key technique, a necessary skill for the accounting and business vocation. Students work at an independent pace applying techniques learned to both the ten-key calculator and computer numeric keypad. The course focuses on proper posture, correct fingering, and accuracy. Speed will develop as technique is learned. This course is recommended for BUS 81 and BUS 82. May be repeated three times. P/NP</td>
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<td>Transfer: CSU</td>
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</table>
BUS-081 Office Accounting Essentials - Accounts Receivable / Accounts Payable

3 hours lecture, 1 hour lab  
3 Units

Advisory: This class should be taken after completing the other courses in the certificate. BUS 18, BUS 80, BUS 181 (previously BUS 10), and BUS 3, (or Math 1 and 2)

This course is designed to enable students to understand the accounts receivable and accounts payable functions of the business organization. The course covers daily operations: document flow, recording customers’ and vendors’ invoices, preparing checks and deposit slips, discount computation, sales and purchase journal generation, collection processes. The information flow will be presented in both the manual and computerized settings. Students will prepare receivable and payable reports/schedules, customer statements and related tax forms. May not be repeated. SC

LMC: DA  
Transfer: CSU

BUS-082 Payroll I

3 hours lecture, 1 hour lab  
3 Units

Advisory: This class should be taken after completing the other courses in the certificate. BUS 18 & BUS 80, BUS 181 (previously BUS 10), and BUS 3, (or Math 1 & 2)

This course enables students to experience the payroll process from beginning to end. It presents theory and regulations with hands-on application to payroll processing both manually and computerized. The course focuses on the payroll cycle: preparation of gross payroll, deductions, net pay, employer’s taxes, payroll journal entries, and payroll tax deposits; preparation of monthly, quarterly and annual tax statements; corrections to tax statements; electronic tax deposits; and compliance record keeping. Gross payroll from hourly, weekly, biweekly, monthly, semimonthly, and piecework are computed; breaking down the regular and overtime components. Both Federal and California payroll taxes for the employee and employer are covered; as well as, the accompanying tax forms. Additionally, common nontax payroll deductions and payroll related responsibilities are presented. Some industry specific issues are also addressed; prevailing wage, union fringe benefits, tips, and self-employment. May not be repeated. SC

LMC: DA  
Transfer: CSU

BUS-083 Basic CPT and ICD-9CM Coding

3 hours lecture, 1 hour lab  
3 Units

This course is designed to introduce coding knowledge and enhance coding skills by addressing specific coding issues within a particular area. ICD-9CM, diagnostic coding, a preview of ICD-10, and CPT coding are discussed. CPT coding is discussed in-depth. May not be repeated. SC

LMC: DA  
Transfer: CSU

BUS-084 Medical Office Procedures/Records Management

1.5 hours lecture, 1.5 hours lab  
2 Units

Advisory: Experience with and knowledge of personal computers

This course provides an introduction to the administrative responsibilities for the front and back office of a medical profession. Students will be introduced to a variety of common medical office procedures and records. Through projects, computer simulations and working papers and forms, students will acquire the knowledge to prepare them for a career in the medical office. May not be repeated. SC

LMC: DA  
Transfer: CSU

BUS-086 Medical Terminology

3 hours lecture  
3 Units

This course provides an introduction to the medical language by analyzing medical words structurally. An understanding of work elements is correlated with basic anatomy, physiology, and the disease processes of the human body. Emphasis is placed on spelling, definition, usage and pronunciation. May not be repeated. SC

LMC: DA  
Transfer: CSU

BUS-087 Beginning Medical Transcription

2 hours lecture, 3 hours lab  
3 Units

Advisory: BUS 8, BUS 8, and word processing at 0 WPM

Medical Transcription is a course where students learn the typing and transcription of medical reports used in medical facilities. Additional medical terminology is taught for each specialty and additional formatting is taught for each report type as they are studied. Satisfactory completion of this course will provide the knowledge and skills necessary to get an entry-level job in a medical facility or a private physician’s office as a medical secretary or medical transcriptionist trainee. May be repeated two times. SC

LMC: DA  
Transfer: CSU

BUS-088 Patient Billing/Accounting

2 hours lecture, 1 hour lab  
2 Units

This course prepares students to work in a health care practice. They will input patient information, medical procedures and diagnoses, and perform a variety of billing operations. They will produce various lists and reports and learn to handle insurance claims. May be repeated two times. SC

LMC: DA  
Transfer: CSU
BUS-089 Medical Law and Ethics for the Medical Office
18 total hours lecture 1 Unit
This course provides an introduction to Medical Law and Ethics concepts and applications needed to perform legally and ethically in a medical environment. The course introduces the complex legal, moral, and ethical issues to be addressed for health care practitioners. It is essential to help the student acquire a working knowledge of the laws and the ethical issues relevant to working in a medical office. May not be repeated. SC
LMC: DA
Transfer: CSU

BUS-090 Advanced Patient Billing
1.5 hours lecture, 1.5 hours lab 2 Units
Students will receive enhanced training in medical office procedures using MediSoft for Windows preparing them further for employment in a medical office setting. This course will provide a realistic and extensive simulation covering two weeks of work in a medical office. While performing various jobs during the simulation, students reinforce essential skills such as inputting patient information, scheduling appointments, and handling billing, reports and insurance claims. In addition, students must exhibit the ability to research facts, think through priorities and analyze problems. Instruction will be given through lecture, hands-on and computer-simulated exercises. May not be repeated. SC
LMC: DA
Transfer: CSU

BUS-091 Managing / Working in a Diverse Workforce
8 total hours lecture .5 Unit
This course is designed to help students recognize individual and cultural values and respect the dimensions or variables that shape people’s values, experiences, and behavior in the work place. May not be repeated. P/NP
LMC: DA
Transfer: CSU

BUS-092 Business Ethics
8 total hours lecture .5 Unit
This one-day business ethics course helps participants recognize and think through ethical issues as they arise in the workplace, and contributes to the overall knowledge of the management processes. May not be repeated. P/NP
LMC: DA
Transfer: CSU

BUS-093 Dealing with Difficult People
8 total hours lecture .5 Unit
This one-day workshop is designed to help participants with the basic skills, methods, and techniques necessary to constructively manage conflict in today’s complex job environment. A course to introduce participants to basic methods, techniques, and the necessary skills to solve on-the-job conflicts. May not be repeated. P/NP
LMC: DA
Transfer: CSU

BUS-094 Advanced Medical Transcription
2 hours lecture, 3 hours lab 3 Units
Prerequisite: BUS 86 and 87
Advisory: Word processing at 45 wpm
This course is designed for students wishing to enter the medical transcription field. It is an intense course of study suitable only for students who have successfully completed Beginning Medical Transcription. Medical transcription is a field that demands in-depth knowledge of terminology and a high degree of accuracy. There is presently a demand for qualified medical transcriptionists. Satisfactory completion of this course will provide the knowledge and skills necessary to get an entry-level job in a transcription service, medical facility, or physician’s office as a medical transcriptionist or medical secretary. May be repeated one time. SC
LMC: DA
Transfer: CSU

BUS-095 Developing Customer Service Satisfaction
8 total hours lecture .5 Unit
Advisory: Eligibility for ENGL 90
This course is designed to provide participants with the skills, strategies and techniques to handle customers professionally, tactfully, and diplomatically. Real life situations are discussed and analyzed to assist students to be successful in today’s service oriented job environment. May not be repeated. P/NP
LMC: DA
Transfer: CSU

BUS-096 Time Management and Goal Setting
8 hours lecture .5 units
Advisory: Eligibility for ENGL 90
This eight-hour course is designed to teach the basic elements of goal setting and time management through discussion and practical application of managing an individual’s personal and professional time. May not be repeated. P/NP
LMC: DA

BUS-098 Independent Study in Business
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC
LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.
Transfer: Independent Study courses may be DA or transferable depending on specific course. See your counselor.
BUS-099  Cooperative Education in Business
Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC
LMC: DA
Transfer: CSU

BUS-109  Introduction to Business
3 hours lecture  3 Units
Advisory: Eligibility for ENGL 90
(Formerly BUS 20) A survey of business organizations and operations within a global context. The class focuses on how all of the basic business functions of entrepreneurship, marketing, management, accounting, financing and information processing interact with each other. The course places these activities within the context of the legal requirements, historical forces, cultural values, ethical considerations, economic systems and social forces of various business regions of the world. May not be repeated. SC
LMC: DA
Transfer: UC, CSU

BUS-160  Personal Finance
3 hours lecture, 1 hour lab  3 Units
Advisory: BUS 3 or MATH 15 and eligibility for ENGL 90
This is an introductory personal finance course designed to help students become financially literate and to teach decision making strategies integral in controlling one’s financial destiny. The course covers the following topics: steps in building a personal financial plan; goal setting; budgeting; evaluating financial institutions’ services; consumer credit; life’s major purchases; insurance types, needs and products; investing basics, equity and debt vehicles; income tax strategies; and retirement and estate planning. May not be repeated. SC
LMC: DA
Transfer: UC, CSU

BUS-181  Accounting: Applied Principles
3 hours lecture, 1 hour lab  3 Units
Advisory: Eligibility for ENGL 90; BUS 3 or MATH 1 and 2
(Formerly BUS 010) Application of the basic accounting language and system to the records of personal services and retail businesses; emphasis on the use of journals, ledgers, and financial statements. Appropriate for students preparing for employment in business occupations. Applies toward real estate brokers license and a certificate in small business operations. May not be repeated. SC
LMC: DA
Transfer: CSU

BUS-185  Computer Assisted Accounting
2 hours lecture, 3 hours lab  3 Units
Advisory: BUS 18 and BUS 181 (previously BUS 10) or BUS 186
(Formerly BUS 12) A hands-on, computer course which introduces students to the use of microcomputers in the accounting field. Includes practice in establishing charts of accounts, journalizing, adjusting entries, subsidiary ledgers, trial balances, income statements, balance sheets and other basic accounting procedures. May be repeated three times. SC
LMC: DA
Transfer: CSU

BUS-186  Accounting Principles I
3 hours lecture, 1 hour lab  3 Units
Advisory: BUS 181 and eligibility for ENGL 90
(Formerly BUS 14) An introduction to the theory and procedures of financial accounting. Designed for students majoring in business administration, accounting, or general business. May not be repeated. (CAN BUS 2, CAN BUS SEQ A) SC
LMC: DA
Transfer: UC, CSU

BUS-187  Accounting Principles II
3 hours lecture, 1 hour lab  3 Units
Prerequisite: BUS 186
(Formerly BUS 15) This course covers accounting for corporations’ equity transactions, financial statement analysis, and provides an introduction to managerial accounting. Managerial accounting topics include the role of the management accountant, using accounting information to analyze and improve operational efficiency, and processing managerial accounting information. May not be repeated. (CAN BUS SEQ A) SC
LMC: DA
Transfer: UC, CSU

BUS-285  Tax Accounting
3 hours lecture  3 Units
Advisory: Eligibility for ENGL 90
A course in income tax preparation and the Internal Revenue Code. Designed for the individual interested in the preparation of basic income tax returns for individuals, partnerships, and corporations, as well as those seeking an understanding of the Internal Revenue Code for use in business. May not be repeated. SC
LMC: DA
Transfer: UC, CSU

BUS-294  Business Law
3 hours lecture  3 Units
Advisory: BUS 109 and eligibility for ENGL 100
(Formerly BUS 34) A study of the legal environment of business and the basic principles of business law. Includes contracts, agency and employment, sales, property and forms of ownership. Also included are the law, courts, and court procedures. May not be repeated. SC
LMC: DA
Transfer: UC, CSU

BUS-900s  Selected Topics in Business
DA varies with course content.
Chemistry

**CHEM-006 Introduction to Inorganic and Physical Chemistry**
3 hours lecture, 4 hours lab 4 Units

**Prerequisite:** MATH 25 or one year high school algebra
(Formerly CHEM 6S) An integrated study of chemical principles, with laboratory methods and techniques focused toward an understanding of the structure of matter and the chemical consequence of that structure. May not be repeated. LR
LMC: DA
Transfer: UC, CSU Gen. Ed. Area B1, B3, IGETC Area 5A

**CHEM-007 Introduction to General, Organic and Biochemistry**
3 hours lecture, 4 hours lab 4 Units

**Prerequisite:** Completion of MATH 18 or 25, eligibility for MATH 30, or one year high school algebra.
A one-semester survey of principles of General Organic, and Biochemistry. Satisfies the chemistry prerequisite of health care programs requiring only one semester of chemistry, including nursing programs at CSUs and most four-year colleges. May not be repeated. LR
LMC: DA
Transfer: UC, CSU Gen. Ed. Area B1, B3, IGETC Area 5A

**CHEM-008 Introductory Organic and Biochemistry**
3 hours lecture, 4 hours lab 4 Units

**Prerequisite:** CHEM 6 or the equivalent with a "C" or better.
(Formerly CHEM 8LS) An integrated study of chemical concepts and principles with laboratory methods and techniques. An intradisciplinary approach will be used to develop an understanding of the structure and properties of organic matter and of biochemical processes. Emphasis will be placed on the creative process of scientific inquiry, on the aesthetics of science, and on the limitations of scientific knowledge. Skills in critical thinking, problem-solving, and effective learning will be developed throughout the course. May not be repeated. LR
LMC: GE: Physical Sciences; DA
Transfer: UC, CSU Gen. Ed. area B1, B3, IGETC Area 5A

**CHEM-025 General College Chemistry**
3 hours lecture, 5 hours lab 5 Units

**Prerequisite:** High school chemistry or CHEM 6, and MATH 30.
(Formerly CHEM 25LS) An exploration of the basic phenomena of chemical processes in terms of fundamental physical concepts, principles, and laws. An intradisciplinary approach will be used to develop an understanding of the structure and states of matter, and dynamics, equilibrium, and energetics of matter transformations. The creative process of scientific inquiry, the aesthetics of science, the limitation and implications of scientific knowledge will be emphasized. Throughout the course, skills in critical thinking, problem-solving, and effective learning will be developed. This is the first semester of a year course in general college chemistry. Required for chemistry major. May not be repeated. (CAN CHEM SEQ A) LR
LMC: GE: Physical Sciences; DA
Transfer: UC, CSU Gen. Ed. Area B1, B3, IGETC Area 5A

**CHEM-026 General College Chemistry**
3 hours lecture, 7 hours lab 5 Units

**Prerequisite:** CHEM 25 or equivalent
A continuation of CHEM 25, including such topics as solutions, equilibriums, acids and bases, kinetics, thermodynamics, electrochemistry, coordination chemistry, nuclear, organic and biological chemistry. Qualitative analysis is included in the lab program. May not be repeated. (CAN CHEM SEQ A) LR
LMC: DA
Transfer: UC, CSU Gen. Ed. Area B1, B3, IGETC Area 5A

**CHEM-027 Quantitative Analysis**
2 hours lecture, 6 hours lab 4 Units

**Prerequisite:** CHEM 26
An introduction to the fundamental principles and procedures of analytical chemistry. Gravimetric and volumetric methods will be covered. Potentiometric, spectrophotometric, and chromatographic procedures will be introduced. Required for chemistry major. May not be repeated. (CAN CHEM 12) LR
LMC: DA
Transfer: UC, CSU

**CHEM-028 Organic Chemistry**
3 hours lecture, 6 hours lab 5 Units

**Prerequisite:** CHEM 26
A study of the physical and chemical properties of simple functional groups in terms of structural and elementary mechanistic considerations. Topics and materials of interest to students of the biological sciences will be included whenever possible. The principles and practices of common synthetic and analytical procedures will be introduced in the laboratory. Required for chemistry major. This course is offered in the fall only. May not be repeated. LR
LMC: DA
Transfer: UC, CSU Gen. Ed. Area B1, B3, IGETC Area 5A

**CHEM-029 Organic Chemistry**
3 hours lecture, 6 hours lab 5 Units

**Prerequisite:** CHEM 28
A continuation of CHEM 28 or PHYS 28 with a continued emphasis upon the correlation of properties of organic substances to structural and mechanistic concepts. The laboratory will incorporate more advanced procedures with a greater emphasis upon the principles and practices of instrumental methods. This course is offered in the spring only. May not be repeated. LR
LMC: DA
Transfer: UC, CSU Gen. Ed. Area B1, B3, IGETC Area 5A
CHEM-098  Independent Study in Chemistry
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC
LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.
Transfer: Independent Study courses may be DA or transferable depending on specific course. See your counselor.

CHEM-099  Cooperative Education in Chemistry
Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC
LMC: DA
Transfer: CSU

CHEM-900s  Selected Topics in Chemistry
DA varies with course content.

CHDEV-011  Techniques and Methods of Child Observation
2 hours lecture, 3 hours lab 3 Units
Advisory: Completion of CHDEV 1 and CHDEV 10; eligibility for ENGL 90
On-site observation of children at various stages of development: techniques of observation and recording of child behavior. Required for Child Development major. May not be repeated. LR
LMC: DA
Transfer: CSU

CHDEV-012  Parenting Seminar
36 total hours lecture, 27 to 54 total hours lab 2-3 Units
Designed for the study of child growth and parental relationships; includes study with the individual child and child groups; participation in lab school. May be repeated one time. SC
LMC: DA
Transfer: CSU

CHDEV-015  Supervised Teaching of Young Children
2 hours lecture, 6 hours lab 4 Units
Prerequisite: CHDEV 1, 10, 11, 50, 62, and 83.
Advisory: Eligibility for ENGL 90
Orientation to child care for young children with six-hour per week supervised practicum in the campus Child Study Center. Includes study of appropriate play and learning experiences; program re-organization and contact; use and creation of materials; guidance of children’s experiences; curriculum planning and implementation; and parent communication. Required for Child Development majors. May not be repeated. SC
LMC: DA
Transfer: UC, CSU Gen. Ed. Area D7

CHDEV-020  Child, Family and Community
3 hours lecture 3 Units
Advisory: Eligibility for ENGL 90
Development of a psycho-socio understanding of the child as a member of the family and as a part of the community; patterns of family living in contemporary society; roles and interrelationships; expectations and goals; diversity issues. Required for Child Development major. Satisfies Department of Social Services Category II. May not be repeated. SC
LMC: DA
Transfer: UC, CSU Gen. Ed. Area D7

CHDEV-022  Guidance and Discipline Strategies for the Young Child
2 hours lecture 2 Units
Advisory: Eligibility for ENGL 90
Focus on the development of techniques and environments which promote self control and positive self esteem in children. Age appropriate developmental strategies will be explored. Fulfills Child Development Certificate of Achievement elective requirement. May not be repeated. SC
LMC: DA
Transfer: CSU
CHDEV-023  Positive Discipline for the Young Child  
18 total hours lecture  
1 Unit  
Focus on the development of techniques and environments, which promote self-control and positive self-esteem in children. Age appropriate developmental strategies will be explored. May not be repeated. SC  
LMC: DA

CHDEV-025  Creative Art for Young Children  
2 hours lecture  
2 Units  
Advisory: Eligibility for ENGL 90  
Focus is on the young child and the creative art process. This course will include the study of stages of art development, the domains of development related to creative art, creativity and artistic expression, appropriate art materials, the role of the environment, and creative art's role in an integrated curriculum. May not be repeated. SC  
LMC: DA  
Transfer: CSU

CHDEV-026  Developing Art Programs for Young Children  
18 total hours lecture  
1 Unit  
Advisory: Eligibility for ENGL 90  
Focus is on fostering artistic expression for infants, toddlers, preschool & school age children. This course will include the study of child development and artistic expression, appropriate art materials, presentation of materials, formation of objectives, and direct participation in creative media. Students will learn how to create developmentally appropriate art centers, develop meaningful curriculums and implement a program that helps children explore the process of art. May not be repeated. P/NP  
LMC: DA  
Transfer: CSU

CHDEV-027  Art and the Creative Process for Young Children  
2 hours lecture  
2 Units  
Advisory: Eligibility for ENGL 90  
This course ties together the foundations of the creative process, information about the fine arts and applications for creative teaching. A consideration of the role of multiple intelligences and creativity will be explored. Through observational case study, collaborative projects, and hands-on art experiences and demonstrations, students will gain experience in integrating creativity into all aspects of teaching young children. May not be repeated. SC  
LMC: DA

CHDEV-028  Learning Environments that Support Art and the Creative Process  
2 hours lecture  
2 Units  
Advisory: Eligibility for ENGL 90  
This class will look closely at the impact of the classroom environment (indoors and outdoors) on children's creativity and learning. The course looks at how to build an environment that is conducive to experimentation with fine arts while promoting integrated learning across the curriculum. Further study will look at how to provoke wonder, curiosity, and critical thinking skills through environmental design and context. May not be repeated. SC  
LMC: DA  
Transfer: CSU

CHDEV-032  Caring for and Educating School Age Children  
3 hours lecture  
3 Units  
Advisory: Eligibility for ENGL 90  
This course covers the social, emotional, physical and cognitive development of the school age child ages five through twelve. A focus on culturally relevant differentiated curriculum and environmental design to meet the needs of all children, including those with special needs will incorporated. Students will develop strategies to guide and support children's behavior based on individual needs. Careers working with school age children will also be explored. This course meets the requirement of a School age course for the Child Development Permit Matrix with School Age Emphasis. May not be repeated. SC  
LMC: DA  
Transfer: CSU

CHDEV-033  Developmentally and Culturally Appropriate Practices for the School Age Child  
2 hours lecture, 3 hours lab  
3 Units  
Advisory: Eligibility for ENGL 90  
This course provides an exploration of program design and curriculum planning for school age child care programs. A study of developmentally and culturally appropriate practice related to routines, the classroom environment, curriculum planning, partnerships, health and safety and nutrition will be covered. This course meets the requirement of a school age course for the Child Development Permit Matrix with a School Age Emphasis. May not be repeated. SC  
LMC: DA  
Transfer: CSU

CHDEV-035  Math and Science for the Young Child  
2 hours lecture  
2 Units  
Advisory: Eligibility for ENGL 90  
Survey of the material in science, mathematics, and the physical and natural world suitable for teaching young children. Training in material techniques, demonstrations, and experiments, which will enable the teacher to develop a concept-based learning environment. Curriculum is based on understanding of children's cognitive development. May not be repeated. LR  
LMC: DA  
Transfer: CSU
CHDEV-036  Foundations of the High/Scope Curriculum  
2 hours lecture 2 Units
Advisory: Eligibility for ENGL 90
A flexible and comprehensive course to understand the High/Scope educational approach based on child development theory and research. This course will explain the building blocks of the High/Scope curriculum needed to create an effective early learning program. Components covered include learning environments, daily routines, key experiences and curriculum, observation and assessment. It is appropriate for caregivers, teachers, and teacher trainers and designed to improve not only teaching skills but also overall program quality. May not be repeated.  SC
LMC: DA 
Transfer: CSU

CHDEV-045  Music and Movement for the Young Child  
2 hours lecture 2 Units
Advisory: Eligibility for ENGL 90
A study of the role of music and movement as they relate to young children; techniques in the application of music movement in early childhood programs; and lecture, discussion, and participation. May not be repeated.  SC
LMC: DA 
Transfer: CSU

CHDEV-046  Using Storytelling, Puppetry, Movement and Games To Involve Children in Music  
18 total hours lecture 1 Unit
A hands-on, playful class that will teach participants techniques for leading successful musical circle times. Participants will sing, dance, use instruments, and listen to “TALL” tales. May not be repeated.  SC
LMC: DA 
Transfer: CSU

CHDEV-050  Anti-bias and Multicultural Education and the Young Child  
3 hours lecture 3 Units
Advisory: Eligibility for ENGL 90; CHDEV 1, or Relevant Industry Experience
Designed to increase an awareness of issues around diversity (racial, cultural, ethnic, gender, disability, social class, lifestyle). Study of how children come to understand and evaluate similarities and differences. Development of anti-bias curriculum program and materials. May not be repeated.  SC
LMC: DA 
Transfer: CSU

CHDEV-053  Child Care Licensing Guidelines  
9 total hours lecture .5 Unit
This course reviews the current licensing requirements, including any recent changes, to operate a child care center. Students have an opportunity to learn how to use the state Licensing Manual (copies provided) and to understand the inspection process. Students also participate in a mock inspection of the campus Child Study Center. May not be repeated.  P/NP 
LMC: DA 
Transfer: CSU

CHDEV-054  Computer Technology in Early Childhood Education  
18 total hours lecture 1 Unit
Consideration of the developmentally appropriate uses of computer technology in the early childhood classroom. Analysis of arguments presenting the pros and cons of computer use with children aged 3 to 8. Personal exploration and assessment of a wide range of children’s software and teacher productivity software. Introduction to the world wide web and its application to ECE research, professional development, and instruction. No previous computer experience is required. May not be repeated.  P/NP 
LMC: DA 
Transfer: CSU

CHDEV-037  Applying High/Scope Principles to Infant/ Toddler and Preschool Programs  
2 hours Lecture 2 Units
Prerequisite: CHDEV 36
Advisory: Eligibility for ENGL 90
A course designed for students to learn to apply a fully developed educational curriculum based on the High/Scope philosophy. The curriculum is an open-framework instructional model and is based on the constructivist theory of child development blended with best practices of early education. Not only will this course improve student’s skills, but overall program quality. May not be repeated.  SC
LMC: DA 
Transfer: CSU

CHDEV-040  Caring for and Educating Infants and Toddlers  
3 hours lecture 3 Units
Advisory: Eligibility for ENGL 90
Study of the growth of infants and toddlers and group care. Effective environmental, staff characteristics, and activities which encourage development are included. Satisfies Department of Social Services category IV. May not be repeated.  SC
LMC: DA 
Transfer: CSU

CHDEV-041  Developmentally Appropriate Practices for Infants and Toddlers  
2 hours lecture, 3 hours lab 3 Units
This second course in infant toddler care covers issues of group care, daily care giving routines. Primary care giving and developmentally appropriate environments and curriculum. Establishing parent partnerships and serving diverse families will also be discussed. Three hours of weekly lab experience is required in an infant and/or toddler group care setting. May not be repeated.  SC
LMC: DA 
Transfer: CSU
CHDEV-055  Caring for and Educating Children with Special Needs
3 hours lecture  3 Units
Advisory: Eligibility for ENGL 90
Learning about the whole child. Learning how you, the adult, control the key to the child’s behavior through your responses. Learning what child development is and isn’t. Learning how children become what they become. Learn about meeting the needs of ALL children, including those with special challenges. Required course for Special Ed emphasis; Fulfills Child Development Certificate of Achievement elective requirement. May not be repeated. SC
LMC: DA
Transfer: CSU

CHDEV-057  Developmentally Appropriate Practices for Children with Special Needs
3 hours lecture  3 Units
Advisory: CHDEV 10
Survey of successful techniques, developmental materials, and methods of working with young children with special needs and their families. Required course for special needs emphasis on Child Development Certificate of Achievement. May not be repeated. SC
LMC: DA
Transfer: CSU

CHDEV-058  Exploring Early Childhood Environments - New Dimensions
18 total hours lecture  1 Unit
This course will focus on the physical attributes of the early childhood classroom. Consideration of environmental components that set the stage for harmony and discovery including space and furnishings, supporting routines, and supporting interactions will be discussed. May not be repeated. P/NP
LMC: DA
Transfer: CSU

CHDEV-060  Language and Literacy for the Young Child
2 hours lecture  2 Units
Advisory: Eligibility for ENGL 90
Exploration of the language development and emerging understandings of literacy in the young child, consideration of nature, nurture, and culture as they influence first and second language acquisition. Analysis of a wide array of diverse and developmentally appropriate preschool and school-age literature. Practice developing literacy experiences and doing presentations of literature. May not be repeated. SC
LMC: DA
Transfer: CSU

CHDEV-062  Curriculum Foundations for the Young Child
3 hours lecture  3 Units
Advisory: Completion of CHDEV 1 and CHDEV 10; and eligibility for ENGL 90
A hands-on broad curriculum course which covers many of the major components of quality programs for children. Students will learn how to implement developmentally appropriate theme-based curriculum. The curriculum areas covered will include science, math, literature, storytelling, dramatic play, puppetry, art, reading, writing, music, outdoor environments, and circle time. May not be repeated. LR
LMC: DA
Transfer: CSU

CHDEV-063  Storytelling for Preschool and School Age Children
18 total hours lecture  1 Unit
Advisory: Eligibility for ENGL 70
Students will listen to a wide diversity of storytellers and practice developing their storytelling style. Various strategies for involving preschool and school age children in the storytelling process will be explored. Students will learn how to write and tell personal history stories and fairy tales. May not be repeated. P/NP
LMC: NDA
Transfer: CSU

CHDEV-064  Outdoor Games, Environments, and Activities for Children Ages 3-12 Years
18 total hours lecture  1 Unit
Advisory: Eligibility for ENGL 70
Learn how to create an outdoor environment that will engage children in active exploration and challenge them to develop their physical abilities. Come prepared to sift, stir, mix, dig, paint, and use pulleys / tubes / funnels / spinning tops / water mills / marbles as well as plant gardens. May not be repeated. P/NP
LMC: NDA
Transfer: CSU

CHDEV-065  Health, Safety and Nutrition for the Young Child
2 hours lecture  2 Units
Advisory: Eligibility for ENGL 90
This course provides an overview of policies regarding health, safety and nutrition for the young child in a child care setting. Students will develop curriculum and in-service staff programs relating to these issues. Fulfills state requirement for the 15 hours of First Aid/CPR training. May not be repeated. SC
LMC: DA
Transfer: CSU
CHDEV-075  Developing Life Skills for Foster Youth  
27 total hours lecture 1.5 Units  
This class teaches a variety of life skills necessary for foster youth to begin living independently from the court system. It is also useful for professionals interested in working with foster youth. Money management, housing, employment skills, and community resources are addressed. Learning social skills to deal with others in a positive way, including anger management, building self-esteem, and developing positive communication are also included. Students receive hands-on help completing forms and applications to get started in a college or vocational training program of their choice. May not be repeated. P/NP  
LMC: NDA  
Transfer: CSU

CHDEV-076  Introduction to Foster Parenting  
18 total hours lecture 1 Unit  
This course is designed for those who are interested in becoming foster parents or working with foster youth from birth through 18 years. This class covers the role of the agency involved as well as the special needs of children in foster care. This can include issues involving abuse, neglect, and attachment and bonding disorders. Additional issues covered are working with the birth parents as well as coping with changes in the family that fostering brings. May not be repeated. P/NP  
LMC: DA  
Transfer: CSU

CHDEV-077  Working with Drug-Exposed Children from Birth to 5 Years of Age  
36 total hours lecture 2 Units  
This class is intended for those who are parenting or working with drug-exposed children from birth through five years of age. It covers normal infant development as well as problems to be aware of when working with this population. Some of the issues covered are working with multiple agencies, HIV & aids, effects of drugs and alcohol on the developing fetus and working with school districts to get help with IEPs. May not be repeated. P/NP  
LMC: DA  
Transfer: CSU

CHDEV-081  Parent Laboratory for Child Study Center I  
1.5-3 hours lab .5-1 Unit  
Advisory: CHDEV 10 or 12 highly recommended  
For parents whose children are enrolled in the daytime Child Study Center. Parent participation activities to support parent-child bond and home-school relationship. May be repeated three times. P/NP  
LMC: DA  
Transfer: CSU

CHDEV-082  Parent Laboratory for Child Study Center II  
1.5-3 hours lab .5-1 Unit  
Advisory: CHDEV 10 or 1 highly recommended  
For parents whose children are enrolled in the evening Child Study Center. Parent participation activities to support parent-child bond and home-school relationship. May be repeated three times. P/NP  
LMC: DA  
Transfer: CSU

CHDEV-083  Field Experience at Community Programs  
3 to 9 hours lab 1-3 Units  
Advisory: Eligibility for ENGL 90; CHDEV 1 or 10 strongly recommended  
This course is designed for students needing to complete experience requirements for the State of California Child Development Permit and California Community Care Licensing. Students will receive guidance and supervision from qualified mentor teachers in licensed early childhood programs as they gain direct hands-on experience guiding and teaching children from infancy to 12 years of age. This course meets the Child Development Permit requirement for supervised college teaching and is required for the Certificate of Achievement and the A.S. degree in Child Development. May be repeated three times. SC  
LMC: DA  
Transfer: CSU

CHDEV-085  Effective Parenting: The Young Child  
1 hour lecture 1 Unit  
This course is concerned with child rearing and the young. It will include stages of development, child development principles, parental stages of development and techniques that foster self-control and self-esteem. May not be repeated. P/NP  
LMC: DA  
Transfer: CSU

CHDEV-086  Effective Parenting: Adolescence  
1.5 hours lecture 1.5 Units  
The students will focus on adolescence as a specific stage in development. Emphasis will be on an exploration of the reasons for the difficulties of this particular stage for both adolescents and their parents. Themes of individuation-separation, as well as issues of peer pressure, drugs, sexuality and changing parental roles will be examined. Methods for minimizing conflict will be presented. May not be repeated. P/NP  
LMC: DA  
Transfer: CSU
CHDEV-090  Supervised Teaching in Local Child Development Programs
2 hours lecture, 8 hours lab 4 Units
Prerequisite: CHDEV 1, 10, 11, 50, 62, and 83.
Co-requisite: Prior or concurrent enrollment in CHDEV 20
Advisory: ENGL 90 or 90A & 90B with a grade of "C" or better or demonstration of equivalent skills based on assessment.
Supervised teaching in local early childhood programs. Involves developmentally appropriate program planning, anti-bias curriculum, professional considerations, staff and interpersonal relationships, working with parents, career planning. Required for Child Development major. May not be repeated. SC
LMC: DA
Transfer: CSU

CHDEV-092  Adult Supervision / Mentor Teacher Training
36 total hours lecture 2 Units
Advisory: Eligibility for ENGL 90
This class is designed to meet the one unit requirement for adult supervision under the State matrix as a master teacher or site supervisor. It is also required for teachers who want to become community based mentors for LMC students in the field placements. Students will learn how to mentor new teachers and aides as they come into the early childhood workforce. May not be repeated. P/NP
LMC: DA
Transfer: CSU

CHDEV-093A  Mentor Teacher Seminar
9 total hours lecture .5 Unit
Advisory: Eligibility for ENGL 100
This course is designed for mentors hired by the LMC Child Development Department under a State Grant. Students will study the mentor teacher and student teacher relationship as well as participate in advocacy work. May not be repeated. P/NP
LMC: NDA
Transfer: CSU

CHDEV-095  Administration of Early Childhood Programs
3 hours lecture 3 Units
Prerequisite: CHDEV 10
Advisory: Eligibility for ENGL 90
Provides a study of basic principles of administration of early childhood programs. Human relations in dealing with staff, community, children and parents as well as appropriate curriculum planning will be covered. Children' Center Supervision Permits from the State of California credentialing office require six units of instruction in administration. In this two part series CHDEV 95 will instruct in the financial aspects of successful administration; CHDEV 96 will cover child needs and other human relations aspects of this requirement. Satisfies Department of Social Services Category VI. May not be repeated. LR
LMC: DA
Transfer: CSU

CHDEV-096  Supervision and Leadership in Early Childhood Programs
3 hours lecture 3 Units
Prerequisite: CHDEV 10 and experiences in early childhood education.
Advisory: Eligibility for ENGL 90
Provides a study of basic principles of administration of early childhood programs. Human relations in dealing with staff, community, children, and parents, as well as appropriate curriculum planning, will be covered. Children’s Center Supervision Permits from the State of California credentialing office require six units of instruction in administration. In this two-part series, CHDEV 95 will instruct in the financial aspects of successful administration; CHDEV 96 will cover child needs and other human relations aspects of this requirement. Satisfies Department of Social Services Category VI. May not be repeated. P/NP
LMC: DA
Transfer: CSU

CHDEV-098  Independent Study in Child Development
36 total hours lecture 2 Units
Advisory: Eligibility for ENGL 100
This course is designed for mentors hired by the LMC Child Development Department under a State Grant. Students will study the mentor teacher and student teacher relationship as well as participate in advocacy work. May not be repeated. P/NP
LMC: DA
Transfer: CSU

CHDEV-099  Cooperative Education in Child Development
36 total hours lecture 2 Units
Co-requisite: Prior or concurrent enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC
LMC: DA
Transfer: CSU

CHDEV-100  Fall Harvest Conference
9 total hours lecture .5 Unit
A day long series of workshops focusing on early childhood education. Workshops vary each year and include topics such as discipline, school age and infant child care, diversity, outdoor games, music, drama, administration, and puppetry. A keynote and closing presentation by a renowned speaker is a main focus of the conference. May not be repeated. P/NP
LMC: DA
Transfer: CSU

CHDEV-900s  Selected Topics in Child Development
DA varies with course content.
**Chinese**

**CHIN-098 Independent Study in Chinese**
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC

LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.

**Transfer:** Independent Study courses may be DA or transferable depending on specific course. See your counselor.

**CHIN-099 Cooperative Education in Chinese**
Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC

LMC: DA

**Transfer:** Cooperative education courses are CSU, UC, IGEC Area B, CSU GE Area C2

**CHIN-010 Conversational Chinese I**
2 hours lecture, 2 hours lab  3 Units
The first of a two-semester sequence, for students with little or no Chinese language background, emphasizing Mandarin Chinese pronunciation, basic sentence patterns, basic conversational skills, basic Chinese characters, and aspects of the Chinese culture. This course does not satisfy UC foreign language requirements. May not be repeated. SC

LMC: DA

**CHIN-020 Conversational Chinese II**
2 hours lecture, 2 hours lab  3 Units
Advisory: CHIN 10 or equivalent
The second of a two-semester sequence, for students with a little Chinese language background, emphasizing Mandarin Chinese pronunciation, basic sentence patterns, basic conversational skills, basic Chinese characters, and aspects of the Chinese culture. This course does not satisfy UC foreign language requirements. May not be repeated. SC

LMC: DA

**CHIN-030 Elementary Chinese I**
5 hours lecture  5 Units
(Formerly CHIN 30S) This is the first of a two-semester sequence, emphasizing Mandarin Chinese pronunciation, basic sentence patterns, basic conversational skills, basic Chinese characters, and aspects of the Chinese culture. This fulfills the UC foreign language requirement. Note: equivalent to two years of high school Chinese. May not be repeated. SC

LMC: DA

Transfer: UC, CSU, IGETC Area 6, CSU GE Area C2

**CHIN-040 Elementary Chinese II**
5 hours lecture  5 Units
Advisory: CHIN 30 or equivalent
(Formerly CHIN 40S) This is the second of a two-semester sequence, emphasizing Mandarin Chinese pronunciation, basic sentence patterns, basic conversational skills, basic Chinese characters, and aspects of the Chinese culture. May not be repeated. SC

LMC: DA

Transfer: UC, CSU GE Area C2

**Computer Science**

**COMSC-010 Introduction to Computer Networking**
27 total hours lecture, 36 total hours lab  2 Units
(Formerly CNT 10) An introduction to computer networking for both those considering careers in the field and individuals looking to understand and apply the technology in their business or home. The course will emphasize the use of "real world" examples and "hands on" lab assignments in achieving an understanding and knowledge of the fundamentals of computer networking. May be repeated two times. SC

LMC: GCR: Computer Literacy; DA

Transfer: Computer Literacy; DA
COMSC-011  Introduction to Network Operating Systems
27 total hours lecture, 36 total hours lab  2 Units
Advisory: COMSC 40, COMSC 60
(Formerly CNT 11) This course is an introduction to network operating systems, including Microsoft Windows Server, Unix, and Linux. Designed for students interested in learning more about computer networking or pursuing a career in Information Technology, this course focuses on fundamental skills that can be applied to any network-based computing environment, including business and education networks. Students in this course will work "hands on" with several different network operating systems to complete real-world tasks, such as managing user accounts, working with network file systems, and basic security configurations. May be repeated two times. SC
LMC: GCR: Computer Literacy; DA
Transfer: CSU

COMSC-012  Introduction to Internet Security
27 total hours lecture, 36 total hours lab  2 Units
(Formerly CNT 12) This course is an introduction to the security issues of today’s computer networks, specifically the Internet. Concepts covered in the course (including TCP/IP, encryption, worms, viruses, hacking, and denial of service attacks) can be applied to home networking as well as large-scale enterprise networking. Student learning includes real-world, hands-on activities. May be repeated two times. SC
LMC: DA
Transfer: CSU

COMSC-030  Web Site Development-Part I
24 total hours lecture, 30 total hours lab  1.5 Units
An introduction to web page design and creation. Learn how to select, layout, and organize content on a web page. Then using HTML and web design applications, create web pages and a web site for business, educational, or personal use with tables, forms, links, lists, and images. (Half semester class.) This course is required for the completion of the Web Page Development Certificate. May not be repeated. SC
LMC: DA
Transfer: CSU

COMSC-031  Web Site Development - Part II
18 total hours lecture, 27 total hours lab  1.5 Units
Advisory: COMSC 30 or have experience with the Internet
Add to web pages and web site using forms, meta tags, cascading style sheets, (CSS) and some basic JavaScript. Then upload the web site using an FTP client. Also learn how to find and evaluate domain name and web hosting services. (Half semester class.) This course is required for the completion of the Web Page Development Certificate. May be repeated one time. SC
LMC: DA
Transfer: CSU

COMSC-032  Web Site Development- Dreamweaver and Flash
2 hours lecture, 3 hours lab  3 Units
Advisory: COMSC 30 and 31, or equivalent.
Learn how to design a multimedia, interactive website that can be used for advertising, marketing, e-commerce, business, non-profit groups, or teaching using the industry standard applications Dreamweaver and Flash. The course will include animated graphics, banners, logos, scrolling text, videos, photos, and sounds. This course is required for the completion of the Web Page Development Certificate. May not be repeated. SC
LMC: DA
Transfer: CSU

COMSC-033  CGI/PERL Scripting Language
18 total hours lecture, 27 total hours lab  1.5 Units
Advisory: COMSC 30 and 31, or equivalent.
PERL (Practical Extraction Report Language) is the foundation programming language that supports CGI (Common Gateway Interface) a standard for Web servers. Learn PERL and create useful CGI scripts. May be repeated one time. SC
LMC: DA
Transfer: CSU

COMSC-034  XML - Web Programming (Extensible Markup Language)
18 total hours lecture, 27 total hours lab  1.5 Units
Advisory: COMSC 30 and 31, or equivalent.
This beginning course is for potential Web developers who want to add the bells and whistles to their Website. It is intended for students with some basic HTML coding experience. May be repeated one time. SC
LMC: DA
Transfer: CSU

COMSC-035  Web Site Development-JavaScript Part I
2 hours lecture, 3 hours lab  3 Units
Advisory: Experience with HTML and computer programming.
This is an introductory programming course in JavaScript that emphasizes practical, "real world" use of JavaScript in a wide variety of web page applications such as controlling frames and windows, verifying forms, creating cookies and using rollovers. (Half semester class.) This course is required for the completion of the Web Page Development Certificate. May not be repeated. SC
LMC: DA
Transfer: CSU

COMSC-036  Basic Networking Skills
18 total hours lecture, 27 total hours lab  1.5 Units
Advisory: COMSC 40 or equivalent
This course is for computer science students interested in learning the basics of networking concepts. Learn how to put together all the parts of the puzzle (hardware, software, service provider) needed to connect to the Internet. Includes configuring and using e-mail, World Wide Web, news groups, and file transfers. May be repeated one time. SC
LMC: DA
Transfer: CSU
### Computer Science

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>COMSC-037</td>
<td>Customer Technical Support Help Desk</td>
<td>18</td>
<td>1.5</td>
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<tr>
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<td><strong>Advisory:</strong> Completion of COMSC 40, eligibility for ENGL 90</td>
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<td></td>
<td>A foundation course in the skills and tools required for entry level IT support positions. This includes how to analyze computer related problems and formulate action plans, best practices in working with end users, the use of diagnostics tools, and use of IT support tracking software. May be repeated three times. SC</td>
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<td>LMC: DA</td>
<td>Transfer: CSU</td>
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<tr>
<td>COMSC-038</td>
<td>Web Site Development- JavaScript Part II</td>
<td>18</td>
<td>1.5</td>
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<td><strong>Advisory:</strong> COMSC 35 or equivalent</td>
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<td>A second course in JavaScript emphasizing programming concepts such as functions, conditional and loops and their application within a web site. (Half semester course.) May not be repeated. SC</td>
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<td>LMC: DA</td>
<td>Transfer: CSU</td>
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<tr>
<td>COMSC-040</td>
<td>Introduction to Computers</td>
<td>3</td>
<td>4</td>
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<td><strong>Advisory:</strong> Eligibility for ENGL 90</td>
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<td>Beginning course in computers designed to acquaint the student with the general concepts and basic vocabulary of the computer field. Surveys the entire computer field. Addresses social implications of computer technology. Includes instruction and hands-on laboratory work in word processing, data base management, and electronic spreadsheets, as well as problem solving and programming procedures using Quick BASIC programming language. Satisfies computer literacy proficiency. May not be repeated. SC</td>
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<td>LMC: GCR: Computer Literacy; DA</td>
<td>Transfer: UC, CSU</td>
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<tr>
<td>COMSC-041</td>
<td>Programming with Visual Basic.NET (VB.NET)</td>
<td>2</td>
<td>3</td>
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<td><strong>Advisory:</strong> COMSC 40, COMSC 60, or consent of the instructor</td>
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<td>An introductory programming course using Microsoft Visual Basic.NET (VB.NET). Teaches the development of graphically oriented, event driven programs. Students will learn fundamental programming structures, as well as the use of the language to develop web based applications. May be repeated three times. SC</td>
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<td>LMC: DA</td>
<td>Transfer: UC, CSU</td>
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<tr>
<td>COMSC-042</td>
<td>Introduction to Programming Using ALICE</td>
<td>2</td>
<td>3</td>
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<td><strong>Advisory:</strong> Completion of COMSC 40 or 49, or prior experience working with Windows based microcomputer systems; eligibility for ENGL 100</td>
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<td>An introduction to elementary programming structures and logic using the language ALICE. Students will learn the programming structures which are the basis for any modern programming language. These structures include the concepts of data types, variables, looping, decision making and string manipulation. In addition, students will be introduced to object oriented programming, using modules, methods and procedures. The ALICE programming language will be used as the programming tool to implement course concepts. ALICE is a highly visual language, enabling students to immediately see the results of their programming activities visually, rather than as a set of abstract data results. An excellent means for students to explore the nature of programming and assist them in learning more complicated languages such as Visual Basic or C++. May be repeated one time. SC</td>
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<td>LMC: DA</td>
<td>Transfer: CSU</td>
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<tr>
<td>COMSC-044</td>
<td>Introduction to C++ Programming Part I</td>
<td>2</td>
<td>3</td>
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<td><strong>Advisory:</strong> COMSC 40 or 41; eligibility for ENGL 90</td>
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<td>This course is designed to be an introduction to the C programming language. We use a C ++ text because C++ is a superset of C and is an object-oriented language. C++ has evolved into one of the leading programming languages in the computer software industry. C++ compilers are available on all platforms ranging from microcomputers to mainframes. The course will include structured program design, programming style, documentation, modular design, code reusability, program verification and testing, data abstraction, information hiding, and data structuring. Problems will come from the areas of business. May not be repeated. SC</td>
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<td>LMC: DA</td>
<td>Transfer: CSU</td>
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<tr>
<td>COMSC-048</td>
<td>Introduction to C++ Programming Part II</td>
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<td><strong>Advisory:</strong> COMSC 44 or equivalent</td>
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<td>A continuation to the Introduction to C++ Programming Part I. The course includes more in-depth coverage of the object-oriented software development analysis, design and implementation. It also includes an introduction to inheritance and polymorphism. A large scale project is developed and refined. May not be repeated. SC</td>
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<tr>
<td>LMC: DA</td>
<td>Transfer: UC, CSU</td>
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COMSC-049 Computer Literacy
27 total hours lecture, 9 total hours lab 1.5 Units
A short term course designed to provide students with an understanding of basic computer concepts. Introduces students to basic computer terminology, the way a computer system works, the historical development of computing devices, computer applications, social implications of computers, and computer careers. Provides students with hands-on experience in operating microcomputers. Satisfies the Los Medanos College computer literacy requirement. May not be repeated. SC
LMC: GCR: Computer Literacy; DA

COMSC-051 Introduction to Java for Programmers Part I
2 hours lecture, 3 hours lab 3 Units
Prerequisite: COMSC 44 or COMSC 41
This course is designed for students with a programming background and no previous knowledge of Java. Upon completion, students will have a solid foundation from which to develop real applications and applets. May not be repeated. SC
LMC: DA
Transfer: UC, CSU

COMSC-052 Introduction to Java for Programmers Part II
2 hours lecture, 3 hours lab 3 Units
Prerequisite: COMSC 51 or equivalent
Students will create Java programs of a more practical nature than the console programs written in Part I. Java II teaches students how to create a Window interface for programs using the Abstract Window Toolkit or (AWT). May not be repeated. SC
LMC: DA
Transfer: UC, CSU

COMSC-053 Advanced Microsoft Visual Basic
2 hours lecture, 3 hours lab 3 Units
Prerequisite: COMSC 41 or equivalent
This course is designed for programmers already familiar with the Visual Basic programming language. Students learn to use the Win32, API and Dynamic Link Libraries to create ActiveX controls and ActiveX documents as well as to manipulate Microsoft Office applications from VB using automation. May not be repeated. SC
LMC: DA
Transfer: UC, CSU

COMSC-055 Systems Analysis and Design
2 hours lecture, 3 hours lab 3 Units
Prerequisite: COMSC 41, COMSC 44 or equivalent
This course will explore systems analysis and design from the early days of second generation systems development up to and including graphical user interface design and development, (GUI). May not be repeated. SC
LMC: DA
Transfer: CSU

COMSC-056 Programming Logic and Design
2 hours lecture, 3 hours lab 3 Units
This course will provide the beginning programmer with a guide to developing structured program logic. It introduces students to programming concepts, enforcing good style and logical thinking. May not be repeated. SC
LMC: DA
Transfer: UC, CSU

COMSC-060 Microcomputer Applications and Emerging Technologies
3 hours lecture, 3 hours lab 4 Units
Advisory: Completion of COMSC 40; eligibility for ENGL 90
This course presents a survey of the contemporary microcomputer technology tools and applications essential to fully participate in the contemporary electronic workplace. Students will be introduced to fundamental microcomputer concepts and the basic applications of word processing, electronic worksheets and database management, which are part of the Microsoft Office Professional suite of applications. In addition, students will develop skills with other contemporary workplace equipment including: Personal Digital Assistants (PDAs), Digital Cameras, Sound and Video processing, GPS and mapping devices, to name a few. All technologies and applications will be integrated using wireless network. May be repeated three times. SC
LMC: GCR: Computer Literacy; DA
Transfer: CSU

COMSC-061 Advanced Microcomputer Applications
2 hours lecture, 3 hours lab 3 Units
Prerequisite: BUS 35D (Formerly COMSC 65)
Once students are familiar with the basic capabilities of Microsoft Office, they can begin to explore advanced features of this application suite. This course enables students to build upon a working knowledge of MS Office, and learn to produce complex document layouts with WORD, create graphic images with COREL DRAW, assemble presentations with POWERPOINT, and finally integrate data from a variety of different applications using OLE and DDE. May be repeated three times. SC
LMC: DA
Transfer: CSU

COMSC-067 Intermediate Microsoft Access
18 total hours lecture, 27 total hours lab 1.5 Units
Advisory: BUS 350 (formally COMSC 65) or previous database experience
An intermediate level Microsoft ACCESS course for students who have completed BUS 35D (Formerly COMSC 65) or who have prior Microsoft ACCESS experience. Students will learn relational database concepts, and build relational database objects including queries, forms and reports. Students will also learn beginning database programming methods. May not be repeated. SC
LMC: DA
Transfer: CSU
COMSC-080  A Survey of Operating Systems  
2 hours lecture, 4 hours lab  
3 Units  
Advisory: Completion of COMSC 40  
This class is a comprehensive survey of operating systems. Coverage includes the fundamentals of operating systems: what they are, what they do, how they function, how can they be evaluated, and how they compare to one another. Students will learn the basic structure and operating procedures of different operating systems necessary to control a contemporary microcomputer. In addition students will develop skills in hardware configuration, startup customization, resource management, performance tracking and optimization, software and hardware troubleshooting, and the manipulation of audio and visual media. Students will be exposed to alternative operating systems, such as UNIX and LINUX. Course will always be taught using the current version of popular operating systems. May be repeated three times. SC  
LMC: DA  
Transfer: CSU

COMSC-083  Introduction to the Macintosh  
2 hours lecture, 4 hours lab  
3 Units  
Advisory: Eligibility for ENGL 90  
An introduction to Macintosh hardware and software, including both the operating system and common applications. The operating system will cover both the overlying Mac specific features and functions and the underlying BSD UNIX kernel. Applications will include both the iLife and iWork suites. Emphasis will be given throughout to the integration of internal and external hardware with the operating system and applications. May be repeated three times. SC  
LMC: DA

COMSC-090  PC Repair - Hardware (A+ Certification)  
2 hours lecture, 3 hours lab  
3 Units  
Advisory: Working knowledge of PC systems and operating systems; eligibility for ENGL 90.  
The second of three courses (COMSC 90, 91, and 92) designed to prepare students for the CompTIA A+ Certification exams. Mastering the craft of the PC technician requires the student to learn many details about a variety of hardware and operating systems, drivers and configurations. Through the use of A+ approved courseware and certified instructor, students will learn how to troubleshoot, upgrade, install, backup, restore and perform preventative maintenance on Person Computers (PC) operating systems in both home and corporate environments. Theory, history, best practice routines and hands on experience will be delivered in this course to insure students achieve the well rounded experience required of an A+ certified technician or for those who would just like to know how to manage their own home/office systems more efficiently. Meets the proficiency / Graduation requirement for Computer Literacy. May be repeated two times. SC  
LMC: DA  
Transfer: CSU

COMSC-091  PC Repair - Software (A+ Certification)  
2 hours lecture, 3 hours lab  
3 Units  
Advisory: COMSC 90, or working knowledge of PC systems and operating systems; eligibility for ENGL 90.  
The second of three courses (COMSC 90, 91, and 92) designed to prepare students for the CompTIA A+ Certification exams. Mastering the craft of the PC technician requires the student to learn many details about a number of operating systems, drivers and configurations. Through the use of A+ approved courseware and certified instructor, students will learn how to troubleshoot, upgrade, install, backup, restore and perform preventative maintenance on Person Computers (PC) operating systems in both home and corporate environments. Theory, history, best practice routines and hands on experience will be delivered in this course to insure students achieve the well rounded experience required of an A+ certified technician or for those who would just like to know how to manage their own home/office systems more efficiently. Meets the proficiency / Graduation requirement for Computer Literacy. May be repeated two times. SC  
LMC: DA  
Transfer: CSU

COMSC-092  A+ Certification Exam Preparation  
18 total hours lecture, 27 total hours lab  
1.5 Units  
Advisory: COMSC 90 and 91; or working knowledge of PC systems and operating systems, eligibility for ENGL 90  
This half semester 1.5 Unit course is the last of three courses (COMSC 90, 91, and 92) designed to prepare students for the CompTIA A+ Certification exams. Mastering the craft of the PC technician requires the student to learn many details about a variety of hardware and operating systems, drivers and configurations. Through the use of A+ approved courseware and certified instructor, students will learn how to maximize their chances of passing the A+ certification exams the first time. Best practice routines and testing of all aspects of the student's knowledge of A+ required topics and practices will be exhausted during this course so that students may be truly informed and prepared to pass CompTIA's A+ certification exams. May be repeated two times. SC  
LMC: DA

COMSC-093  Visual Basic for Microsoft Applications  
2 hours lecture, 3 hours lab  
3 Units  
Advisory: Prior experience with MS Office applications  
Microsoft office has become the standard applications suite for use on contemporary microcomputers. Visual Basic has been established as the programming language which may be used both to automate MS Office operations, as well as to create systems for integrating data from several applications. This course will teach students how to use Visual Basic and object oriented programming to creating automated systems with Microsoft Office applications. May be repeated three times. SC  
LMC: DA  
Transfer: CSU
COMSC-095 Microcomputer Problems
18 total hours lecture, 54 total hours lab 2 Units
Advisory: Taken as the last class in the Microcomputer Certificate Program
In this final course in the Los Medanos College Microcomputer Systems Specialist certificate program, students will develop a project to integrate a series of microcomputer applications and to provide a solution to a specific microcomputer applications problem. The project will be defined in conjunction with an academic advisor. Upon completion of the project, the student will submit a written report, along with appropriate support materials. May be repeated three times. SC
LMC: DA
Transfer: CSU

COMSC-098 Independent Study in Computer Science
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC
LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.
Transfer: Independent Study courses may be DA or transferable depending on specific course. See your counselor.

COMSC-099 Cooperative Education in Computer Science
Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC
LMC: DA
Transfer: CSU

COMSC-100 Introduction to UNIX
18 total hours lecture, 27 total hours lab 1.5 Units
Advisory: COMSC 40 or equivalent
A beginning course in the basics of the UNIX/LINUX computing environment. The course will cover the concepts and vocabulary of the UNIX/LINUX shell and command processing, file system, directories and permissions, utilities, printing and the visual editor. May not be repeated. SC
LMC: DA
Transfer: CSU

COMSC-101 UNIX Shell Scripting
18 total hours lecture, 27 total hours lab 1.5 Units
Advisory: COMSC 100 or equivalent
Students will be shown how to use the UNIX operating system and its facilities to accomplish useful work as well as creating applications. This course will complete their basic competency in the UNIX subject that employers often look for in their successful candidates. May not be repeated. SC
LMC: DA
Transfer: CSU

COMSC-110 Gaming: An Introduction
18 hours lecture, 27 hours lab 1.5 Units
Advisory: Completion of COMSC 40, eligibility for ENGL 90
An introduction to electronic game development. This course presents a survey of topic areas involved in the development of electronic games for microcomputers and game consoles. Topics include computer animation, with an overview of character modeling, rendering, animation illustrating and storyboarding, and game design with an overview of gaming structures, design fundamentals and programming options. May be repeated three times. SC
LMC: DA

COMSC-120 Computer Forensics
2 hours lecture, 4 hours lab 3 Units
Advisory: Completion of COMSC 40, eligibility for ENGL 90
A foundation course in the theory, skills, and tools of computer forensics. Students will learn techniques on preventing intrusions into network systems and quickly assess any damage that may occur. How to initiate and manage various types of investigations and prepare a comprehensive response plan. May be repeated three times. SC
LMC: DA

COMSC-900s Selected Topics in Computer Science
DA varies with course content.

Cosmetology

COSME-010 Cosmetology—Theory, Principles and Practices
50 hours lab per unit .5-16 Units
Course of study will be that stipulated in the California Cosmetology Act as defined by the Department of Professional and Vocational Standards: theory, reception desk work, hairdressing (wet and thermal), shampoo, hair cutting, permanent wave, chemical straightening, hair coloring, bleaching, scalp and hair treatment, facials, make-up, eyebrow arching, manicuring and miscellaneous studies. Presentation is lecture, workshop, laboratory, model. One unit of credit will be granted for each 50 hours successfully completed. The course is repeatable to a maximum of 32 units and the 1600 required hours for state certification. 1600 hours total lab. "An optional material fee may be applied." LR
LMC: NDA
COSME-011  Cosmetology — Theory, Principles and Practices
50 hours lab per unit  .5-16 Units
A continuation of Cosmetology 10, this course of study will be
that stipulated in the California Cosmetology Act as defined by
the Department of Professional and Vocational Standards: theory,
reception desk work, hairdressing (wet and thermal), shampoo,
hair cutting, permanent wave, chemicalstraightening, hair color-
ing, bleaching, scalp and hair treatment, facials, make-up, eye-
brow arching, manicuring and miscellaneous studies. Presentation
is lecture, workshop, laboratory, model. One unit of credit will be
granted for each 50 hours successfully completed. The course is
repeatable to a maximum of 32 units in combination with Cosme-
tology 10 resulting in the 1,600 hours required for State Certifi-
cation. “An optional material fee may be applied.”  LR
LMC: NDA

COSME-040  Licensed Cosmetology Instructor Training
50 hours lab per unit  .5-12 Units
Prerequisite: Valid California License in Cosmetology and one
year of experience in the field, or equivalent
Advisory: Prior approval from Cosmetology School
Course of study is as stipulated in the California Cosmetology
Act as defined by the Department of Professional and Vocational
Standards. Course work includes 60 hours of preparation train-
ing, 40 hours of conducting theory classes; 100 hours conduct-
ing practical classes in all required subjects, and 400 hours su-
ervision of student practices. One unit of credit is earned for
each 50 hours successfully completed. Student will clock in and
will be granted only those units satisfactorily completed. This
course prepares the student to take the test to qualify as a Li-
censed Cosmetology Instructor. “An optional material fee may
be applied.”  LR
LMC: NDA

COSME-070  Manicuring and Pedicuring
50 hours lab per unit  .5-8 Units
Advisory: Prior approval from Cosmetology School
Consists of technical instruction and practical operations cover-
ing all practices of a manicurist and pedicurist, pursuant to Sec-
tion 7350 of the Cosmetology Act. Technical instructions include
practical operations, including the actual performance by the
student. Unit of credit granted for each 50 hours successfully completed. May be repeated for a total of 8 units. “An optional material fee may be applied.”  LR
LMC: NDA

COSME-080  Cosmetician/Esthetician Training
50 hours lab per unit  .5-12 Units
Course of study is stipulated in the California Cosmetology Act
as defined by the Department of Professional and Vocational
Standards; giving facials, applying makeup, giving skin care, re-
moving hair by tweezing, depilatory or waxing, upper body
massage, applying eyelashes, theory, reception desk work, mod-
eling and miscellaneous studies. Presentation is lecture, work-
shop, laboratory, model. One unit of credit will be granted for
each 50 hours successfully completed; 600 hours total. May be
repeated for a total of 12 units. “An optional material fee may
be applied.”  LR
LMC: NDA

COSME-098  Independent Study in Cosmetology
Provides students an opportunity to design and pursue their
own interests within a particular area. Projects reflecting cul-
tural diversity and/or societal issues will be greatly encouraged.
A contract must be drawn between the student and the instruc-
tor stipulating the goals of the independent study, the content,
the method of approach, the estimated time involved, and the
periodic evaluation to be used. This course may be repeated for
credit. (Minimum 1 hour per week with instructor plus 54 hours
of contracted work for each unit of credit.) SC
LMC: Independent Study courses may be DA or transferable
depending on specific course. See your counselor.
Transfer: Independent Study courses may be DA or transferable
depending on specific course. See your counselor.

COSME-099  Cooperative Education in Cosmetology
Under agreement of an employer and a faculty member, a con-
tact will be developed for supervised cooperative education as to
goals, content, methods, and evaluation. Approved appli-
cation and enrollment in at least 7 units (including up to 4 for this
course). No more than four units may be taken each semester.
A maximum of 16 units may be earned. Cooperative education is
offered by instructional area.  SC
LMC: DA
Transfer: CSU

COSME-900s  Selected Topics in Cosmetology
DA varies with course content.

Counseling
COUNS-030  Orientation to College
18 hours lecture  1 Unit
Advisory: Completion of the LMC Assessment Test or equiva-
 lent
This course is an orientation to Los Medanos College’s academic
policies, resources, academic programs and services; introduc-
tion to the California system of higher education; formation of
an educational plan. The course covers topics including: use of
student services, LMC certificates, associate degrees, and four-
year schools’ requirements for transfer. May not be repeated.
P/NP
LMC: NDA

COUNS-032  Career Development
18 total hours lecture  1 Unit
An intense career exploration designed to engage students in
their own career development. Topics include how to realistically
assess, review, and interpret various areas such as interests,
attitudes, values, priorities, skills and strengths, goals, and ca-
career options in the current job market. The course includes the
opportunity to utilize the campus Career Center. May not be repeated. P/NP
LMC: DA
Transfer: CSU
Dramatic Arts

COUNS-033 Transfer Planning
18 total hours lecture 1 Unit
Advisory: Eligibility for ENGL 90 or equivalent
Enables students to become active participants in planning their continuing education. Provides students with information necessary to evaluate universities, plan required course work, explore housing, financial aid, and to familiarize themselves with programs, and services offered at the universities. May not be repeated. P/NP
LMC: DA
Transfer: CSU

COUNS-034 College Success
18 total hours lecture 1 Unit
Designed to help students learn and develop the critical thinking skills necessary to succeed in their college experiences. Topics will include some practical ideas, problem solving techniques, and applications of strategies for time management, test anxiety, study skills, stress management, and problem-solving. May not be repeated. P/NP
LMC: DA
Transfer: CSU

COUNS-098 Independent Study in Counseling
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC
LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.
Transfer: Independent Study courses may be DA or transferable depending on specific course. See your counselor.

COUNS-099 Cooperative Education in Counseling
Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. SC
LMC: DA
Transfer: CSU

COUNS-900s Selected Topics in Counseling
DA varies with course content.

Dramatic Arts

DRAMA-015 Principles of Dramatic Art: A Multicultural Perspective
3 hours lecture 3 Units
Advisory: Eligibility for ENGL 100
(Formerly DRAMA 15LS) Explorations of the relationships of experience, imagination and expression in dramatic art forms, particularly as they pertain to Asian American, Native American, African American, Latino American and European American theatre; dramatic art as a cultural force in the past and present in above mentioned cultures; analysis of both the individual and collaborative contributions of the playwright, director, actors and designers to a total work of dramatic art in Asian American, African American, Latino American and European American dramatic forms. The course will be interdisciplinary stressing in relationships of the dramatic arts to the visual arts, music and other art forms in each individual culture. This course meets the General Education Requirement for Creative Arts. May not be repeated. SC
LMC: GE: Creative Arts; GCR: Ethnic/Multicultural Studies; DA
Transfer: UC, CSU Gen. Ed. Area C1, IGETC Area 3A

DRAMA-016 Theatre Appreciation: from Greek Myth through Shakespeare to Def Jam
3 hours lecture 3 Units
Advisory: Eligibility for ENGL 90
(Formerly DRAMA 16LS) An introduction to theatre appreciation in which students will explore the various aspects of the theatrical experience; the components of theatre, the various creative artists and technicians who make it happen, design and technical production elements, including the "nuts and bolts" aspects of scenery, costumes, lighting and sound, the traditional and historical background from which theatre springs and the genre of movement of which a particular play is part. Meets the Creative Arts General Education requirement. May not be repeated. SC
LMC: GE: Creative Arts; DA
Transfer: UC, CSU Gen. Ed. Area C1, IGETC Area 3A

DRAMA-020 Principles of Acting I
3 hours lecture, 1 hour lab 3 Units
Principles and experiences of acting designed to fulfill the most diverse needs of self exploration and self-discovery; uses the Stanislavsky system of utilizing physical and psychological resources of total being through awareness, observation, recall, improvisation, games, and role playing to develop a believable character in the naturalistic and realistic styles. May not be repeated. SC
LMC: DA
Transfer: UC, CSU
DRAMA-021  Principles of Acting II
3 hours lecture, 1 hour lab  3 Units
_Advisory:_ DRAMA 20
Continuation and elaboration of the content of DRAMA 20 with emphasis on analysis, interpretation, and creation of a believable character in either advanced imaginative or realistic style. May be repeated one time.  SC
_LMC:_ DA
_Transfer:_ UC, CSU

DRAMA-022  Principles of Voice and Dialects
2 hours lecture, 3 hours lab  3 Units
_Advisory:_ DRAMA 20 and 31
(Formerly DRAMA 30). Principles and experiences in methods of utilizing the human voice as an instrument for communication; development of individual resources for relaxation, diaphragmatic breathing, breath control, phrasing, articulation, resonance and tone placement; notation and dialects; projection of believable characterization. May be repeated three times.  SC
_LMC:_ DA
_Transfer:_ UC, CSU

DRAMA-030  Chicano Cinema: A Critical Analysis
3 hours lecture  3 Units
(Formerly DRAMA 30S) Film screenings, lectures, classroom discussions, and readings on Chicano/Raza experience and theory of cinema as seen by mainstream culture and by Chicano/Raza filmmakers. Students will screen film works in the areas of documentary, narrative, experimental, and other film genera and develop critical perspectives of film as a reflection of the values of society. Meets ethnic/multicultural studies graduation requirement. May not be repeated.  LR
_LMC:_ GCR: Ethnic/Multicultural Studies; DA
_Transfer:_ UC, CSU Gen. Ed. Area C2, IGETC Area 3B. Also satisfies American Cultures Requirement at UCB

DRAMA-031  Principles of Improvisation and Movement
2 hours lecture, 3 hours lab  3 Units
_Advisory:_ DRAMA 20 or DRAMA 15
Principles of movement for the stage utilizing the human body as an instrument for communication; development of individual resources for relaxation, control of the body as a whole or as separate parts; creative and imaginative use of the body; rhythm and projection of believable characterizations; also stage combat, mime, clown techniques and use of contemporary and current methodology of movement (i.e. Feldenkrais, Laban); improvisational work with and without vocalization. May be repeated three times.  SC
_LMC:_ DA
_Transfer:_ UC, CSU

DRAMA-040  Principles of Backstage Techniques
1 to 3 hours lecture  1-3 Units
Understanding and appreciation of the technical principles of a dramatic production; basic tools and materials; principles of scene construction; scene painting, stage rigging, lighting and sound equipment, control systems, costume construction, and makeup. May not be repeated.  LR
_LMC:_ DA
_Transfer:_ UC, CSU

DRAMA-041  Basic Backstage Techniques
54 total hours lab  1 Unit
Collective and individual projects in selected areas of technical production culminating in public performance. May be repeated three times.  LR
_LMC:_ DA
_Transfer:_ UC, CSU

DRAMA-042  Theatre Production: Acting for Performance
1 hour lecture, 3 to 6 hours lab  1-3 Units
Students will participate in the entire process of play production from the selection and analysis of the script to the actor’s interpretation of character through the director’s, production designer’s, lighting and sound designer’s choices through the rehearsal process, as well as the management of the box office and house during the production. May be repeated three times.  SC
_LMC:_ DA
_Transfer:_ UC, CSU

DRAMA-060  Music Theatre: Acting
54 total hours lab per unit  1-2 Units
Devoted to the preparation and presentation of a dramatic musical work. Detailed study, practice, and performance in a single dramatic/musical role. May be repeated three times.  LR
_LMC:_ DA
_Transfer:_ UC, CSU

DRAMA-062  Musical Enhancement for Theatre Production
1 hour lecture, 4.5 hours lab 1.5-2.5 Units
_Advisory:_ DRAMA 20 or DRAMA 15
Students will participate in the preparation and presentation of a show’s chorus, vocal solos and live music enhancement. Preparation will require ten weeks of rehearsals. The variable units reflect the degree of difficulty and the amount of time required to fulfill the assigned tasks. For example, a soloist or major voice role will attend more rehearsals than a general chorus member and will have daily assignments or exercises outside of the rehearsal period. May be repeated three times.  SC
_LMC:_ DA
_Transfer:_ UC, CSU
DRAMA-070  The Film as an Art Form
3 hours lecture, 2 hours lab 3 Units
Advisory: ENGL 90 or ENGL 100
(Formerly DRAMA 70LS) Examination of cinema as a modern art form; analysis and discussion of a series of feature length films with a theme described in the subtitle of the course; emphasis will be on the social, philosophic, and psychological ideas depicted in the films, with secondary attention paid to techniques of acting, direction, filming, and producing. May not be repeated. LR
LMC: GE: Creative Arts; DA
Transfer: UC, CSU Gen. Ed. Area C1, IGETC Area 3A

DRAMA-071  The Art of Documentary Filmmaking
3 hours lecture, 2 hours lab 3 Units
Advisory: Eligibility for ENGL 100
(Formerly DRAMA 71L) Through a combination of lectures, film screenings, readings and hands-on demonstrations, this course will introduce students to the Documentary Film Form and will instructor them in how to produce, write, shoot and edit their own five minute documentary. Meets General Education / Creative Arts graduation requirement. May not be repeated. SC
LMC: GE: Creative Arts; DA
Transfer: UC, CSU Gen. Ed. Area C1, IGETC Area 3A

DRAMA-098  Independent Study in Dramatic Arts
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC
LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.
Transfer: Independent Study courses may be DA or transferable depending on specific course. See your counselor.

DRAMA-099  Cooperative Education in Dramatic Arts
Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC
LMC: DA
Transfer: CSU

DRAMA-900s  Selected Topics in Dramatic Art
DA varies with course content.

Economics

ECON-005  Economic History of the United States
3 hours lecture 3 Units
Advisory: Completion of ENGL 100
(Formerly ECON 5LS) An examination of the origin and development of the American Economy from the Colonial Era to the present time. Topics studied include the following: colonial economic policies, land and resource use, industrial and economic growth, role of immigration and ethnic/cultural groups, the transport revolution, the development of money, banking and trade patterns, as well as the role of the government. The course applies the economic context in which the American society, culture, and political institutions evolved during the agricultural and extractive era, the industrial era, and the current era. This course meets the General Education Requirement for Social Science, and partially fulfills the CSU American Institutions Requirement. May not be repeated. SC
LMC: GE: Social Science; DA
Transfer: UC, CSU Gen. Ed. Area D6, IGETC Area 4F

ECON-010  Principles of Microeconomics
3 hours lecture 3 Units
Advisory: Completion of ENGL 90
(Formerly ECON 10LS) This course introduces the beginning economics students to microeconomic principles. It includes an examination of the nature and method of economics, the economizing problem, individual markets - demand and supply, the market system and market failure; the microeconomics of product markets-elasticities, costs of production, market models, including pure competition and monopoly, the demand for resources and microeconomic issues and policy. May not be repeated. (CAN ECON 4) SC
LMC: GE: Social Science; DA
Transfer: UC, CSU Gen. Ed. Area D2, IGETC Area 4B

ECON-011  Principles of Macroeconomics
3 hours lecture 3 Units
Advisory: Completion of ECON 10
(Formerly ECON 11LS) An examination of economic factors, primarily macroeconomic in nature, including unemployment, inflation, business cycles, fiscal policy and monetary policy. May not be repeated. (CAN ECON 2) LR
LMC: GE: Social Science; DA
Transfer: UC, CSU Gen. Ed. Area D2, IGETC Area 4B

ECON-098  Independent Study in Economics
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC
LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.
Transfer: Independent Study courses may be DA or transferable depending on specific course. See your counselor.
ECON-099  Cooperative Education in Economics
Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC
LMC: DA
Transfer: CSU

EDUC-050  Introduction to Tutoring Reading for K-3
2 hours lecture, 3 hours lab 3 Units
Advisory: Eligibility for ENGL 100
This course introduces students to the practice and theory of reading intervention in grades kindergarten to third. Students will be exposed to the developmental stages of language acquisition and literacy. Students will acquire a working vocabulary of pertinent terms and strategies appropriate to enhance the literacy of primary-age students. Students are required to complete three hours of fieldwork per week. Students will be expected to research a topic related to reading and report findings. May not be repeated. LR
LMC: DA
Transfer: CSU

ECON-099s  Selected Topics in Economics
DA varies with course content.

EDUC-005  Strategies for Success
3 hours lecture, 1 hour lab 3 Units
Advisory: Enrollment in at least one lecture course will be necessary to complete certain assignments and projects in this course.
This is a one-semester course designed to help students both learn and apply study skills strategies. Students complete a learning and study strategies inventory complete related instructional modules. Topics include making information meaningful and storing it in memory, selecting, reducing anxiety and worry about academic performance and controlling concentration. In addition to the inventory and modules, projects and additional readings are assigned to further integrate course concepts. May not be repeated. SC
LMC: DA
Transfer: CSU

EDUC-040  Teaching as a Profession
2 hours lecture, 3 hours lab 3 Units
Advisory: Eligibility for ENGL 100
This course invites the student to explore teaching as a profession. Effective teaching experiences and expectations of a teacher, foundations of teaching, critical issues in education, student diversity and job options are emphasized. Students are required to complete three hours of field observation per week. This course is designed for students considering teaching as a profession, and for parents of children in the American school system who want to be informed of current issues and practices in education. May not be repeated. LR
LMC: DA
Transfer: UC, CSU

2 hours lecture, 2 hours lab 3 Units
This course explores and expands the essential connections between meaningful teaching and meaningful learning. Although grounded in various theories, this course is predominantly a practical guide to improving real-life instruction in the classroom. Ample opportunities will be afforded to enlarge and enhance one’s repertoire and view of pedagogy, as well as experiment with different techniques. May not be repeated. SC
LMC: DA
Transfer: CSU

EDUC-098  Independent Study in Education
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC
LMC: DA
Transfer: CSU

EDUC-099  Cooperative Education in Education
Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC
LMC: DA
Transfer: CSU

EDUC-900s  Selected Topics in Education
DA varies with course content.
Electrical / Electronic Technology

EETEC-004  Introduction to Electrical Technology
3 hours lecture, 3 hours lab 3 Units
Advisory: Eligibility for ENGL 100; Math 12 or equivalent
(Formerly EETEC 10) An introduction to elementary concepts and principles of electrical technology. This course is designed to meet the needs of students in related technologies such as: Appliance Service Technology, Automotive Technology, Recording Arts and Welding Technology programs, as well as provide a general knowledge of electrical technology to the beginning student who is exploring alternatives. The course will present the outlined material on a conceptual level, with emphasis on demonstrations and hands-on laboratory exercises. May be repeated three times. SC
LMC: DA
Transfer: CSU

EETEC-006  Introduction to Electronics Technology
2 hours lecture, 3 hours lab 3 Units
Advisory: Eligibility for ENGL 100; Math 12 or equivalent
(Formerly EETEC 11) An introduction to the elementary concepts and principles of Electronic Technology. This course is designed to meet the needs of students in related technologies such as: Appliance Service Technology, Recording Arts and Automotive Technology programs, as well as provide a general knowledge of electronic technology to the beginning student exploring alternatives. This course will present the outlined material on a conceptual level, with emphasis on demonstrations and hands-on laboratory exercises. May be repeated three times. SC
LMC: DA
Transfer: CSU

EETEC-010  Direct Current Circuits
3 hours lecture, 3 hours lab 4 Units
Advisory: Eligibility for ENGL 100; MATH 12 or equivalent
(Formerly EETEC 20) This is the first semester course in the fundamentals of electricity and electronics. It will provide a solid background in direct current circuits including Ohm’s law, component identification, and electrical terminology commonly used in industry. Student will learn how electricity interacts with passive components. Emphasis will be placed upon the calculation, construction, and measurement of direct current circuits. The coordinated laboratory will teach the use of test equipment to measure circuits in order to perform circuit analysis. Students will apply the basic principles of DC circuits to develop troubleshooting techniques. May be repeated three times. SC
LMC: DA
Transfer: CSU

EETEC-012  Alternating Current Circuits
3 hours lecture, 3 hours lab 4 Units
Advisory: Eligibility for ENGL 100; MATH 12 or equivalent
(Formerly EETEC 21) This course will address calculation, construction, measurement and analysis of single phase alternating current RCL circuits. Magnetism, transformer theory, passive filters, vectorial analysis and power in alternating current circuits will be extensively covered. The coordinated lab will provide a thorough understanding of the concept by way of experimentation and troubleshooting using laboratory test equipment. May be repeated three times. SC
LMC: DA
Transfer: CSU

EETEC-020  Electric Motor Control
2 hours lecture, 4 hours lab 3 Units
Advisory: EETEC 10, EETEC 12; eligibility for ENGL 100; MATH 12 or equivalent
(Formerly EETEC 35) A study of electrical control circuits as they apply to industrial control systems. The student will learn control components and their use in control systems as well as the use and development of electrical schematic and wiring diagrams. Control circuits will be constructed, analyzed, tested, and calibrated from a schematic diagram. Systematic trouble shooting techniques will be emphasized. The addressing, programming, and connection of Programmable Logic Controllers will be introduced. May be repeated three times. SC
LMC: DA
Transfer: CSU

EETEC-022  Semiconductor Devices
3 hours lecture, 3 hours lab 2 Units
Advisory: EETEC 10, EETEC 12; eligibility for ENGL 100; MATH 12
(Formerly EETEC 40) A study of active electronic semiconductor devices commonly used in analog and industrial control circuits. The analysis of the operational characteristics, biasing, power dissipation and application of each device will be explored. Included will be coordinated laboratory projects to help reinforce the theoretical and practical understanding of active semiconductor devices. May be repeated three times. SC
LMC: DA
Transfer: CSU

EETEC-024  Digital Devices
1 hour lecture, 3 hours lab 2 Units
Advisory: EETEC 10, EETEC 12; eligibility for ENGL 100; MATH 12
(Formerly EETEC 41) This course of study will provide the student with the concepts of digital devices and circuitry commonly used in modern electronic circuits. The student will understand sequential logic circuits binary and hexadecimal numbering systems, binary math and the application of these subjects in industrial control systems. May be repeated three times. SC
LMC: DA
Transfer: CSU
### COURSE DESCRIPTIONS

#### Electrical/Electronic Technology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>EETEC-028</td>
<td>National Electric Code Changes</td>
<td>3</td>
<td>A study of the extensive changes that occur every three years in the National Electric Code. These changes are dictated by new developments in design, application, materials, and methods in the electrical industry, as well as public demand for energy efficiency and protection for the environment. The California Department of Apprenticeship Standards requires all workers in the electrical industry to be certified as a journeyman or DAS registered trainees. This course is approved for journeymen certification or recertification or trainee registration. May not be repeated. SC</td>
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<tr>
<td></td>
<td>Advisory: EETEC 10, EETEC 12; eligibility for ENGL 100; MATH 12 or equivalent</td>
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<tr>
<td>EETEC-030</td>
<td>Programmable Logic Controllers</td>
<td>4</td>
<td>(Formerly EETEC 36) This course will provide the student with knowledge of the hardware and programming syntax of a specific programmable logic controller. Hardware components and their addressing when installing a new system will be discussed as well as the ladder logic programming of the device. Programming components such as counters, timers, sequencers, internal and external relay equivalents will be used to construct sequential ladder logic diagrams. May be repeated three times. SC</td>
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<td></td>
<td>Advisory: EETEC 10, EETEC 12, EETEC 20, or an equivalent motor control courses or employment in the electrical or electronic industry; eligibility for ENGL 100, MATH 12</td>
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<tr>
<td>EETEC-032</td>
<td>Instrumentation - Process Measurement</td>
<td>3</td>
<td>(Formerly EETEC 50) This is a course in the fundamentals of instrumentation measurement which leads to process control. The student will learn the characteristics of Temperature, Pressure, Level and Flow as well as Analytical properties. Emphasis will be on the theoretical operation and practical application of each transmitter and transducer used in the sensing of these process variables. May not be repeated. SC</td>
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<td></td>
<td>Co-requisite: EETEC 34</td>
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<tr>
<td></td>
<td>Advisory: EETEC 10, EETEC 12, EETEC 30, PHYS 15; eligibility for ENGL 100, MATH 12</td>
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<tr>
<td>EETEC-034</td>
<td>Instrument Calibration Lab</td>
<td>1</td>
<td>(Formerly EETEC 50) This is a lab course which provides hands on experience to enhance the fundamentals of instrumentation measurement of process control covered in EETEC 32. The student will learn to use test and calibration equipment commonly used in industry to measure Temperature, Pressure, Level and Flow as well as Analytical properties. May be repeated three times. SC</td>
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<td></td>
<td>Co-requisite: EETEC 32</td>
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<td></td>
<td>Advisory: EETEC 10, EETEC 12, EETEC 32, PHYS 15; eligibility for ENGL 100, MATH 12</td>
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<tr>
<td>EETEC-040</td>
<td>National Electric Code</td>
<td>3</td>
<td>(Formerly EETEC 25) A comprehensive study of poly-phase systems and how they are used today for power distribution. The understanding of poly-phase systems the effects of loading and neutral current calculation will be stressed. A thorough coverage of the principles of operation, application and construction of transformer connections will be emphasized to enable the student to understand single and poly-phase system voltages and currents. In the coordinated laboratory, students will have the opportunity to calculate, connect, measure, and evaluate each transformer and polyphase circuit connection. May be repeated three times. SC</td>
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<tr>
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<td>Co-requisite: EETEC 42</td>
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<tr>
<td>EETEC-042</td>
<td>Electrical Wiring Methods and Code Application</td>
<td>1</td>
<td>(Formerly EETEC 25) This course provides hands on skill development in the use of tools, materials, and methods demanded by employers in the electrical industry to install electrical wiring systems to code specifications in residential, commercial, and industrial settings. May be repeated three times. SC</td>
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<td>Co-requisite: EETEC 40</td>
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<tr>
<td>EETEC-044</td>
<td>Transformers and Power Distribution</td>
<td>3</td>
<td>(Formerly EETEC 30) A comprehensive study of poly-phase systems and how they are used today for power distribution. The understanding of poly-phase systems the effects of loading and neutral current calculation will be stressed. A thorough coverage of the principles of operation, application and construction of transformer connections will be emphasized to enable the student to understand single and poly-phase system voltages and currents. In the coordinated laboratory, students will have the opportunity to calculate, connect, measure, and evaluate each transformer and poly phase circuit connection. May be repeated three times. SC</td>
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<tr>
<td></td>
<td>Co-requisite: EETEC 10, EETEC 12, MATH 12 or equivalent; eligibility for ENGL 100</td>
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**Transfer:**

- **LMC:** DA
- **CSU:**

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EETEC-046  DC & AC Motors and Generators
2 hours lecture, 4 hours lab  
Advisory: EETEC 10, EETEC 12; eligibility for ENGL 100; MATH 12
(Formerly EETEC 31) A comprehensive study of Direct Current and Alternating Current Rotating electrical machinery. This course will include the identification, construction, connection, operation, and application of single and poly-phase motors and generators commonly found in today’s automated systems. The student will develop an understanding of the connection, reversal, torque characteristics and speed control of this equipment. May be repeated three times. SC
LMC: DA
Transfer: CSU

EETEC-050  Instrumentation - Process Control
3 hours lecture  
Co-requisite: EETEC 52
Advisory: EETEC 10, EETEC 12, EETEC 32, EETEC 034; eligibility for ENGL 100; PHYS 15
(Formerly EETEC 051) A course of study of the theory and application of Process Control. Process Variables are measured, analyzed to control an Industrial Process. Students will learn theory of process control and the various types of Final Control Elements and how they will affect the process. Students will use P & ID and specific instrument diagram to understand how the process designed and they will learn techniques to adjust the Process Controller PID Gain to obtain the best process response to an upset to the measured variable. The process variables will be graphed and analyzed to determine the appropriate controller response to an upset. May not be repeated. SC
LMC: DA
Transfer: CSU

EETEC-052  Applied Process Control Lab
3 hours lab  
Co-requisite: EETEC 50
Advisory: EETEC 10, EETEC 12, EETEC 32, EETEC 34, EETEC 50, PHYS 12; eligibility for ENGL 100; MATH 12
(Formerly part of EETEC 051) This course is a Laboratory designed to give the student hands on experience with transducers and transmitters used to measure process variables and transmit proportional signals to a PLC, Loop controller or DCS I/O. Students will configure pneumatic, electronic and digital transmitters and connect them in measurement loops. They will calibrate the transmitters for use in pressure, level, temperature, pH and flow processes then check for accuracy, precision and linearity. Student will learn to use ISA standards and techniques to accurately prepare a transmitter for use in the field. The course is designed to be taken concurrently with EETEC 50 and provide the practical experience necessary to understand the fundamentals of process measurement. May be repeated three times. SC
LMC: DA
Transfer: CSU

EETEC-056  Codes for Instrument Application
1 hour lecture  
Advisory: EETEC 10, EETEC 12; eligibility for ENGL 100; Math 12
This course focuses on the National Electric Code regulations that govern wiring methods as they apply to hazardous locations, classified locations, remote signaling and power-limited circuits. Students will learn the theory or wiring design and installation and associated NEC regulations for Classes 1, 2, and 3, Division 1 and 2 hazardous locations. May not be repeated. SC
LMC: DA

EETEC-058  Analytical Instrumentation
1 hour lecture, 3 hours lab 2 Units
Prerequisite: CHEM 6 and PHYS 15
Advisory: EETEC 10, EETEC 12, EETEC 32; eligibility for ENGL 100; MATH 12
This is a course in the fundamentals of analytical instrumentation which are necessary skills for process control in refineries, chemical plants and environmental protection. The student will learn to measure and control analytical properties such as, Ph, oxygen, conductivity, hydrocarbon and toxic gas. Emphasis will be on the operation of analytical test equipment and proper sampling techniques. May be repeated three times. SC
LMC: DA

EETEC-059  System Integration and Troubleshooting
1 hours lecture, 3 hours lab 2 Units
Prerequisite: EETEC 20, EETEC 30, EETEC 32, EETEC 50
Advisory: MATH 25; eligibility for ENGL 100
This course is designed to tie together all the information covered in all the other EETEC courses. The student will design and build motor control circuits, write PLC programs, design, build and tune instrumentation measurement and control systems and tie them all together using the "trainers" in the lab. Proper safety, documentation, wiring and troubleshooting techniques will be emphasized. May be repeated three times. SC
LMC: DA

EETEC-098  Independent Study in Electrical/Electronic Technology
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC
LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.
Transfer: Independent Study courses may be DA or transferable depending on specific course. See your counselor.
Emergency Medical Services

EMS-010  Emergency Medical Technician I
3 hours lecture, 9 hours lab  6 Units
Advisory: Eligibility for ENGL 90
Presents the major topics of Patient Assessment (Medical and Trauma), Spinal Immobilization (Spine and Seated), Bleeding Control/Shock Management, Airway Management, and Musculoskeletal Injury Management. Prepares students for certification as an Emergency Medical Technician with the state of California. "Material lab fee of $50 required." EMT Certification is the minimum requirement for ambulance attendants and is a prerequisite for most entry level firefighter positions. May be repeated one time. LR
LMC: DA
Transfer: CSU

EMS-011  Emergency Medical Technician I Recertification
12 total hours lecture, 12 total hours lab  1 Unit
Prerequisite: EMT-Basic Certification
Advisory: Eligibility for ENGL 100
Provides training and knowledge required for Recertification for Emergency Medical Technician I as outlined by the State of California. Presents review of (1) basic life-support measures; (2) cardiopulmonary resuscitation; and (3) use of emergency medical equipment and supplies. Twenty-four hours of continuing education for EMT-B. May be repeated three times. SC
LMC: NDA

EMS-017  Introduction to EKG Arrhythmias
18 total hours lecture, 6 total hours lab  1 Unit
Advisory: Eligibility for ENGL 100
This course provides the skills and knowledge necessary to correctly interpret basic readings from an EKG, ECG, or cardiac monitor. It includes a study of cardiac anatomy and physiology as well as essential medical terminology. Approved for BRN credit (00209). May not be repeated. SC
LMC: DA

EMS-022  Drug Use and Abuse -- Updates and Horizons
3 hours lecture  3 Units
Advisory: ENGL 90 or 100
Designed for nurses, educators, social workers, psychologists, counselors in drug/alcohol agencies, criminal justice personnel, and/or individuals in substance abuse therapy or recovery. Emphasis will be on new research information about nutrition, biochemistry, and genetics. Special attention will be given to realities of management of the drug abuser instead of promises of a "fad" nature. There will be exposure to various ideas about causes of drug/alcohol abuse from guest speakers in leading Bay Area centers and the State Department of Alcohol/Drug Abuse. Approved for BRN credit (00209). May not be repeated. SC
LMC: NDA

EMS-098  Independent Study in Emergency Medical Services
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC
LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.
Transfer: Independent Study courses may be DA or transferable depending on specific course. See your counselor.

EMS-099  Cooperative Education in Emergency Medical Services
Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC
LMC: DA
Transfer: CSU

EMS-900s  Selected Topics in Emergency Medical Services
DA varies with course content.
Engineering

ENGIN-010 Introduction to Engineering
3 hours lecture, 1 hour lab 3 Units
Prerequisite: MATH 25 or equivalent
Advisory: Eligibility for ENGL 90
(Formerly ENGIN 10LS) Introduces the engineering profession. Includes the worldwide history of engineering and its influences on society. Reviews the major engineering disciplines and the requirements for becoming and engineer. Introduces engineering reports, graphics, and presentations. Engineering calculations and a design project are an integral part of the course. Engineering ethics and the need for lifelong learning are also discussed. Meets General Education requirement for Science. May not be repeated. LR
LMC: GE: Physical Science; DA
Transfer: UC, CSU

ENGIN-020 Programming with C++ for Engineers and Scientists
3 hours lecture, 3 hours lab 4 Units
Prerequisite: MATH 50
Computer programming using the C++ programming language’s syntax, control, and data structures. Includes object oriented programming techniques. Introduces numerical techniques for scientific and engineering applications. Emphasizes optimal programming practices. Introduces various aspects of software life-cycle, including design, documentation, implementation, debugging, testing, and maintenance. Case studies and software projects are significant parts of the course. This course is not intended for computer science majors. May not be repeated. LR
LMC: DA
Transfer: UC, CSU

ENGIN-022 Programming with Matlab for Engineers and Scientists
3 hours lecture, 3 hours lab 4 Units
Co-requisite: MATH 50
Computer programming using the MATLAB software package, including syntax, control, and data structures. Includes object oriented programming techniques. Introduces numerical techniques for scientific and engineering applications. Emphasizes optimal programming practices. Introduces various aspects of software life-cycle, including design, documentation, implementation, debugging, testing, and maintenance. Case studies and software projects are significant parts of the course. May not be repeated. LR
LMC: DA
Transfer: UC, CSU

ENGIN-025 Engineering Graphics
2 hours lecture, 4 hours lab 3 Units
Prerequisite: MATH 26 or the equivalent
Advisory: ENGIN 10
Introduces descriptive geometry and engineering graphics techniques. Techniques include freehand and instrument drawing, while the primary emphasis is on computer aided drafting. Applications of descriptive geometry include orthographic drawings, sectional views, and auxiliary views. Axonometric, oblique, and perspective drawings are also covered. Other topics include revolutions, tolerances, dimensions, fasteners, springs detail drawings, and assembly drawings. May not be repeated. LR
LMC: DA
Transfer: UC, CSU

ENGIN-030 Materials Science
3 hours lecture, 3 hours lab 4 Units
Prerequisite: CHEM 25 and PHYS 40
A lecture and lab course that investigates the relationships between microscopic structures and the macroscopic properties of engineering materials -- including metals, ceramics, polymers, and composites. Mechanical, thermal, electrical, magnetic, and optical properties are examined. Processes for producing and strengthening various materials are introduced. Certain failure mechanisms are also studied. May not be repeated. LR
LMC: DA
Transfer: UC, CSU

ENGIN-036 Engineering Statics
3 hours lecture, 1 hour lab 3 Units
Prerequisite: PHYS 40
An introduction on the application of physical concept and principles to engineering problems. Force systems and their effects on objects in equilibriums will be studied in the context of structures and machines. Problem solving approaches will include analytical, graphical and computer representations. May not be repeated. LR
LMC: DA
Transfer: UC, CSU

ENGIN-038 Manufacturing Processes
2 hours lecture, 3 hours lab 3 Units
Prerequisite: ENGIN 25
Co-requisite: ENGIN 30
An introduction to manufacturing processes, including: CNC machining, casting, forcible deformation processes, sintering, injection molding, microfabrication, and joining processes. Economic, environmental, and workability issues are examined to determine optimal manufacturing processes. May not be repeated. LR
LMC: DA
Transfer: UC, CSU
ENGL-003 Investigating the Middle East
3 hours lecture, 1 hour lab 3 Units
Prerequisite: Eligibility for or completion of ENGL 100
(Formerly ENGL 3LS) This course will investigate the ethical implications of U.S. involvement in, and foreign policies toward, the varying peoples and nations of the Middle East; and evaluate the many and varying consequences in historical interpretations and political actions and cultural clash. As language has maintained, in the Middle East, its magical power of turning people’s fantasies into historical and political realities, this course will also examine the many kinds and uses of language itself and its relationship to physical reality and national self-definition. This course meets the General Education Requirement for Ethical Inquiry. May not be repeated. LR
LMC: DA
Transfer: UC, CSU

ENGL-022 Rapid and Efficient Reading for Study and Enjoyment
2 hours lecture, 3 hours lab 3 Units
Designed for students who want to develop the reading and related study skills needed for better understanding of college texts, in-depth reading, and lectures in all areas of the college offering; emphasis on conceptual approach in reading, increased retention, and rapid reading techniques. This course may be repeated once. May be repeated one time. SC
LMC: DA
Transfer: UC, CSU Gen. Ed. Area C2

ENGL-031 Poetry and Drama
3 hours lecture 3 Units
Selected listening and reading from the poetry and drama of the world to broaden familiarization and to stimulate interests; some analysis of the nature and forms of poetry and drama; discussion on interpretations of meaning as well as beauty of language; examples will be drawn from many cultures. May not be repeated. SC
LMC: DA

ENGL-050 Fundamentals of English for Non-Native Speakers
1 hour lecture, 1 hour lab, 4 hours composition 5 Units
Advisory: Completion of ESL 45 and 46; LOEP placement exam
(Formerly ENGL 63) This course provides a bridge for students transitioning from ESL courses to English 70. Using an integrative approach, students learn strategies to build reading comprehension, develop writing and editing skills, and improve speaking and listening. May not be repeated. SC
LMC: NDA
### ENGL-060 Basic Reading and Writing Skills

| 1 hour lecture, 1 hour lab, 4 hours composition | 5 Units |

**Advisory:** Take English assessment test in the Assessment Center

(Formerly ENGL 64) This course prepares students for ENGL 70. Students will learn foundational skills in reading, writing, and thinking. Through an integrated approach, students will learn strategies to build reading comprehension, increase vocabulary, write well-developed and organized paragraphs, and improve editing skills, including spelling and sentence structure. May not be repeated. SC

**LMC:** NDA

### ENGL-062 Fundamentals of English for Non-Native Speakers

| 1 hour lecture, 1 hour lab, 4 hours composition | 5 Units |

**Advisory:** For students who are completing ESL courses at LMC. ENGL 62 is a “bridge” to the regular English curriculum.

ENGL 62 prepares students for ENGL 70. This is the first of a two-semester sequence which introduces fundamentals of English for non-native speakers. Strategies to increase reading and composition skills at the college level will be the focus of this course. May not be repeated. SC

**LMC:** NDA

### ENGL-070 Fundamentals of English: Reading, Writing and Thinking

| 1 hour lecture, 1 hour lab, 4 hours composition | 5 Units |

ENGL 70 is an integrated reading, writing, and critical thinking course which leads to English 90 and ultimately, English 100, College Composition. This course uses a theme-based approach to help students acquire the skills and abilities they need as readers, writers, critical thinkers and effective students in a college environment. Students learn to read actively and critically, and to write clear, focused and comprehensible academic paragraphs and essays. They also learn how to enhance their leaning in a classroom setting and how to use college resources to support their educational and occupational goals. May not be repeated. SC

**LMC:** NDA

### ENGL-081 Introduction to Spelling and Vocabulary

| 36 total hours lecture, 12 total hours lab | 2 Units |

This short-term course is designed to interest ESL students and students currently enrolled in the ENGL 70 and 90 series. Emphasis will be on helping student identify areas in which their spelling and vocabulary need improvement. Not transferable. May not be repeated. SC

**LMC:** DA

### ENGL-082 Building a College Vocabulary

| 3 hours lecture | 3 Units |

(Formerly ENGL 80) This course focuses on helping students learn new words in a variety of contexts including short readings and a novel. Students will improve skills in using a dictionary and thesaurus, using context clues, understanding connotation and denotation, and recognizing work parts and idioms. May be repeated one time. SC

**LMC:** NDA

### ENGL-083 Proofreading and Sentence-Combining Skills

| 3 hours composition | 3 Units |

**Advisory:** Concurrent enrollment in a class that requires writing.

(Formerly ENGL 13) Students will gain the knowledge and skills necessary to understand basic sentence grammar, proofread their papers and construct coherent, mature sentences. May not be repeated. SC

**LMC:** NDA

### ENGL-090 Integrated Reading, Writing and Critical Thinking

| 1 hour lecture, 1 hour lab, 4 hours composition | 5 Units |

**Prerequisite:** Completion of ENGL 70, 71 or 70B; or demonstration of equivalent skills based on assessment.

Students are introduced to college level reading, writing and critical thinking skills and are given practice in developing them. Students will learn skills for reading passages of various lengths and styles, techniques for improving comprehension and retention, and guidelines for writing effective lively paragraphs and expository essays. This course uses the whole-language approach for improving the reading, critical thinking and writing skills which students need to succeed in college. May not be repeated. LR

**LMC:** DA

### ENGL-098 Independent Study in English

Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) SC

**LMC:** Independent Study courses may be DA or transferable depending on specific course. See your counselor.

**Transfer:** Independent Study courses may be DA or transferable depending on specific course. See your counselor.

### ENGL-099 Cooperative Education in English

Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC

**LMC:** DA

**Transfer:** CSU
**ENGL-100 College Composition**  
3 hours composition  
3 Units  
**Prerequisite:** Completion of ENGL 90 or 90A and 90B or ENGL 9 and ENGL 19; or demonstration of equivalent skills based on the assessment process; or completion of course work at another college that is comparable to the courses listed above with a grade of "C" or better; or equivalent assessment recommendation at another college; or English Placement Test (EPT) score of 151 or higher; or English AP score of 3; or SAT II Writing score of 680 or better (660 if administered before May 1993).  

(Formerly ENGL 10S) ENGL 100 is a college-level course designed to help students develop critical reading, thinking and writing skills. Students read essays and articles dealing with multi-cultural issues and current events, and write effective thesis-driven academic essays which synthesize the readings. Students will produce at least 8,000-10,000 words of formal writing that draws upon the assigned readings as well as articles that students have researched on their own. They will also read, analyze and write about one book-length work. May not be repeated. (CAN ENGL 2)  

LMC: GCR: Reading-Writing; DA  
Transfer: UC, CSU Gen. Ed. Area A2, IGETC Area 1A  

**ENGL-111 Creative Writing**  
3 hours lecture  
3 Units  
**Advisory:** Completion of ENGL 100; ENGL 230  

(Formerly ENGL 11) Allows departure from the usual expository forms and encourages the student to write creatively, learning to use words and expressions figuratively and literally to create pictures or conceptions that stir the imagination and inner visions. All forms of visual and auditory stimuli will be used to expand the students’ perceptions of the world about which they will be writing. May not be repeated.  

LMC: DA  
Transfer: CSU  

**ENGL-112 Intermediate Creative Writing**  
3 hours lecture  
3 Units  
**Advisory:** ENGL 100, ENGL 111  

English 112 is an intermediate Creative Writing class which encourages writers to focus on a long creative work in one genre: a novel, a novella, a short story collection, a book or poetry, a three act play, a screenplay. Students are advised to take English 111 before they take English 112. Students will be encouraged to submit their work to agents, contests, and publishers. May not be repeated.  

LMC: DA  
Transfer: CSU  

**ENGL-115 Writing the Research Paper**  
3 hours lecture  
3 Units  
**Advisory:** Eligibility for English 100  

ENGLISH 115: WRITING THE RESEARCH PAPER is designed to help students develop an effective process for researching and writing a successful transfer level essay. Students will learn time management, task scheduling, library and Internet research strategies, essay building skills and MLA citation format, which they will apply to writing one transfer level research essay from “start to finish”. May not be repeated.  

LMC: DA  
Transfer: CSU  

**ENGL-127 The Mythology and Literature of Ethnic Americans: The Passing of Stories and Reflections on Common Human Concerns**  
3 hours lecture  
3 Units  
**Advisory:** Eligibility for ENGL 90  

(Formerly ENGL 27LS) This course will focus on the mythological themes, folk tales/oral literature, fiction and essays produced by selected African American, American Indian, Latino/Chicano and European American authors. Emphasis will be on the similarities and differences in the literature of these ethnic/racial groups and the ways in which the respective literatures developed in response to each group’s unique American experience. May not be repeated.  

LMC: GE: Humanities; GCR: Ethnic/Multicultural Studies; DA  
Transfer: UC, CSU Gen. Ed. Area C2, IGETC Area 3BAlso satisfies American Cultures Requirement at UCB  

**ENGL-128 Introduction to Asian-American Literature**  
3 hours lecture  
3 Units  
**Advisory:** Eligibility for ENGL 100  

(Formerly ENGL 28LS) This course analyzes works of Asian American literature including writings by Chinese Americans, Japanese Americans, Filipino Americans, South Asian Americans, and Vietnamese Americans. Students will explore through close readings of short stories, novels and other works how concerns such as building self-identity, forming relationships, resolving family conflicts and experiencing cultural problems are Asian Americans issues as well as universal human issues. Satisfies LMC’s Ethnic/Multicultural Studies Graduation Requirement. May not be repeated.  

LMC: GE: Humanities; GCR: Ethnic/Multicultural Studies; DA  
Transfer: UC, CSU Gen. Ed. Area C2, IGETC Area 3B  

**ENGL-129 Introduction to Contemporary African-American Literature**  
3 hours lecture  
3 Units  
**Advisory:** Prior enrollment in ENGL 90 or ENGL 100 or eligibility for/or concurrent enrollment in ENGL 90  

(Formerly ENGL 29LS) This course is designed to offer students the opportunity to read widely and deeply in a selection of contemporary African American authors, from the era of the Harlem Renaissance to contemporary African American authors on the literary scene. Students will be introduced to standard techniques of literary analysis as well as to the unique power of African American studies, poetry, drama and novels. This course meets the General Education Requirement for Ethnic / Multicultural Studies. May not be repeated.  

LMC: GE: Humanities; GCR: Ethnic/Multicultural Studies; DA  
Transfer: UC, CSU Gen. Ed. Area C2, IGETC Area 3B  

**ENGL-132 Literature of Imagination: Myths, Tales, the Short Story and the Novel**  
3 hours lecture  
3 Units  
**Advisory:** Successful completion of ENGL 100  

(Formerly ENGL 32S) Selected listening and reading from the myths, tales, stories, and novels of the world to broaden fa-
miliarization and to stimulate interests; some analysis of the art form as a metaphor to describe the human condition; examples will be drawn from many cultures. May not be repeated. LR

ENGL-133 Reflections: Representations of Race, Ethnicity and Gender in Hollywood Films and Popular Fiction
3 hours lecture 3 Units
Advisory: Eligibility for ENGL 90
(Formerly ENGL 33LS) This course explores the effects on American culture of Hollywood’s cinematic representation of race, ethnicity and gender through a critical examination of selected popular films and novels discussed within their historical setting. Meets the Ethnic Studies and Humanities graduation requirement. May not be repeated. SC

ENGL-200 Introduction to Fiction
3 hours lecture 3 Units
Prerequisite: Completion of ENGL 100
Selected forms of fiction such as short stories, tales, novels and novellas will be read and interpreted using tools of literary analysis particular to fiction such as a writer’s use of narrative point of view, plot structure, imagery, characterization, theme, setting, tone and other narrative devices. Students will examine the literature within its contemporary multicultural social, cultural and historical context. They will also become familiar with interpreting literature from a perspective of diversity, one that critically analyzes not only race/ethnicity, class, and gender, but also addresses issues of sexual orientation, religion, age and disability when they emerge from the writings. May not be repeated. SC

ENGL-201 Introduction to Poetry
3 hours lecture 3 Units
Prerequisite: Completion of ENGL 100
Students will read selected poems and interpret them using tools of literary analysis particular to poetry, such as tone, diction, imagery, characterization, point of view, plot, and setting. Students will also examine the significance of rhyme and structure as well as other aspects of poetic sound, such as beat and other musical influences. Course will emphasize the meaning behind such poetic devices. In addition, students will examine poems within their contemporary multicultural social and historical context. They will also become familiar with interpreting literature from a perspective of diversity, one that critically analyzes not only race/ethnicity, class, and gender, but also addresses issues of sexual orientation, religion, age and disability when they emerge from the poetry. May not be repeated. SC

ENGL-202 Introduction to Drama as Literature
3 hours lecture 3 Units
Prerequisite: Completion of ENGL 100
(Formerly ENGL 34) ENGL 202 introduces strategies to help students read, analyze, interpret and evaluate Drama as literature, and to write essays which reflect this study. Plays from diverse cultures will serve as texts for “close reading,” and students will see one play in production. The historical, social, and biographical context of each play will also be explored. May not be repeated. SC

ENGL-205 California Literature
3 hours lecture 3 Units
Prerequisite: ENGL 100
This course presents literature written by Californians or that is about California, as a state and before. Students will read, discuss, and analyze the literature from a variety of genres: fiction and non-fiction, novels, short stories, diaries, poetry, drama, and film. The course and these genres will be taught from historical, social, economic, political, and ethnic perspectives. This is a transfer-level course that demands students maintain a high level of critical thinking (literal, interpretative, synthesis, and evaluative analysis) while learning about the canon of California literature. May not be repeated. LR

ENGL-220 Critical Inquiry and Analysis
3 hours lecture 3 Units
Prerequisite: ENGL 100 or clearance of writing proficiency
(Formerly ENGL 20LS) A critical investigation of meaning, its creation and transmission through the study of language processes and the application of the principles and criteria of critical thinking to reading and writing the argumentative essay. This course will examine the relationships between thought and language, including synthesis and the relationship to logic and meaning. Critical thinking criteria include: recognizing informal and formal fallacies, determining validity of arguments and points of view, separating fact from opinion and identifying biases. May not be repeated. LR

ENGLISH
ENGL-221  Advanced Composition and Critical Thinking
3 hours composition  3 Units
Prerequisite: ENGL 100 with a "C" or better
(Formerly ENGL 21LS) This course is designed to provide advanced composition and critical thinking instruction beyond the 100 (1A) level. Instruction in advanced composition will be: advanced prose style, syntax analysis, meta-linguistics, tone and mood. Instruction in critical thinking will include: inductive and deductive reasoning, formal and informal fallacies, argument analysis. Multicultural content will be examined, generating a series of essays requiring increased sophistication of style and analysis to be evaluated by the standards of advanced composition and critical thinking. May not be repeated. LR
LMC: GE: Communication/Critical Thinking; DA
Transfer: UC, CSU Gen. Ed. Area A3, IGETC Area 1B

ENGL-230  Literature and Composition
3 hours composition  3 Units
Prerequisite: ENGL 100
(Formerly ENGL 30LS) This course seeks to stimulate an enduring awareness of and respect for literature based on: (1) the student's discovery of literature's insights into and reflections of individuals, societies, and cultures; (2) appreciation for the creative and technical processes inherent in the production of a creative work, especially in written form; and (3) development of critical thinking processes necessary to appreciate and assess the influence of specific and creative language use. Directed class discussions and rigorous reading and writing assignments provide opportunities for students to develop critical skills and learning associated with the study of literature. May not be repeated. (CAN ENGL 4) LR
LMC: GE: Humanities; DA
Transfer: UC, CSU Gen. Ed. Area C2

ENGL-900s  Selected Topics in English
DA varies with course content.

ESL-010  Intensive English as a Second Language
3 hours lecture, 1 hour lab  3 Units
(Formerly ESL 52) This intensive course is for nonnative speakers. Strategies to increase reading skills at the college level will be the focus of this proficiency-based course. Students will learn intensively how to guess meaning from context, increase reading speed, as well as make predictions and inferences and learn new vocabulary and sentence structures. May not be repeated. LR
LMC: NDA

ESL-016  Computer-Assisted Instruction in ESL
3 hours lecture, 1 hour lab  3 Units
(Formerly ESL 51) For ESL students at all levels of English proficiency to develop "basic" skills in English grammar, pronunciation, and vocabulary through computer-assisted learning programs on the Internet. May not be repeated. LR
LMC: NDA

ESL-017  Idioms and Phrases for ESL
3 hours lecture, 1 hour lab  3 Units
(Formerly ESL 53) Course assists intermediate level students in comprehension, retention and application of phrasal (two-word) verbs and idiomatic expressions. May not be repeated. LR
LMC: NDA

ESL-018  Word Memory Skills for ESL
3 hours lecture, 1 hour lab  3 Units
(Formerly ESL 54) A course to develop ESL students' skills in memorizing English vocabulary to learn English more effectively and efficiently. May not be repeated. LR
LMC: NDA

ESL-019  ESL Vocabulary Development
3 hours lecture, 1 hour lab  3 Units
(Formerly ESL 50) A course to build ESL students' English vocabulary and develop ability to use dictionaries effectively to learn and use English words appropriately. May not be repeated. LR
LMC: NDA

ESL-020  ESL Grammar I
2 hours lecture, 3 hours lab  3 Units
Advisory: One year of formal English.
This is the first of a two-semester sequence which introduces fundamentals of English grammar using the communicative approach. Students learn to understand and use English Grammar through guided discovery and analysis for further development in listening, speaking, reading and writing skills. May be repeated two times. SC
LMC: NDA

ESL-021  ESL Grammar II
3 hours lecture, 1 hour lab  3 Units
Advisory: ESL 20
This is the second of a two-semester sequence which introduces fundamentals of English grammar using the communicative approach. Students learn more about English grammar through guided discovery and analysis for further development in listening, speaking, reading and writing skills. May not be repeated. LR
LMC: NDA

English As A Second Language (ESL)
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Advisory</th>
<th>Description</th>
<th>Notes</th>
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<tbody>
<tr>
<td>ESL-022</td>
<td>Grammar III</td>
<td>3</td>
<td></td>
<td>This is the third semester in the grammar sequence, introducing more complex grammar structures using the communicative approach. Students learn to write more sophisticated sentences and paragraphs with more sentence variety. May not be repeated. SC</td>
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<tr>
<td>ESL-030</td>
<td>ESL Conversation/Pronunciation I</td>
<td>3</td>
<td></td>
<td>This is the first of a two-semester sequence which introduces English pronunciation and conversational skills for college communication. Emphasis is placed on pronunciation skill development. May not be repeated. LR</td>
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<tr>
<td>ESL-031</td>
<td>ESL Conversation/Pronunciation II</td>
<td>3</td>
<td></td>
<td>This is the second of a two-semester sequence which introduces English pronunciation and conversational skills for college communication. Emphasis is placed on conversational skill development. May not be repeated. LR</td>
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<tr>
<td>ESL-041</td>
<td>ESL Reading, Writing, Speaking, Listening I</td>
<td>3</td>
<td></td>
<td>This is the first semester of an integrated skills course which is designed for ESL students at a low intermediate level. Students receive instruction in how to improve listening comprehension, oral communication skills, reading comprehension, vocabulary, writing and grammar skills. May not be repeated. SC</td>
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<tr>
<td>ESL-042</td>
<td>ESL Reading, Writing, Speaking, Listening II</td>
<td>3</td>
<td></td>
<td>This is the second semester course of an integrated skills sequence, which is designed for ESL students at an intermediate level. Students receive instruction in how to improve reading comprehension, vocabulary, writing and grammar skills, as well as listening and speaking skills. May not be repeated. SC</td>
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<tr>
<td>ESL-043</td>
<td>ESL Reading, Writing, Speaking, Listening III</td>
<td>3</td>
<td></td>
<td>This is the first semester of an integrated skills sequence, which is designed for ESL students at an intermediate level. Students receive instruction in how to improve reading comprehension, vocabulary, writing and grammar skills, as well as listening and speaking skills. May not be repeated. SC</td>
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<tr>
<td>ESL-044</td>
<td>ESL Reading, Writing, Speaking, Listening IV</td>
<td>3</td>
<td></td>
<td>This is the second semester course of an integrated skills sequence, which is designed for ESL students at an intermediate level. Students receive instruction in how to improve reading comprehension, writing, speaking, listening, vocabulary, and grammar skills. May not be repeated. SC</td>
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<tr>
<td>ESL-045</td>
<td>ESL Reading, Writing, Speaking, Listening V</td>
<td>3</td>
<td></td>
<td>This is the first semester of an integrated skills course which is designed for ESL or international students at an intermediate level. Using an integrated approach, students will improve reading, vocabulary, writing, grammar, listening comprehension, and oral communication skills. May not be repeated. SC</td>
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<tr>
<td>ESL-046</td>
<td>ESL Reading, Writing, Speaking, Listening VI</td>
<td>3</td>
<td></td>
<td>This is the second semester of an integrated skills course which is designed for ESL students at an intermediate level. Using an integrated approach, students will improve reading, vocabulary, writing, grammar, listening comprehension, and oral communication skills. This is the final course in the three-year integrated skills sequence. May not be repeated. SC</td>
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<tr>
<td>ESL-047</td>
<td>English As a Second Language</td>
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<td></td>
<td>Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC</td>
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<tr>
<td>ESL-098</td>
<td>Independent Study in English as a Second Language</td>
<td></td>
<td></td>
<td>Independent Study courses may be DA or transferable depending on specific course. See your counselor.</td>
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</tbody>
</table>

LMC: NDA
**Environmental Science**

**ENVSCI-001 Environmental Sciences Freshman Seminar**

1 hour lecture, 3 hours lab

Advisory: Eligibility for ENGL 100

This course provides students entering the Environmental Science program with an up-to-date overview of the fields within the discipline as well as potential career path opportunities. Using current research literature, students will learn how to prepare and present topical lectures on important regional environmental issues. Students will also complete a rotation of site visits with local employers during which students will interact with a broad range of environmental professionals on-the-job. May not be repeated. LR

LMC: GE: Physical Sciences, DA
Transfer: CSU

**ENVSCI-006 Bay-Delta Environmental Sciences Practicum**

3 hours lecture, 3 hours lab

Advisory: Eligibility for ENGL 100

This course is designed for Environmental Science majors as well as pre-and in-service secondary science teachers interested in teaching a course in environmental science, or who would like to use the environment as an integrating context for study in another scientific discipline (e.g., biology, chemistry, physics). This course is project-based and hands-on. Students will learn how to utilize local environs (e.g., creeks, wetlands, forests, brown fields) as outdoor laboratories for real-time environmental sampling and monitoring, resource conservation studies, and habitat restoration. The significance of the Bay-Delta system to the environmental health of California will be emphasized. Students who successfully complete this course will have access to field equipment, instrumentation, and curriculum materials for use in their own classrooms. May not be repeated. LR

LMC: DA
Transfer: CSU

**ENVSCI-010 Introduction to the Environmental Sciences**

3 hours lecture, 3 hours lab

Advisory: Eligibility for ENGL 100

This course provides an interdisciplinary introduction to the environmental sciences—a group of sciences that seek to explain how life on Earth is sustained, what causes environmental problems, and how these problems can be solved. The course also provides students with the opportunity to work hands-on a problem of regional environmental significance using the techniques and technologies employed by environmental professionals. May not be repeated. LR

LMC: GE: Physical Sciences, DA
Transfer: UC, Gen. Ed. Area B1, B3, IGETC Area 5A

**Fire Technology**

**FIRE-098 Independent Study in Fire Technology**

Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC

LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.

Transfer: Independent Study courses may be DA or transferable depending on specific course. See your counselor.

**FIRE-099 Cooperative Education in Fire Technology**

Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC

LMC: DA
Transfer: CSU

**FIRE-101 Fire Protection Organization**

3 hours lecture

Advisory: Eligibility for ENGL 90

Survey of fire service and fire protection, career opportunities in fire protection and related fields, history of fire protection; fire loss analysis; public, quasi-public and private fire protection services; specific fire protection functions, fire chemistry and physics. May not be repeated. SC

LMC: DA
Transfer: CSU
FIRE-102  Fire Behavior and Combustion
3 hours lecture  3 Units
Advisory: FIRE 101; eligibility for ENGL 90
Fundamentals and scientific principles of fire behavior, combus-
tible materials, extinguishing agents, hazardous and toxin ma-
terials, forms of energy and fire prevention/suppression tech-
niques of all types of fires. May not be repeated. SC
LMC: DA
Transfer: CSU

FIRE-103  Fire Protection Equipment and Systems
3 hours lecture  3 Units
Advisory: Completion of FIRE 101 and FIRE 102; eligibility for
ENGL 90
An overview of fire protection equipment and systems includes
portable fire extinguishing equipment; protection systems; spe-
cial hazards, sprinkler systems and fire detection systems. Fire
Protection systems are continually changing due to technology
and different types of occupancies need different types of fire
protection. May not be repeated. SC
LMC: DA
Transfer: CSU

FIRE-104  Building Construction for Fire Protection
3 hours lecture  3 Units
Advisory: FIRE 101, 102, and Sociology or Social Sciences; mul-
ticultural issues within Public Safety or equivalent
(Formerly FIRE 21) Fundamentals of building construction as it
relates to fire protection; classification of occupancy and types
of construction with emphasis on fire protection features includ-
ing: building equipment, facilities, fire resistant materials. May
not be repeated. SC
LMC: DA
Transfer: CSU

FIRE-105  Fundamentals of Fire Prevention
3 hours lecture  3 Units
Advisory: Completion of FIRE 101 and FIRE 102; eligibility for
ENGL 90
An overview of the history, organization and functions of fire
prevention efforts includes inspection; fire investigation; recog-
nizing and solving fire and life hazards; enforcing solutions and
public relations. May not be repeated. SC
LMC: DA
Transfer: CSU

FIRE-106  Physical Fitness for Public Safety Personnel
3 hours of activity  1 Unit
An activity class designed to provide students information on
exercise and nutrition. For Public Safety Personnel. May be re-
peated two times. SC
LMC: GCR: Physical Education; DA
Transfer: CSU

FIRE-120  Basic Fire Academy
228 total hours lecture, 132 total hours lab  15 Units
Prerequisite: A total of 9 units from FIRE 101, 102, 103, 104, 105,
or 106; Satisfactory score on the Candidate Physical Ability Test
(CPAT) or equivalent; meet NFPA 1582 medical assessment; cur-
rent EMT certification
Advisory: Successfully completed the Candidate Physical Ability
Test or FIRE 106
(Formerly FIRE 60) California State Board of Fire Services / Fire-
fighter I approved. The Basic Academy Firefighter I prepares
students for entry-level jobs in firefighting and for the California
State Firefighter certification. The California State Firefighter I
curriculum, guidelines and assessments are followed throughout
the program. Standards of performance in written exams and
skill demonstrations are established by the International Fire Ser-
vice Association (IFSTA) and local fire agencies. This academy is
approximately 18 weeks in length and uses an evening and week-
end schedule. “An optional material fee may be applied.” May
not be repeated. P/NP
LMC: DA

FIRE-130  Advanced Fire Academy
198 lecture, 442 lab  19 Units
Prerequisite: A total of 9 units from FIRE 101, 102, 103, 104, 105,
or 106; satisfactory score on the Candidate Physical Agility Test
(CPAT) or equivalent; meet National Fire Protection Association
(NFPA) 1582 medical assessment; current Emergency Medical
Technician (EMT) certification.
Advisory: Successfully completed the Candidate Physical Agility
Test or FIRE 106
The Advanced Firefighter I Academy prepares students for entry-
level jobs in firefighting and for California State Firefighter I cer-
ification. The California State Firefighter I curriculum, guidelines
and assessments are followed throughout the program. Stan-
dards of performance in written exams and skill demonstrations
are established by the International Fire Service Training Asso-
ciation (IFSTA) and local fire agencies. This academy is approxi-
ately 16 weeks in length and uses a Monday-Friday, 40 hour per
week schedule. Accredited by the Office of the California State
Fire Marshal. P/NP
LMC: DA

FIRE-140  Fire Apparatus Driver/ Operator IA
16 total hours lecture, 24 total hours lab  1.5 Units
Prerequisite: Completion of FIRE 60 Basic Fire Fighter I Acad-
emy. Each student must have a valid California DMV Commercial
or Firefighter Class B driver’s license and show proof of vehicle
insurance at the first class meeting.
Advisory: It is recommended that students be at least 18 years of
age.
(Formerly FIRE 93A) This course is designed to provide the stu-
dent with information on driver techniques for emergency ve-
Hicles and techniques of basic inspection and maintenance of
emergency vehicles, including actual driving exercises under
simulated emergency conditions. This course is designed for in-
service personnel and meets the goals as outlined in the NFPA
Standard 1002. May not be repeated. P/NP
LMC: DA
Transfer: CSU
## Food Services

### FIRE-141  Fire Apparatus Driver/ Operator IB

16 total hours lecture, 24 total hours lab 1.5 Units

**Prerequisite:** Completion of FIRE 60 Basic Fire Fighter I Academy. Each student must have a valid California DMV Commercial or Firefighter Class B driver’s license and show proof of vehicle insurance at the first class meeting.

**Advisory:** It is recommended that students be at least 18 years of age.

(Formerly FIRE 93B) This course provides the student with information, theory, methods and techniques for operating fire service pumps. Subjects include: types of pumps, engine and pump gauges, maintenance, unsafe pumping conditions, pressure relief devices, cooling systems, water supplies, drafting, field hydractics and pumping operations. This course is designed for in-service personnel and meets the goals as outlined in the NFPA Standard 1002. May not be repeated. P/NP

**LMC:** DA

**Transfer:** CSU

### FIRE-150  Technical Fire Training

2 to 8 total lecture hours, 40 to 120 total hours lab .3-6 Units

**Prerequisite:** Employment in a Fire Department or possession of a Fire Fighter Academy Certificate

**Advisory:** College level English, Psychology and Sociology

(Formerly FIRE 050) A series of courses designed to maintain proficiency in skills and knowledge of fire service tasks, emergency medical response, hazardous materials response, and update technology. These courses are certified through the California State Fire Marshall's Service and/or the Emergency Medical Service of Contra Costa County. This course may vary with content presentation. Each course subtitle describes course content. This series of courses is continuing professional education for the Fire Service required by the State Fire Marshall’s Office. May be repeated nine times. P/NP

**LMC:** NDA

### FIRE-200  Advanced Fire Training

2 to 8 total hours lecture, 40 to 120 total hours lab .3-6 Units

**Prerequisite:** Employment in a Fire Department or possession of a Fire Fighter Academy Certificate

(Formerly FIRE 51) A study of specific areas of the Fire Service designed to train in-service personnel in new areas of leadership, professional domains, management skills and organizational practices. The State Fire Marshall’s Officer series includes certificates in Prevention, Instructor Skills, Investigation, and Public Education. These courses are certified through the California State Fire Marshall’s Service. The course may vary with content presentation. Each course subtitle describes content. This series of courses meets the State Fire Marshall’s skills acquisition and renewal requirement. May be repeated nine times. P/NP

**LMC:** NDA

### FIRE-900s  Selected Topics in Fire Technology

DA varies with course content.

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### FOOD-001  Introduction to Food Services Technology

54 hours lab per unit 1.4 Units

A basic course in food service technology designed to prepare students for a variety of jobs in the food service industry (catering, restaurants, hospitals, institutional settings). May be repeated two times. SC

**LMC:** NDA

### FOOD-002  Fast Foods Operations

162 total hours lab 3 Units

**Prerequisite:** FOOD 1

This course will prepare a cook who already has basic cooking techniques for work as a short-order cook (broiler, deep-fryer, griddle, salad, sandwich, sauté stations), to read written food orders and abbreviations correctly, and to understand food orders. May be repeated two times. SC

**LMC:** NDA

### FOOD-098  Independent Study in Food Services Technology

Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC

**LMC:** Independent Study courses may be DA or transferable depending on specific course. See your counselor.

**Transfer:** Independent Study courses may be DA or transferable depending on specific course. See your counselor.

### FOOD-099  Cooperative Education in Food Services Technology

Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC

**LMC:** DA

**Transfer:** CSU

### FOOD-900s  Selected Topics in Food Services Technology

DA varies with course content.
French

FRNCH-060  Elementary French I
5 hours lecture                                    5 Units
Advisory:  ENGL 90
(Formerly FRNCH 60S) A visual / oral / aural approach to understanding, speaking, reading and writing French. The content used to learn the language will be drawn from the rich French culture. Note: equivalent to two years of high school French. May not be repeated. SC
LMC: DA
Transfer:  UC, CSU Gen. Ed. Area C2, IGETC Area 6

FRNCH-061  Elementary French II
5 hours lecture                                    5 Units
Prerequisite:  FRNCH 60
(Formerly FRNCH 61S) Second semester of elementary French. This course continues to develop understanding, speaking, reading and writing skills of the French language. The content used to learn the language will be drawn from the rich French culture. May not be repeated. SC
LMC: DA
Transfer:  UC, CSU Gen. Ed. Area C2

FRNCH-098  Independent Study in French
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC
LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.
Transfer:  Independent Study courses may be DA or transferable depending on specific course. See your counselor.

FRNCH-099  Cooperative Education in French
Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated. SC
LMC: DA
Transfer:  CSU

FRNCH-900s  Selected Topics in French
DA varies with course content.

Geography

GEOG-015  Physical Geography
3 hours lecture, 3 hours lab                        4 Units
Advisory:  Eligibility for ENGL 100
This course provides an introduction to physical geography including: our atmosphere and hydrosphere (weather and climate, oceans), lithosphere (landforms, earth processes), and biosphere (plants and animals, primarily), and emphasizes the fundamental relationships between these spheres. The interactions between the processes at the Earth's surface and human activities will also be examined. May not be repeated. LR
LMC: GE: Physical Sciences, DA
Transfer:  UC, CSU Gen. Ed. Area B1, B3, IGETC Area 5A

GEOG-098  Independent Study in Physical Geography
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC
LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.
Transfer:  Independent Study courses may be DA or transferable depending on specific course. See your counselor.

GEOG-099  Cooperative Education in Physical Geology
Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC
LMC: DA
Transfer:  CSU

FRNCH-060  Elementary French I
5 hours lecture                                    5 Units
Advisory:  ENGL 90
(Formerly FRNCH 60S) A visual / oral / aural approach to understanding, speaking, reading and writing French. The content used to learn the language will be drawn from the rich French culture. Note: equivalent to two years of high school French. May not be repeated. SC
LMC: DA
Transfer:  UC, CSU Gen. Ed. Area C2, IGETC Area 6

FRNCH-061  Elementary French II
5 hours lecture                                    5 Units
Prerequisite:  FRNCH 60
(Formerly FRNCH 61S) Second semester of elementary French. This course continues to develop understanding, speaking, reading and writing skills of the French language. The content used to learn the language will be drawn from the rich French culture. May not be repeated. SC
LMC: DA
Transfer:  UC, CSU Gen. Ed. Area C2

FRNCH-098  Independent Study in French
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LMC: DA
Transfer:  CSU

FRNCH-900s  Selected Topics in French
DA varies with course content.
**History**

**HIST-031** California History  
3 hours lecture  
3 Units  
**Advisory:** Eligibility for ENGL 100  
(Formerly HIST 31S) A survey of California history, beginning with the Indians. Emphasis is on interrelationships between the history of New Spain, Mexico, and the U.S. as a whole. May not be repeated. LR  
**LMC:** DA  
**Transfer:** UC, CSU Gen. Ed. Area D6, IGETC Area 5A

**HIST-034** Our Western Inheritance in Global Perspective: Ancient World History  
3 hours lecture  
3 Units  
**Advisory:** Eligibility for ENGL 100  
(Formerly HIST 34LS) Students will examine the historical evolution of western civilization from the Neolithic Age through the 16th century. A continuous review and comparison of the parallel history of nonwestern societies will be made. The primary goal of the course is to appraise and appreciate western history as a cultural legacy of unique importance for American citizens of the 21st century. May not be repeated. SC  
**LMC:** GE: Social Science; DA  
**Transfer:** UC, CSU Gen. Ed. Area D6, IGETC Area 4F

**HIST-035** Our Western Inheritance in Global Perspective: Modern World History  
3 hours lecture  
3 Units  
**Advisory:** Eligibility for ENGL 100  
(Formerly HIST 35LS) Students will examine the historical evolution of western civilization from the 16th century through the 20th century. A continuous review and comparison of the parallel history of nonwestern societies will be made. The primary goal for the course is to appraise and appreciate western history as a cultural legacy of unique importance for American citizens of the 21st century. May not be repeated. SC  
**LMC:** GE: Social Science; DA  
**Transfer:** UC, CSU Gen. Ed. Area D6, IGETC Area 4F

**HIST-036** U.S. History: Origins to Civil War  
3 hours lecture  
3 Units  
**Advisory:** Eligibility for ENGL 100  
(Formerly HIST 36LS) Students will examine the colonial and early-national history of the United States from a socially inclusive, trans-hemispheric perspective. Its main theme, "Peopling America", refers to the epochal story of dynamic ethnic, racial and cross-cultural encounter, which, framed by clashing European imperial powers, laid the bedrock of our national life. The course will address recurrent problems of shifting ethnic identities and societal reformulation; racial and racist cultural construction; class and gender inequity; religious and ideological conflict; economic development and dislocation; and, above all, the elusive, if persistent, quest to build a common polity of republican form and democratic spirit. This course will use an interdisciplinary, intercultural and comparative methodology which is compatible with the intrinsically analytical and interpretive nature of late-modern historical study. May not be repeated. SC  
**LMC:** GE: Social Science; DA  
**Transfer:** UC, CSU Gen. Ed. Area D6, IGETC Area 4F

**HIST-037** U.S. History: Civil War to Present Era  
3 hours lecture  
3 Units  
**Advisory:** Eligibility for ENGL 100  
(Formerly HIST 37LS) Students will examine the later 19th & 20th century history of the United States from a socially inclusive, trans-cultural, trans-national perspective. Its main theme, "Peopling America", refers to the unfinished story of the struggle for meaningful national belonging amidst dynamic ethnic, "racial" & cross-cultural encounter, which framed by a global market and newly emergent "world order" challenges conventional notions
of the American way-of-life. The course will address recurrent problems of shifting ethnic identities and societal reformation; racial and racist cultural construction; class and gender inequity; religious and ideological conflict; economic development and dislocation; and, above all, the elusive, if persistent quest to build a common polity of republican form and democratic spirit. The course will use an interdisciplinary, intercultural and comparative methodology which is compatible with the intrinsically analytical and interpretive nature of late-modern historical study. May not be repeated. SC

LMC: GE: Social Science; DA
Transfer: UC, CSU Gen. Ed. Area D6, IGETC Area 4F

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>HIST-038</td>
<td>U. S. History Since World War II</td>
<td>3</td>
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<tr>
<td>HIST-046</td>
<td>History and Cultures of Native Americans in North America (from Pre-European Contact Through 1830)</td>
<td>3</td>
</tr>
<tr>
<td>HIST-047</td>
<td>Native Americans from American Revolution to Present</td>
<td>3</td>
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<tr>
<td>HIST-049</td>
<td>Native Americans in the Twentieth Century</td>
<td>3</td>
</tr>
<tr>
<td>HIST-052</td>
<td>Mexican American History 1900 to Present</td>
<td>3</td>
</tr>
</tbody>
</table>

Advisory: Eligibility for ENGL 100

(Formerly HIST 46LS) This course will focus on Native American cultures in their traditional settings from pre-European contact times until the year 1830. It will survey the great diversity of cultures, beliefs systems, languages, social and political structures and creative expressions which characterized the numerous tribes and communities. The aim of this course is to foster a broader and more sensitive understanding of the history and life ways of the American Indians. Course satisfies LMC's Ethnic/Multicultural Studies and General Education Graduation Requirement. May not be repeated. SC

LMC: GCR: Ethnic/Multicultural Studies; DA
Transfer: UC, CSU Gen. Ed. Area D3, IGETC Area 4C

Advisory: Eligibility for ENGL 100

(Formerly HIST 47LS) Course presents the experience of Native Americans from the American Revolution to the present. It deals with political, military, legal and social history within the framework of Indian - U. S. relations. Course satisfies LMC's Ethnic/Multicultural Studies Graduation Requirement. May not be repeated. SC

LMC: GCR: Ethnic/Multicultural Studies; DA
Transfer: UC, CSU Gen. Ed. Area D3, IGETC Area 4G

Advisory: Eligibility for ENGL 100

(Formerly HIST 49S) This course will deal with the significant issues and events which have affected Native American tribes and communities in the twentieth century. Examined will be issues such as the "Indian policy" under the Roosevelt Administration; attempts by the government to tribalize and assimilate the tribes in the 1950's and the political activism of Native Americans in the 1960's to assert greater sovereignty and self-determination. Also covered will be contemporary issues affecting Native Americans such as the development of casino gambling on reservations, as a means of overcoming the distress of poverty and economic stagnation. May not be repeated. SC

LMC: DA
Transfer: UC, CSU Gen. Ed. Area D3, IGETC Area 4F

Advisory: Eligibility for ENGL 100

(Formerly HIST 52LS) This course chronicles Mexican American history from 1900 to the present. The course will cover the social, political and economic issues that have been relevant and important to the Mexican American experience. Issues such as immigration, labor, gender roles, community organizations and social protest movements will be among the specific issues covered. The course will provide an overview of the Mexican American contribution to the economic and cultural development of the Southwestern United States, as well as an examination of the distinctive regional and generational variations that are characteristic of the nation's second largest minority group. Course satisfies LMC Ethnic Studies / Multicultural Requirement. May not be repeated. SC

LMC: GCR: Ethnic/Multicultural Studies; DA
Transfer: UC, CSU Gen. Ed. Area D3, IGETC Area 4G
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<td>HIST-098</td>
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<td>Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC</td>
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<tr>
<td>HIST-900s</td>
<td>Selected Topics in History</td>
<td></td>
<td>DA varies with course content.</td>
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</table>

**Human Services**

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<tbody>
<tr>
<td>HMSRV-005</td>
<td>Introduction to Human Services</td>
<td>3</td>
<td>An introductory course for students interested in a career in Human Services. Course covers the history of Human Services, types and functions of Human Services agencies, careers in Human Services, skills utilized in the Human Services professions, ethics, current trends and issues, human need theory, and self-support techniques for Human Services workers. May not be repeated. SC</td>
</tr>
<tr>
<td>LMC: DA</td>
<td>Transfer: CSU</td>
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<tr>
<td>HMSRV-030</td>
<td>Empowerment Skills for Family Workers</td>
<td>3</td>
<td>An introduction to family support services designed to prepare human services students and workers with values; knowledge and skills needed to empower families to achieve self reliance. Focuses on the principles of family development, family empowerment skills, self-support for family workers, effective communication with families and cultural competency. May not be repeated. SC</td>
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<tr>
<td>LMC: DA</td>
<td>Transfer: CSU</td>
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<tr>
<td>HMSRV-031</td>
<td>Supporting Family Success</td>
<td>3</td>
<td>A skills-based course designed to prepare human services students and workers to provide support services to families in a community setting. Covers strength-based assessment, resource development, service coordination, collaboration and networking, home visitation, team building, goal setting and family conference facilitation. May not be repeated. SC</td>
</tr>
<tr>
<td>Advisory:</td>
<td>Eligibility for ENGL 100; HMSRV 30</td>
<td></td>
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<td>Transfer: CSU</td>
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<tr>
<td>HMSRV-045</td>
<td>Beginning Student Leadership and Governance</td>
<td>2</td>
<td>Designed to help the student leader develop an understanding of the fundamentals of group interaction in a student governance setting. May be repeated one time. SC</td>
</tr>
<tr>
<td>LMC: DA</td>
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<tr>
<td>HMSRV-046</td>
<td>Intermediate Student Leadership and Governance</td>
<td>2</td>
<td>Designed to help the student leader continue to develop an understanding of the fundamentals of group interaction, parliamentary procedure, and leadership techniques. Weekly practicum experiences will be required utilizing student involvement in College governance. May be repeated one time. SC</td>
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<tr>
<td>HMSRV-047</td>
<td>Advanced Student Leadership and Governance</td>
<td>2</td>
<td>Designed to help the student leader continue to develop an understanding of the fundamentals of group interaction, parliamentary procedure, and leadership techniques. Weekly practicum experiences will be required utilizing student involvement in College governance. May be repeated one time. SC</td>
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<tr>
<td>HMSRV-057</td>
<td>Introduction to Tutoring</td>
<td>2</td>
<td>A practical introduction to the tutoring process with special attention to improving student performance across the curriculum. Course covers the phases of learning including preparing, accessing, processing, remembering and expressing information, and the implementation and evaluation of techniques and strategies. May not be repeated. SC</td>
</tr>
<tr>
<td>LMC: DA</td>
<td>Transfer: CSU</td>
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</tbody>
</table>
HMSRV-058  Advanced Studies in Tutoring
1 hour lecture  1 Unit
Advisory: HMSRV 57
An advanced course combining practical experience and theoretical knowledge regarding individual and small group tutoring across the curriculum. Second semester tutors may earn one unit as participants assisting in the pre-semester workshops. May not be repeated. SC
LMC: DA
Transfer: CSU

HMSRV-098  Independent Study in Human Services
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC
LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.
Transfer: Independent Study courses may be DA or transferable depending on specific course. See your counselor.

HMSRV-099  Cooperative Education in Human Services
Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC
LMC: DA
Transfer: CSU

HUMAN-003  Origin and Evolution of the Universe: An Exploration of Scientific and Religious World Views
3 hours lecture, 1 hour field-practicum  3 Units
Prerequisite: Eligibility for or completion of ENGL 100 (Formerly HUMAN 3LS) This course presents the mythological and spiritual explanations for the origin and evolution of the universe. Students analyze the differences, similarities and implied value systems of each approach. Meets LMC Ethical Inquiry requirement. May not be repeated. SC
LMC: GE: Humanities; GCR: Ethical Inquiry; DA
Transfer: UC, CSU Gen. Ed. Area C2, IGETC Area 3B

Humanistic Studies
HUMST-098  Independent Study in Humanistic Studies
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC
LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.
Transfer: Independent Study courses may be DA or transferable depending on specific course. See your counselor.

HUMST-099  Cooperative Education in Humanistic Studies
Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC
LMC: DA
Transfer: CSU

HUMST-900s  Selected Topics in Humanistic Studies
DA varies with course content.

Humanities
HUMAN-003  Origin and Evolution of the Universe: An Exploration of Scientific and Religious World Views
3 hours lecture, 1 hour field-practicum  3 Units
Prerequisite: Eligibility for or completion of ENGL 100 (Formerly HUMAN 3LS) This course presents the mythological and spiritual explanations for the origin and evolution of the universe. Students analyze the differences, similarities and implied value systems of each approach. Meets LMC Ethical Inquiry requirement. May not be repeated. SC
LMC: GE: Humanities; GCR: Ethical Inquiry; DA
Transfer: UC, CSU Gen. Ed. Area C2, IGETC Area 3B
### HUMAN-019 Introduction to Ancient Humanities (3000 BCE to 350 CE)

3 hours lecture  
3 Units  
**Advisory:** Eligibility for ENGL 100  
(Formerly HUMAN 19LS) An integrated interdisciplinary approach to history, religion, philosophy, literature, art and music as aspects of Western culture and civilization, focusing on the period from the rise of civilizations in Mesopotamia and Egypt through the pinnacle of the Roman empire. In this broad context, students will investigate the intellectual, spiritual, cultural and political foundations of the Medieval and modern worlds. May not be repeated. LR  
LMC: GE: Humanities; DA  
Transfer: UC, CSU Gen. Ed Area C2

### HUMAN-020 Introduction to Medieval and Renaissance Humanities (350 to 1550)

3 hours lecture  
3 Units  
**Advisory:** Eligibility for ENGL 100  
(Formerly HUMAN 20LS) An integrated interdisciplinary approach to history, religion, philosophy, literature, art and music as aspects of Western culture and civilization, focusing on the period from the late Roman Empire through the Renaissance and Reformation. In this broad context, students will investigate the intellectual, spiritual, cultural and political foundations of the Modern World. This course meets the General Education Requirement for Humanities. May not be repeated. LR  
LMC: GE: Humanities; DA  
Transfer: UC, CSU Gen. Ed. Area C2

### HUMAN-021 Introduction to Modern Humanities (1550-1920)

3 hours lecture  
3 Units  
**Advisory:** Eligibility for ENGL 100  
(Formerly HUMAN 21LS) An integrated, interdisciplinary approach to history, religion, philosophy, literature, art and music as aspects of Western culture and civilization, focusing on the period from the Scientific Revolution through the 20th century. In this broad context, students will investigate the intellectual, spiritual, cultural and political foundations of the Modern World. This course meets the General Education Requirement for Humanities. May not be repeated. LR  
LMC: GE: Humanities; DA  
Transfer: UC, CSU Gen. Ed. Area C2

### HUMAN-022 Introduction to American Humanities

3 hours lecture  
3 Units  
**Advisory:** Eligibility for ENGL 100  
An integrated interdisciplinary approach to history, religion, philosophy, literature, art and music as aspects of American culture and civilization, focusing on the period from the late 19th century though the 20th. In this broad context, students will investigate the intellectual, spiritual, cultural and political foundations of contemporary American society. Meets Humanities requirements for general education. May not be repeated. LR  
LMC: GE: Humanities; DA  
Transfer: UC, CSU Gen. Ed. Area C2, IGETC Area 3B

### HUMAN-024 Shakespeare's English Kings: History, Literature and Drama

3 hours lecture  
3 Units  
**Advisory:** Eligibility for ENGL 100  
An integrated, interdisciplinary approach to history, literature and drama through the study of Shakespeare's plays based on the Plantegent kinds from Edward III to Richard III, focusing on English history from 1337 to 1485. This dynamic period of international war, dynastic struggle and regicide chronicles England's evolution from a medieval kingdom to a modern nation. The events of history will be investigated in light of Shakespeare's artistic license with that history in crafting popular dramas. Students will address Shakespearean dramaturgy, issues of staging and performance, as well as the political and cultural conditions of Shakespeare's era that shape the plays. Meets Humanities requirements for general education. May not be repeated. LR  
LMC: GE: Humanities; DA  
Transfer: UC, CSU Gen. Ed. Area C2, IGETC Area 3B

### HUMAN-030 Modernist Paris: Artists and Intellectuals (1890-1950)

3 hours lecture  
3 Units  
**Advisory:** Eligibility for ENGL 100  
An integrated interdisciplinary approach to intellectual and cultural history, using the productions of Modernism - philosophy, literature art, music, dance and film, and focusing on Paris as a nexus of creative thought in the period from the late 19th century through the mid-20th. In this broad context, students will investigate the intellectual, artistic and philosophical foundations of Modernism in Western culture. May not be repeated. LR  
LMC: DA  
Transfer: UC, CSU Gen. Ed. Area C2

### HUMAN-040 Opera: The Human Experience in Music, Voice and Drama

3 hours lecture  
3 Units  
**Advisory:** Eligibility for ENGL 100  
Introduces opera as a unique means of bringing the human experience to the stage with a focus on understanding how primary sources (novels, plays, history, legends and myths, etc.) are transformed into musical drama. While coming to understand the primary role of vocal and instrumental music in the operatic drama, students will also learn how cultural, ethical and moral values are expressed in performance, including staging, set design and costuming. Specific operas addressed depend on the current season schedule of San Francisco Opera productions, which will be fully integrated with course content. Meets LMC Humanities requirements for general education and CSU Humanities Area C2. SC  
LMC: GE: Humanities, DA  
Transfer: CSU

### HUMAN-098 Independent Study in Humanities

Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the
periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC

LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.
Transfer: Independent Study courses may be DA or transferable depending on specific course. See your counselor.

HUMAN-099 Cooperative Education in Humanities
Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC

LMC: DA
Transfer: CSU

HUMAN-900s Selected Topics in Humanities
DA varies with course content.

Italian

ITAL-060 Elementary Italian I
90 total hours lecture 5 Units
Advisory: ENGL 90
(Formerly ITAL 60S) A visual/oral/aural approach to understanding, speaking, reading and writing Italian. The content used to learn the language will be drawn from the rich varied culture of Italy. Note: equivalent to two years of high school Italian. May not be repeated. SC

LMC: DA
Transfer: UC, CSU Gen. Ed. Area C2, IGETC Area 6

ITAL-061 Elementary Italian II
90 total hours lecture 5 Units
Prerequisite: ITAL 60 or two years of high school Italian
(Formerly ITAL 61S) Second semester of elementary Italian. This course continues to develop understanding, speaking, reading and writing skills of Italian language. The content used to learn the language will be drawn from the rich Italian culture. May not be repeated. SC

LMC: DA
Transfer: UC, CSU Gen. Ed. Area C2

ITAL-098 Independent Study in Italian
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC

LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.
Transfer: Independent Study courses may be DA or transferable depending on specific course. See your counselor.

ITAL-099 Cooperative Education in Italian
Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC

LMC: DA
Transfer: CSU

Journalism

JOURN-010 Writing for the Media
2 hours composition, 3 hours lab 3 Units
Advisory: Concurrent enrollment in ENGL 90 or 90A/B, or eligibility for or completion of ENGL 100
(Formerly JOURN 10L) This course provides an introduction into collecting, evaluating and writing information and news for print, Internet and broadcast media audiences. It will also cover issues of law and ethics pertinent to the media industries. May not be repeated. SC

LMC: GE: Communication/Critical Thinking; DA
Transfer: CSU

JOURN-015 Reporting Practicum
3 hours lab 1 Unit
Advisory: JOURN 10
A laboratory course for students to practice and refine their news gathering, reporting, persuasion, news photography and graphic communication skills by working as staff members on the weekly college newspaper and other print and online student publications. May be repeated three times. SC

LMC: DA
Transfer: CSU

JOURN-020 Publication Production I
1 hour lecture, 6 hours lab 3 Units
Advisory: JOURN 10
Basic publication production for students planning careers in the news and information media, and other related fields such as advertising and public relations. The course also touches on communications law and ethics, and requires extensive laboratory work on the college newspaper, online news site, and/or magazine. May be repeated three times. SC

LMC: DA
Transfer: CSU
COURSE DESCRIPTIONS

JOURN-030  Publication Production II
1 hour lecture, 6 hours lab  3 Units
Advisory: JOURN 10 and 20, or previous publication experience
Advanced publication production for students planning careers in the news and information media, and other related fields such as advertising and public relations. The course also touches on communications law and ethics, and requires extensive laboratory work on the college newspaper, online news site, and/or magazine. May be repeated three times. SC
LMC: DA
Transfer: CSU

JOURN-035  Mass Communication
3 hours lecture  3 Units
Advisory: Eligibility for Engr 100
(Formerly JOURN 35LS) A survey of mass communication in the information age. This course examines the origins, development and role of the major mass media in society - books, newspapers, magazines, radio, television, film and recordings - as well as the emerging influence of the world wide web. It also explores current and future trends in mass communication, issues and ethics involved with the mass media and related industries. This course meets the General Education requirement for Humanities. May not be repeated. (CAN JOUR 4) SC
LMC: GE: Humanities; DA
Transfer: UC, CSU Gen. Ed. Area D7, IGETC Area 4G

JOURN-098  Independent Study in Journalism
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC
LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.
Transfer: Independent Study courses may be DA or transferable depending on specific course. See your counselor.

JOURN-099  Cooperative Education in Journalism
Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC
LMC: DA
Transfer: CSU

JOURN-090s  Selected Topics in Journalism
DA varies with course content.

Latin

LATIN-020  Elementary Latin I
5 hours lecture  5 Units
Advisory: Eligibility for ENGL 100
(Formerly LATIN 20S) This beginning course prepares students to read original Latin works and introduces them to the basic structure of Latin grammar, syntax and culture. Curricula will assist students in attaining higher levels of English reading and writing skills paramount to success in higher education. Note: equivalent to two years of high school Latin. May not be repeated. SC
LMC: DA
Transfer: UC, CSU Gen. Ed. Area C2, IGETC Area 6

LATIN-021  Elementary Latin II
5 hours lecture  5 Units
Advisory: Eligibility for ENGL 100
(Formerly LATIN 21S) Second semester of Elementary Latin prepares students to read original Latin works at the Elementary Level II, which include structure of Latin grammar, syntax and culture. Curricula will assist student in attaining higher levels of English reading and writing skills paramount in higher education. May not be repeated. SC
LMC: DA
Transfer: UC, CSU Gen. Ed. Area C2

Learning Skills

LRNSK-050  Multimodal Strategies for Reading and Spelling
3 hours lecture, 1 hour lab  3 Units
(Formerly ENGL 50) This course is the first in a two-semester sequence of courses and is designed for students with specific learning disabilities and open to those who need to improve their study skills in basic skills in reading, spelling, writing sentences, paragraphs, and short essays. The focus is on learning strategies to develop the fundamental skills of reading and spelling. Instruction is based on a multimodal approach with emphasis on frequent practice, application, and individual feedback. One of the three lab hours includes individualized instruction as determined by the instructor and student. May not be repeated. SC
LMC: NDA

LRNSK-051  Applications: Reading and Spelling Strategies
3 hours lecture, 1 hour lab  3 Units
Advisory: LRNSK 50 with a passing grade
(Formerly ENGL 51) This is the second course in a two-semester sequence designed for students with specific learning disabilities and open to those who need to improve their study skills in basic skills in reading, spelling, writing sentences, paragraphs, and short essays. This course focuses on the application of strategies learned in Learning Skills 50 (LRNSK 50). The lab hour involves individualized instruction as determined by the instructor and student. May not be repeated. SC
LMC: NDA
LRNSK-070  Adaptive Computer Technology
2 hours lecture, 3 hours lab 3 Units
Computers and technology have allowed students with disabilities greater access to information and allowed for increased communication. This is a beginning course to introduce students with disabilities to adaptive software and hardware available to them. This course is also appropriate for students with basic knowledge of adaptive technology and wants to improve their computer skills. This course will allow students to explore new technology and reinforce computer skills they have gained. May be repeated two times. SC
LMC: NDA

LRNSK-080  Learning Skills Math Reasoning and Strategies
54 total hours lecture, 18 total hours lab 1-3 Units
This course provides students who have learning disabilities and students who struggle with basic math skills, with group and individualized instruction in the basic foundations of arithmetic and mathematics. The focus of the course will be on whole numbers, fractions, decimals, percent concepts and word problems. Students develop individualized strategies for overcoming math difficulties. May be repeated three times. SC
LMC: NDA

LRNSK-098  Independent Study in Learning Skills
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC
LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.
Transfer: Independent Study courses may be DA or transferable depending on specific course. See your counselor.

LRNSK-099  Cooperative Education in Learning Skills
Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC
LMC: DA
Transfer: CSU

LRNSK-900s  Selected Topics in Learning Skills
DA varies with course content.

Library Studies
Libst-014  Library Research and Information Literacy Skills
54 total hours lab 1 Unit
Advisory: Eligibility ENGL 90
This course teaches the research strategies and skills for successfully locating, retrieving, evaluating, synthesizing and using information in various formats. It combines library skills, research methods and information technology literacy. Coursework includes the ethical and legal aspects of information use and the critical thinking skills necessary for successful college research. May be repeated one time. SC
LMC: DA

Libst-017  Introduction to Internet Information Resources
9 total hours lecture .5 Unit
Advisory: Eligibility ENGL 90
This introductory short term course is designed for individuals with little or no experience using the Internet. The course will provide the basic knowledge and skills needed to make effective use of information resources available via the Internet. The topics covered in course will include the nature and organization of Internet resources, options for obtaining Internet access, basic tools and strategies for locating Internet information resources, as well as evaluation criteria and documentation of Internet information. The course will be of particular value to students needing to do Internet research for course assignments. May not be repeated. SC
LMC: DA

Libst-018  Internet Information Resources - Advanced Search Techniques and Strategies
9 total hours lecture .5 Unit
Advisory: Eligibility ENGL 90
This short-term course is designed for individuals who may already have some experience using the Internet. The course will cover more advanced search techniques and strategies for locating information resources available on the Internet. Among the topics covered will be the use of various features of Internet web browsers such as Netscape and Internet Explorer, an in-depth comparison of Internet search engines and an exploration of sites which provide subject and discipline based information resources. This course will also cover evaluation criteria and proper documentation of Internet information sources. Students interested in learning how to more effectively and efficiently search the Internet for class assignments or topics of personal interest will find this course of particular value. May not be repeated. SC
LMC: DA
LIBST-098 Independent Study in Library Studies
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC
LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.
Transfer: Independent Study courses may be DA or transferable depending on specific course. See your counselor.

LIBST-099 Cooperative Education in Library Studies
Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC
LMC: DA
Transfer: CSU

LIBST-900s Selected Topics in Library Studies
DA varies with course content.

Management and Supervision

MANGT-050A Introducing Supervision: Viewing the Roles and Contributions of Front-Line Managers
18 total hours lecture 1 Unit
Advisory: Eligibility for ENGL 90
The first of three six-week module courses which may be taken in any order or may be taken as a single class. This course presents a practical overview of supervision and management concepts, processes, and techniques and presents the role of the front-line manager in contributing to the organization’s success. May not be repeated. SC
LMC: DA
Transfer: CSU

MANGT-050B Introducing Supervision: Helping Staff Obtain Their Personal Best
18 total hours lecture 1 Unit
Advisory: Eligibility for ENGL 90
The second of three six-week module courses which may be taken in any order or may be taken as a single class. This course presents a practical overview of supervision and management concepts, processes, and techniques for the front-line manager to obtain successful employee relations and staff productivity. May not be repeated. SC
LMC: DA
Transfer: CSU

MANGT-050C Introducing Supervision: Exploring Human Resources Compliance Issues
18 total hours lecture 1 Unit
Advisory: Eligibility for ENGL 90
The third of three six-week module courses which may be taken in any order or may be taken as a single class. This course presents a practical overview of the front-line manager’s responsibilities for compliance with human resources issues. May not be repeated. SC
LMC: DA
Transfer: CSU

MANGT-055A Communicating with Confidence: Communicating One-to-One
18 total hours lecture 1 Unit
Advisory: Eligibility for ENGL 90
The first of three six-week module course which may be taken in any order or may be taken as a single class. The course emphasizes effective oral communication skills between individuals. May not be repeated. SC
LMC: DA
Transfer: CSU

MANGT-055B Communicating with Confidence: Facilitating Small Groups
18 total hours lecture 1 Unit
Advisory: Eligibility for ENGL 90
The second of three six-week module courses which may be taken in any order or may be taken as a single class. The course emphasizes effective oral and written communication skills when facilitating or working with small groups. May not be repeated. SC
LMC: DA
Transfer: CSU
MANGT-055C Communicating with Confidence: Presenting to Small and Large Audiences
18 total hours lecture 1 Unit
Advisory: Eligibility for ENGL 90
The third of three six-week module courses which may be taken in any order or may be taken as a single class. The course emphasizes effective skills for presentations to small and large audiences. May not be repeated. SC
LMC: DA
Transfer: CSU

MANGT-060A Making Effective Decisions: Learning How to Make the Hard Ones
18 total hours lecture 1 Unit
Advisory: Eligibility for ENGL 90
The first of three six-week module courses which may be taken in any order or may be taken as a separate stand-alone class. The course emphasizes skills for effective and timely decision-making. May not be repeated. SC
LMC: DA
Transfer: CSU

MANGT-060B Making Effective Decisions: Getting Buy-In
18 total hours lecture 1 Unit
Advisory: Eligibility for ENGL 90
The second of three six-week module courses which may be taken in any order or may be taken as a single class. The course emphasizes skills for obtaining buy-in to implement change. May not be repeated. SC
LMC: DA
Transfer: CSU

MANGT-060C Making Effective Decisions: Using Performance-Based Evaluation Methods
18 total hours lecture 1 Unit
Advisory: Eligibility for ENGL 90
The third of three six-week module courses which may be taken in any order or may be taken as a single class. The course emphasizes skills and methods for ensuring organizational performance accountability. May not be repeated. SC
LMC: DA
Transfer: CSU

MANGT-065A Mastering Management’s Essential Tools: Planning and Strategizing for the Organization
18 hours lecture 1 Unit
Advisory: Eligibility for ENGL 90
This is one of the three courses integrated into the Essential Supervisory and Management Tools course. Organizational Planning incorporates those essential tasks necessary for a successful business operation. A number of planning methods are explored, allowing for diversity in plan development. May not be repeated. SC
LMC: DA
Transfer: CSU

MANGT-065B Mastering Management’s Essential Tools: Implementing Total Quality Management
18 total hours lecture 1 Unit
Advisory: Eligibility for ENGL 90
The second of three parts of the Mastering Management’s Essential Tools. This is an introduction to the concepts surrounding Total Quality Management. Work teams and the techniques and process utilized are covered; these include communication, response, adaptation and coordination in teams. May not be repeated. SC
LMC: DA
Transfer: CSU

MANGT-065C Mastering Management’s Essential Tools: Practicing Time and Stress Management
18 total hours lecture 1 Unit
Advisory: Eligibility for ENGL 90
This course will assist supervisors and managers in being more effective in dealing with the demands of the modern workplace. Emphasis is placed on dealing with the time management which in turn can result in added stress in the job. May not be repeated. SC
LMC: DA
Transfer: CSU

MANGT-070A Relating in Human Terms: Resolving Conflicts
18 total hours lecture 1 Unit
Advisory: Eligibility for ENGL 90
The emphasis is on the understanding of the role conflict plays in the modern workplace. Positive as well as negative conflicts are analyzed and evaluated with the purpose of understanding the use of these roles. This is a stand alone course designed to be integrated into the Human Relations in Supervision course. May not be repeated. SC
LMC: DA
Transfer: CSU

MANGT-070B Relating in Human Terms: Supporting Teams
9 total hours lecture .5 Unit
Advisory: Eligibility for ENGL 90
This course is a second in a series on Human Relations in Supervision. The course on team development places the emphasis on team building and team cohesiveness. Cultural diversity in the team analyzed and developed. May not be repeated. SC
LMC: DA
Transfer: CSU
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Hours</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>MANGT-070C</td>
<td>Relating in Human Terms: Diversifying the Workplace</td>
<td>9</td>
<td>.5</td>
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<td><strong>Advisory:</strong> Eligibility for ENGL 90</td>
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<td>This course is the third in a series on Human Relations in Supervision.</td>
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<td>The course on cultural diversity in the modern workplace puts the focus on developing the skills required to function in the business environment of the 21st Century. May not be repeated. SC</td>
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<td><strong>LMC:</strong> DA</td>
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<td><strong>Transfer:</strong> CSU</td>
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<tr>
<td>MANGT-070D</td>
<td>Relating in Human Terms: Developing Leadership Skills in Yourself and Others</td>
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<td>.5</td>
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<td><strong>Advisory:</strong> Eligibility for ENGL 90</td>
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<td>This three-week course develops an understanding of the critical role that the individual plays in leadership development. Styles and methods are analyzed and integrated into role models of an effective leader. May not be repeated. SC</td>
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<td><strong>LMC:</strong> DA</td>
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<td>MANGT-070E</td>
<td>Relating in Human Terms: Understanding Etiquette in the Workplace</td>
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<td><strong>Advisory:</strong> Eligibility for ENGL 90</td>
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<td>This course is a critical element in the work environment and the understanding of proper etiquette. This is tied into the changing workforce of the 21st century with all its cultural diversity. A local and global perspective is taken when viewing the factors surrounding etiquette in the workplace. May not be repeated. SC</td>
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<td><strong>LMC:</strong> DA</td>
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<td><strong>Transfer:</strong> CSU</td>
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<tr>
<td>MANGT-075A</td>
<td>Managing Human Resources: Applying Federal and California Employment Laws</td>
<td>18</td>
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<td><strong>Advisory:</strong> Eligibility for ENGL 90</td>
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<td>The first of three six-week module course which may be taken in any order or may be taken as a single class. This course presents a practical overview of federal and California employment law as these laws relate to discrimination, equal employment, and affirmative action. May not be repeated. SC</td>
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<td><strong>LMC:</strong> DA</td>
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<td><strong>Transfer:</strong> CSU</td>
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<tr>
<td>MANGT-075B</td>
<td>Managing Human Resources: Recruiting and Interviewing Applicants</td>
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<td><strong>Advisory:</strong> Eligibility for ENGL 90</td>
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<td>The second of three six-week module courses which may be taken in any order or may be taken as a single class. This course presents a practical overview of recruiting and interviewing job applicants. May not be repeated. SC</td>
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<td><strong>LMC:</strong> DA</td>
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<td><strong>Transfer:</strong> CSU</td>
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<tr>
<td>MANGT-075C</td>
<td>Managing Human Resources: Hiring and Dismissing Employees</td>
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<td><strong>Advisory:</strong> Eligibility for ENGL 90</td>
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<td>The third of three six-week module courses which may be taken in any order or may be taken as a single class. This course presents a practical overview of hiring and dismissing employees. May not be repeated. SC</td>
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<td><strong>LMC:</strong> DA</td>
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<td><strong>Transfer:</strong> CSU</td>
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<tr>
<td>MANGT-098</td>
<td>Independent Study in Management and Supervision</td>
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<td>Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC</td>
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<td><strong>LMC:</strong> Independent Study courses may be DA or transferable depending on specific course. See your counselor.** Trans**</td>
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<td><strong>Transfer:</strong> Independent Study courses may be DA or transferable depending on specific course. See your counselor.</td>
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<tr>
<td>MANGT-099</td>
<td>Cooperative Education in Management and Supervision</td>
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<td>Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC</td>
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<td><strong>LMC:</strong> DA</td>
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<tr>
<td>MANGT-900s</td>
<td>Selected Topics in Management and Supervision</td>
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<td>DA varies with course content.</td>
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</table>
## Mathematics

### MATH-001  CORE - Applied Mathematics

5 hours lab  
1.5 Units

Instruction in a mathematics workshop setting to teach basic skills review using whole numbers, fractions, square roots, exponents, decimals, percentages and applications of arithmetic. Students choose a more delineated application field upon completion of this course. Successful completion of 3 units (with 1.5 units in Math 2) satisfies LMC proficiency requirements for the certificate of achievement or certificate of completion. May not be repeated.  SC

| LMC:  | NDA |

### MATH-002  Math Applications

5 hours lab  
1.5 Units

Instruction in a mathematics workshop setting to teach applications of arithmetic for consumers, nurses, paramedics, and those persons in the vocational-technical trades. Successful completion of both Math 1 and Math 2 satisfies LMC proficiency requirements for the certificate of achievement. May not be repeated.  SC

| LMC:  | NDA |

### MATH-004  Basic Math and Study Skills

2 hours lecture, 4 hours lab  
3 Units

This one semester, lecture / lab course is designed for students who need a "refresher" arithmetic course or wish to improve basic math skills using decimals, fractions, ratios, proportions, percents, and purchasing. Application and integration of learning strategies for improving study skills and math confidence is also emphasized. Successful completion of this course is equivalent to MATH 1. May be repeated one time.  SC

| LMC:  | NDA |

### MATH-007  Math for Occupational Education

1.5 to 10.5 hours lab  
0.5-3.5 Units

MATH for Occupational Education is instruction in math basic skills in an applied setting. The course is open enrollment, self-paced, in a computer laboratory setting. The course is designed for students wanting a context-based skills instructional review of whole numbers, fractions, decimals, basic geometric ideas, graphs and charts, measurement and an introduction to prealgebra. Up to 3.5 units of credit may be earned from this sequence of offerings. Three units of MATH 7 is equivalent to MATH 1 and 2. May be repeated seven times.  P/NP

| LMC:  | NDA |

### MATH-009  Arithmetic Skills with Applications

4 hours lecture, 2 hours lab  
4 Units

MATH 9 is a four-unit lecture / lab course designed to meet the math requirements for the LMC Certificate of Achievement. MATH 9 students will demonstrate mastery of arithmetic with whole numbers, fractions, decimals, and basic proportions and percents. Students will become proficient in the application and use of technology, estimation, arithmetic, proportional reasoning and percents, as well as multi-pronged representations including use of formulas, charts, and graphs. Applications will include topics from geometry, such as measurement, the metric system, perimeter, area and volume, as well as topics from personal finance such as calculating interest, sales tax, finance charges, balancing a checkbook, and budgeting. Students will develop proficient skills in communication of mathematics, problem-solving, use of multiple representations, and effective learning skills. MATH 9 is part of the LMC Developmental Math Program. Meets requirements for an LMC Certificate of Achievement. May not be repeated.  SC

| LMC:  | NDA |

### MATH-012  Prealgebra

3 hours lecture, 3 hours lab  
4 Units

MATH 12 is a four-unit lecture/lab prealgebra course designed to provide students with the background skills and knowledge in preparation for the study of elementary algebra. In MATH 12 students will demonstrate mastery with arithmetic involving integers, fractions, and decimals, with basic proportions and percents, as well as the order of operations, properties of exponents and solving linear equations. Students will become proficient in the application and use of technology, estimation, arithmetic, proportional reasoning and percents, as well as multi-pronged representations including use of equations, tables, and graphs. Applications will include introductory topics from algebra, geometry, and descriptive statistics. Students will develop proficient skills in communication of mathematics, problem-solving, use of multiple representations, and effective learning skills (such as self-assessment, goal-setting, and using resources). MATH 12 is part of the LMC Developmental Math Program and satisfies the math requirements for the LMC Certificate of Achievements. May not be repeated.  SC

| LMC:  | NDA |

### MATH-015  Liberal Arts Math

3 hours lecture, 2 hours lab  
3 Units

**Advisory:** MATH 1 or equivalent course

MATH 15 uses a common sense approach to the study of real-life data. Students will use graphs, tables, and words to describe data and to draw conclusions from data. We will use information from surveys and samples to make predictions, and we will learn to estimate the accuracy of our predictions. We will also explore the practical use of probability in making decisions. May not be repeated.  SC

| LMC:  | GCR: Mathematics; DA |

### MATH-018  Mathematics for Health Sciences

4 hours lecture, 2 hours lab  
4 Units

**Advisory:** MATH 1, MATH 4, MATH 7 (at least 1.5 units of MATH 7), or the equivalent college course taken within the last year

This course is designed for students interested in the health sciences field. The course will teach health-related applications of arithmetic and the analysis of data and health-related case studies for pertinent information. Basic arithmetic topics will be reviewed including percentage, ratio and proportions as well as basic statistical topics such as graphs, averages and statistical significance. Students will develop proficient skills in communication of mathematics, problem solving, use of multiple representations, and effective learning skills. MATH 18 is part of the LMC Developmental Math Program. Meets requirements for LMC Certificate of Achievement and the LMC Associate Degree. May not be repeated.  SC

| LMC:  | GCR: Mathematics; DA |

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2008–2009 Los Medanos College

151
MATH-025  Elementary Algebra
4 hours lecture, 3 hours lab  5 Units
Prerequisite: Completion of MATH 12, completion of coursework at another college that is comparable to MATH 12, demonstration of equivalent prealgebra skills based on the LMC assessment process, or equivalent assessment recommendation from another college.

An accelerated five-unit introductory algebra course that focuses on the study of linear equations, systems of linear equations, and quadratic equations. Linear equations and systems of linear equations are constructed from information given in a tabular, graphical and symbolic forms in real-world settings and these models are used to make decisions or predictions. Quadratic equations are solved using symbolic methods, such as factoring and the quadratic formula, as well as tables and graphs. The following topics are also covered: arithmetic and order of operations with real numbers; addition, subtraction, and multiplication of polynomials; laws of exponents with integer exponents; one variable inequalities, proportional reasoning, the Pythagorean Theorem, unit analysis, perimeter, area and volume. Successful students will develop proficient skills in communication of mathematics, problem-solving, use of multiple representations, and effective learning skills. MATH 25 is part of the LMC Developmental Math Program. May not be repeated. SC

LMC: GCR: Mathematics; DA

MATH-025AX  Elementary Algebra - Lecture Part One
3 hours lecture, 2 hours lab  3 Units
Prerequisite: Completion of MATH 12, completion of coursework at another college that is comparable to MATH 12, demonstration of equivalent prealgebra skills based on the LMC assessment process, or equivalent assessment recommendation from another college.

The first part of a two course introductory algebra sequence that focuses on the study of linear equations. Linear equations are constructed from information given in a tabular, graphical and symbolic forms in real-world settings and these models are used to make decisions or predictions. The following topics are also covered: order of operations with real numbers, one variable inequalities, proportional reasoning, unit analysis, perimeter, area and volume. Successful students will develop proficient skills in communication of mathematics, problem-solving, use of multiple representations, and effective learning skills. MATH 25AX is part of the LMC Developmental Math Program. May not be repeated. SC

LMC: GCR: Mathematics; DA

MATH-025BX  Elementary Algebra - Lecture Part Two
3 hours lecture, 2 hours lab  3 Units
Prerequisite: MATH 25AX or 25A or the equivalent

MATH 25BX is the second part of a two course introductory algebra sequence. MATH 25BX focuses on the study of systems of linear equations and on solving quadratic equations. Systems of linear equations are constructed from information given in a tabular, graphical and symbolic forms in real-world settings and these models are used to make decisions or predictions. Quadratic equations are solved using symbolic methods, such as factoring and the quadratic formula, as well as tables and graphs. The following topics are also covered: addition, subtraction, and multiplication of polynomials; laws of exponents with integer exponents; and the Pythagorean Theorem. Successful students will develop proficient skills in communication of mathematics, problem-solving, use of multiple representations, and effective learning skills. MATH 25BX is part of the LMC Developmental Math Program. May not be repeated. SC

LMC: GCR: Mathematics; DA

MATH-026  Plane Geometry
3 hours lecture, 2 hours lab  3 Units
Prerequisite: MATH 25 or equivalent course

Plane geometry is a one semester study of lines, angles, triangles, quadrilaterals, other polygons, circles and some polygon solids and spheres; topics include perimeter, area, surface, area, volume, Pythagorean Theorem, congruence and similar figures, "proof" and logical explanation and some geometric "constructions". Students will work primarily in small groups with instructor assistance and directed discussion in creative problem-solving and discovery-type approach to learning geometric concepts, theory and application to solving practical problems. This course is ideal as a review as well as first course in geometry, and preparation for study of more advanced math. May not be repeated. SC

LMC: GCR: Mathematics; DA

MATH-030  Intermediate Algebra
4 hours lecture, 2 hours lab  4 Units
Prerequisite: Successful completion of MATH 25 (or MATH 25AX and BX, or MATH 25A and B), or successful completion of coursework at another college that is comparable to MATH 25, or demonstration of equivalent elementary algebra skills based on our LMC assessment process, or equivalent assessment recommendation from another college, or successful completion of Algebra II within the past two years.

An intermediate algebra course that focuses on linear, quadratic, exponential, and logarithmic functions. Each family of functions will be investigated from multiple perspectives that include tabular, graphical, symbolic, and verbal forms. Successful students will develop proficient skills in communication of mathematics, problem-solving, use of multiple representations, and effective learning skills. Meets requirements for an LMC Certificate of Achievement and the LMC Associate Degree. May not be repeated. SC

LMC: GCR: Mathematics; DA

MATH-031  Survey of College Mathematics
3 hours lecture, 2 hours lab  3 Units
Prerequisite: MATH 30 (Intermediate Algebra) or equivalent

(Formerly MATH 31S) Designed especially for the transfer liberal arts major, this survey course uses students' background in intermediate algebra to develop a broad set of mathematical skills required for everyday life along with an appreciation for the beauty and power of mathematics. Topics include: loans and mortgages, simple and compound interest, measures of central tendency and dispersion, the normal distribution, probability and odds, polls and margins of error, Venn Diagrams, syllogisms, truth tables, and historical and contemporary math puzzles. May not be repeated. SC

LMC: GCR: Mathematics; DA

Transfer: CSU Gen. Ed. Area B4
MATH-034  Introduction to Statistics  
4 hours lecture, 2 hours lab  
4 Units  
Prerequisite: MATH 30 or equivalent course  
(Formerly MATH 34S) A first course in statistics with an introduction to descriptive statistics (measures of central tendency, dispersion, and correlation connected to standard graphical representations of data distributions), sampling design for reliable data production via experiments and surveys, tests of significance and confidence intervals, probability as it relates to inference. Use of a statistical software package or graphing calculator required. May not be repeated. (CAN STAT 2) SC  
LMC: GCR: Mathematics; DA  
Transfer: UC, CSU Gen. Ed. Area B4, IGETC Area 2

MATH-035  Finite Mathematics  
3 hours lecture, 2 hours lab  
3 Units  
Prerequisite: MATH 30 or equivalent course  
(Formerly MATH 35S) An introduction to finite mathematical models used in solving applied problems in business, social science and related fields. Topics include: linear models (lines and systems); matrices; linear programming; probability; Markov chains; decision theory; mathematics of finance. May not be repeated. (CAN MATH 12) SC  
LMC: GCR: Mathematics; DA  
Transfer: UC, CSU Gen. Ed. Area B4, IGETC Area 2

MATH-037  Applied Calculus  
3 hours lecture, 2 hours lab  
3 Units  
Prerequisite: MATH 30 or equivalent course  
(Formerly MATH 37S) An introduction to the theory of calculus with applications to problems in business, social and life sciences. Mathematical models will be applied to these fields and problem solving will be emphasized. Topics include: problem solving; modeling; functions; differential calculus; integral calculus; exponential and logarithmic functions; and multivariate calculus. May not be repeated. (CAN MATH 12) SC  
LMC: GCR: Mathematics; DA  
Transfer: UC, CSU Gen. Ed. Area B4, IGETC Area 2

MATH-040  Precalculus  
4 hours lecture, 2 hours lab  
4 Units  
Prerequisite: MATH 26 and 30 or equivalent courses  
(Formerly MATH 40S) The nature of proof; real and complex number systems; exponential and logarithmic functions; trigonometric functions, identities, and equations; analytic geometry; sequences and series; and algebraic skills will be emphasized and further developed. This course is intended to prepare students for calculus as well as to serve as an advanced course for students not intending to continue with calculus. May not be repeated. (CAN MATH 16) SC  
LMC: GCR: Mathematics; DA  
Transfer: UC, CSU Gen. Ed. Area B4, IGETC Area 2

MATH-050  Calculus and Analytic Geometry  
4 hours lecture, 2 hours lab  
4 Units  
Prerequisite: MATH 40 or equivalent course  
(Formerly MATH 50S) Introduction to differential and integral calculus: functions, limits, and continuity; techniques and applications of differentiation; the Fundamental Theorem of Calculus. Primarily for mathematics, science, and engineering majors. May not be repeated. (CAN MATH 18, CAN MATH SEQ B, CAN MATH SEQ C) SC  
LMC: GCR: Mathematics; DA  
Transfer: UC, CSU Gen. Ed. Area B4, IGETC Area 2

MATH-060  Calculus and Analytic Geometry  
4 hours lecture, 2 hours lab  
4 Units  
Prerequisite: MATH 50 or equivalent course  
Advisory: Eligible for ENGL 90  
(Formerly MATH 60S) This course is the second of the three semester calculus sequence. Extends the ideas of the previous course to further development and applications of the derivative and integral, differential equations, and series approximation of functions. Applications to various fields. Graphing calculator required. May not be repeated. (CAN MATH 20, CAN MATH SEQ B, CAN MATH SEQ C) SC  
LMC: GCR: Mathematics; DA  
Transfer: UC, CSU Gen. Ed. Area B4, IGETC Area 2

MATH-070  Calculus and Analytic Geometry  
4 hours lecture, 2 hours lab  
4 Units  
Prerequisite: MATH 60 or equivalent course  
(Formerly MATH 70S) Vectors in two and three dimensions; analytic geometry of three dimensions; partial differentiation; multiple integrals; line and surface integrals; applications to various fields. Green’s Theorem and Stokes’ Theorem are covered. May not be repeated. (CAN MATH 22, CAN MATH SEQ C) SC  
LMC: GCR: Mathematics; DA  
Transfer: UC, CSU Gen. Ed. Area B4, IGETC Area 2

MATH-075  Linear Algebra  
3 hours lecture, 2 hours lab  
3 Units  
Prerequisite: MATH 70  
(Formerly MATH 75S) This is a one-semester introduction to Linear Algebra and its applications. The aim of the course is to study applications to various fields while providing a transition from computational mathematics to more theoretical mathematics. Mathematical proofs are emphasized. The methods and concepts of linear algebra prepare the student for higher math courses and supplies problem-solving methods for many other fields. May not be repeated. (CAN MATH 26) SC  
LMC: GCR: Mathematics; DA  
Transfer: UC, CSU Gen. Ed. Area B4, IGETC Area 2

COURSE DESCRIPTIONS
MATH-080  Differential Equations
3 hours lecture, 2 hours lab 3 Units

Prerequisite: MATH 70 or equivalent course
(Formerly MATH 80S) A study of various methods for the solution of ordinary differential equations such as separation of variables, laplace transforms, variation of parameters, undetermined coefficients, and numerical methods. Simultaneous systems and partial differential equations will be included. Applications to various fields will be discussed. May not be repeated. (CAN MATH 24) SC
LMC: CCR: Mathematics; DA
Transfer: UC, CSU Gen. Ed. Area B4, IGETC Area 2

MATH-098  Independent Study in Mathematics
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC
LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.
Transfer: Independent Study courses may be DA or transferable depending on specific course. See your counselor.

MATH-099  Cooperative Education in Mathematics
Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC
LMC: DA
Transfer: CSU

MATH-900s  Selected Topics in Mathematics
DA varies with course content.

Music

MUSIC-001  Music I
1.5 hours lab .5 Unit

Prerequisite: Enrollment in any music performance course
Designed for the music student who needs further development in the mechanics of vocalizing or playing an instrument; conceptual development in the theory of music. The material is designed to be used individually or in any sequence according to the student’s need or an instructor’s discretion. May be repeated three times. P/NP
LMC: DA
Transfer: CSU

MUSIC-002  Music II
1.5 hours lab .5 Unit

Prerequisite: Enrollment in any music performance course
Designed for the music student who needs further development in the mechanics of vocalizing or playing an instrument; conceptual development in the theory of music. The material is designed to be used individually or in any sequence according to the student’s need or an instructor’s discretion. May be repeated three times. P/NP
LMC: DA
Transfer: CSU

MUSIC-003  Music III
1.5 hours lab .5 Unit

Prerequisite: Enrollment in any music performance course
Designed for the music student who needs further development in the mechanics of vocalizing or playing an instrument; conceptual development in the theory of music. The material is designed to be used individually or in any sequence according to the student’s need or an instructor’s discretion. May be repeated three times. P/NP
LMC: DA
Transfer: CSU

MUSIC-005  Recital Class
3 hours lab 1 Unit

Advisory: Arrangement with a private music instructor
The introductory phase of the private lesson and performance sequence. This course is designed to be taken in conjunction with MUSIC 8, Private Lesson Practicum or with private instruction from a qualified off-campus instructor. Three hours of performance/preparatory work will be given on campus by the instructor. May be repeated three times. LR
LMC: DA
Transfer: UC, CSU
### MUSIC-006 Recital Class: Intermediate

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<td>3 hours lab</td>
<td>1 Unit</td>
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**Advisory:** Arrangement with a private music instructor

The same preparatory work as MUSIC 5. In addition to the continuation of the content in MUSIC 5, the content will include concepts of performance style memorization, advanced practice concepts, selecting accompanists, and performance-related stress and nervousness. Recitals or a jury examination will be evaluated by the music faculty. Two semesters of MUSIC 5, 6, 7 are required for music majors. May be repeated three times.

**Transfer:** UC, CSU

**LMC:** DA

### MUSIC-007 Recital Class: Advanced

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<td>3 hours lab</td>
<td>1 Unit</td>
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**Advisory:** Arrangement with a private music instructor

Includes the continuation of the content in MUSIC 6, including the same preparatory work. Additional content includes techniques of private teaching, critical thinking applied to recital performance, videotaping activities, self and peer evaluation, and attendance at professional-level recitals. Recitals or a jury examination will be evaluated by the music faculty. Two semesters of MUSIC 5, 6, 7 are required for music majors. May be repeated three times.

**Transfer:** UC, CSU

**LMC:** DA

### MUSIC-008 Private Lessons Practicum

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<td>5 hours lab</td>
<td>1 Unit</td>
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**Co-requisite:** Concurrently enrolled in MUSIC 5, 6, or 7; enrolled in major performance medium; MUSIC 30, 31 or 32; music theory course at appropriate level (MUSIC 15, 16, 17, 18 or 81); and chamber ensembles (MUSIC 50 - 56). Pianists, vocalists, and guitarists may substitute alternative music courses to satisfy chamber ensemble requirement.

**Advisory:** Eligible for ENGL 90

This course is designed for the music major or minor students who will study their performance medium with a private tutor. Students will audition for the available lesson slots with a maximum class size of 60 students. Students will meet with a private tutor for nine theory hours during the semester. Each student must be concurrently enrolled in MUSIC 30, 31 or 32, MUSIC 5, 6 or 7, a music theory course at the student’s appropriate level, (MUSIC 15, 16, 17, 18 or 81), enrollment in a major performance group (e.g. Concert Band, College Chorus, Advanced Piano, Advanced Guitar), and chamber ensembles (any section between MUSIC 50 - 56). Pianists, vocalists, and guitarists may substitute alternative music courses to satisfy chamber ensemble requirement. Any exception to this list must have instructor’s approval. May be repeated three times. P/NP

**LMC:** DA

**Transfer:** CSU

### MUSIC-010 Music Literature

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<td>3 hours lecture</td>
<td>3 Units</td>
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**Advisory:** Eligibility for ENGL 100

(Formerly MUSIC 10LS) An interdisciplinary course providing an overview of the creative process with a focus on music. The course develops an aural analysis of music from many cultures and from past to present-day forms of musical creativity; it examines music as a reflection of the beliefs, social conditions and temper of the times. Sophistication in listening will be developed with attention to musical design, forms, style, instrumentaton, and the derivation of increased pleasure from this art form. The course will allow the opportunity for creative problem-solving through exercises and hands-on experiences, and will teach observation and critical skills through attendance at and evaluation of contemporary exhibits and performances. This course meets the General Education requirement for Creative Arts. May not be repeated.

**Transfer:** UC, CSU Gen. Ed. Area C1, IGETC Area 3A

**LMC:** GE: Creative Arts; DA

### MUSIC-012 Popular Musics in American Culture

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<th>Requirement</th>
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<td>3 hours lecture</td>
<td>3 Units</td>
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**Advisory:** Eligibility for ENGL 90

(Formerly MUSIC 12LS) A multicultural study of the evolution of American musical styles, including blues, salsa, samba, rock, jazz, pop, rhythm and blues and country and folk, with emphasis on the African American, Euro-American, Latin American origins of these contemporary styles and their historical contexts. This course meets the General Education requirement for Creative Arts. May not be repeated.

**Transfer:** UC, CSU Gen. Ed. Area C1 Also satisfies American Cultures Requirement at UCB

**LMC:** GE: Creative Arts; DA

### MUSIC-013 Musicianship I

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<td>1.5 hours lecture, 2 hours lab</td>
<td>2 Units</td>
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**Advisory:** MUSIC 30, concurrent enrollment in MUSIC 16, previous or concurrent enrollment in MUSIC 31

This first semester in ear training includes sight singing, interval and chord recognition, rhythm, musical dictation and technical and foreign language musical terms. Required for music majors and should be taken concurrently with MUSIC 16. May be repeated one time.

**Transfer:** UC, CSU

**LMC:** DA

### MUSIC-014 Musicianship II

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<td>1.5 hours lecture, 2 hours lab</td>
<td>2 Units</td>
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</table>

**Advisory:** MUSIC 13; MUSIC 16 and 31, concurrent enrollment in MUSIC 17, previous or concurrent enrollment in MUSIC 32

Continuation of the content of MUSIC 13. May be repeated one time.

**Transfer:** UC, CSU

**LMC:** DA

### MUSIC-016 Private Lessons Practicum

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>1.5 hours lecture</td>
<td>2 Units</td>
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</tbody>
</table>

**Advisory:** Eligible for ENGL 90

This course is designed for the music major or minor students who will study their performance medium for one hour of private lessons during the semester. Each student must be concurrently enrolled in MUSIC 30, 31 or 32, MUSIC 5, 6 or 7, a music theory course at the student’s appropriate level, (MUSIC 15, 16, 17, 18 or 81), enrollment in a major performance group (e.g. Concert Band, College Chorus, Advanced Piano, Advanced Guitar), and chamber ensembles (any section between MUSIC 50 - 56). Pianists, vocalists, and guitarists may substitute alternative music courses to satisfy chamber ensemble requirement. Any exception to this list must have instructor’s approval. May be repeated three times. P/NP

**LMC:** DA

**Transfer:** CSU
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Advisory</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC-015</td>
<td>Basic Music</td>
<td>3</td>
<td>Eligibility for ENGL 90; prior or concurrent enrollment in MUSIC 30</td>
<td>(Formerly MUSIC 15LS) Introduction to the reading of music; functional keyboard; theory of melody and rhythm; various aspects of musicianship; experience with musical literature through recordings. Recommended for students not majoring or minoring in music or for music majors who need reinforcement in basic musical concepts. The need to take this course is dependent upon theory placement exam. May not be repeated. LR</td>
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<td>LMC: GE: Creative Arts; DA</td>
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<td>Transfer: UC (UC transferable, but may not be combined with MUSIC 13) CSU Gen. Ed. Area C1, IGETC Area 3A</td>
</tr>
<tr>
<td>MUSIC-016</td>
<td>Fundamentals of Music Theory</td>
<td>3</td>
<td>MUSIC 15; prior or concurrent enrollment in MUSIC 31</td>
<td>Development of fundamental understanding of basic acoustics, notation, rhythm, key signatures, scales and modes, intervals, transposition, and form and composition of melodies. Required for music majors and should be taken concurrently with MUSIC 13. May not be repeated. LR</td>
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<td>LMC: DA</td>
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<td>Transfer: UC, CSU</td>
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<tr>
<td>MUSIC-017</td>
<td>Fundamentals of Music Harmony</td>
<td>4</td>
<td>MUSIC 13, 16, and 31; prior or concurrent enrollment in MUSIC 32. Concurrent enrollment in MUSIC 14.</td>
<td>The study of Common Practice Period harmony; exercises in analyzing and writing music, and further development of acuity of listening skills; sight singing, ear training, dictation, and keyboard exercises. Required for music majors and should be taken concurrently with MUSIC 14. May be repeated one time. This course is offered in the fall only. LR</td>
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<td>Transfer: UC, CSU</td>
</tr>
<tr>
<td>MUSIC-018</td>
<td>Advanced Music Harmony</td>
<td>4</td>
<td>MUSIC 17</td>
<td>The study of Common Practice Period Harmony, exercises in analyzing and writing music, and further development of acuity of listening skills; sight singing, ear training, dictation, and keyboard exercises. Required for music majors, including chromatic harmony and extended chord structures. May be repeated one time. This course is offered in the spring only. LR</td>
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<td>Transfer: UC, CSU</td>
</tr>
<tr>
<td>MUSIC-020</td>
<td>Seminar in Chamber Music: Baroque I</td>
<td>1</td>
<td>Audition by instructor; ENGL 90, MUSIC 15</td>
<td>Investigation of a variety of chamber orchestra styles through practice and performance; emphasis will be on literature of the Baroque period in music history. May be repeated three times. P/NP</td>
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<td>Transfer: UC, CSU</td>
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<tr>
<td>MUSIC-021</td>
<td>Seminar in Chamber Music: Baroque II</td>
<td>1</td>
<td>Audition by instructor; ENGL 90, MUSIC 15</td>
<td>A continuing investigation of the vast musical literature of the Baroque period. The emphasis will be on the practice and performance activities of selected literature. May be repeated three times. P/NP</td>
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<td>Transfer: UC, CSU</td>
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<tr>
<td>MUSIC-022</td>
<td>Seminar in Chamber Music: Classical</td>
<td>1</td>
<td>Audition by instructor; ENGL 90, MUSIC 15</td>
<td>Investigation of a variety of chamber ensemble and chamber orchestra styles through practice and performance; emphasis will be on literature of the Classical period in music history. May be repeated three times. P/NP</td>
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<td>Transfer: UC, CSU</td>
</tr>
<tr>
<td>MUSIC-023</td>
<td>Seminar in Chamber Music: Contemporary</td>
<td>1</td>
<td>Audition by instructor; ENGL 90, MUSIC 15</td>
<td>Investigation of contemporary chamber ensemble and chamber orchestra styles through practice and performance; emphasis will be on performance demands of contemporary musical literature. May be repeated three times. P/NP</td>
</tr>
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<td>Transfer: UC, CSU</td>
</tr>
<tr>
<td>MUSIC-026</td>
<td>Survey of Music Literature - Educators Band</td>
<td>3-1</td>
<td>Fundamental skill in the medium of performance emphasis; ENGL 90, MUSIC 15.</td>
<td>Development of rehearsal or sight treading techniques through group activities in one or more of the following fields of the student’s choice: 1) choral, 2) Instrumental (band), 3) Jazz, 4) Chamber, 5) Vocal, 6) Instrumental (orchestral), and 7) Marching Band. Each area of concentration deals with a particular aspect of music literature including sight reading, rehearsal techniques, or organizational aspects of specific musical situations. Investigation and performance of standard music literature; possible public performance. May be repeated nine times. P/NP</td>
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<td>LMC: DA</td>
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<td>Transfer: CSU</td>
</tr>
</tbody>
</table>

| MUSIC-015   | Basic Music                                      | 3     | Eligibility for ENGL 90; prior or concurrent enrollment in MUSIC 30       | (Formerly MUSIC 15LS) Introduction to the reading of music; functional keyboard; theory of melody and rhythm; various aspects of musicianship; experience with musical literature through recordings. Recommended for students not majoring or minoring in music or for music majors who need reinforcement in basic musical concepts. The need to take this course is dependent upon theory placement exam. May not be repeated. LR |
|             |                                                  |       |                                                                          | LMC: GE: Creative Arts; DA                                                                  |
|             |                                                  |       |                                                                          | Transfer: UC (UC transferable, but may not be combined with MUSIC 13) CSU Gen. Ed. Area C1, IGETC Area 3A |
| MUSIC-016   | Fundamentals of Music Theory                     | 3     | MUSIC 15; prior or concurrent enrollment in MUSIC 31                     | Development of fundamental understanding of basic acoustics, notation, rhythm, key signatures, scales and modes, intervals, transposition, and form and composition of melodies. Required for music majors and should be taken concurrently with MUSIC 13. May not be repeated. LR |
|             |                                                  |       |                                                                          | LMC: DA                                                                                      |
|             |                                                  |       |                                                                          | Transfer: UC, CSU                                                                            |
| MUSIC-017   | Fundamentals of Music Harmony                    | 4     | MUSIC 13, 16, and 31; prior or concurrent enrollment in MUSIC 32. Concurrent enrollment in MUSIC 14. | The study of Common Practice Period harmony; exercises in analyzing and writing music, and further development of acuity of listening skills; sight singing, ear training, dictation, and keyboard exercises. Required for music majors and should be taken concurrently with MUSIC 14. May be repeated one time. This course is offered in the fall only. LR |
|             |                                                  |       |                                                                          | LMC: DA                                                                                      |
|             |                                                  |       |                                                                          | Transfer: UC, CSU                                                                            |
| MUSIC-018   | Advanced Music Harmony                            | 4     | MUSIC 17                                                                 | The study of Common Practice Period Harmony, exercises in analyzing and writing music, and further development of acuity of listening skills; sight singing, ear training, dictation, and keyboard exercises. Required for music majors, including chromatic harmony and extended chord structures. May be repeated one time. This course is offered in the spring only. LR |
|             |                                                  |       |                                                                          | LMC: DA                                                                                      |
|             |                                                  |       |                                                                          | Transfer: UC, CSU                                                                            |
| MUSIC-020   | Seminar in Chamber Music: Baroque I              | 1     | Audition by instructor; ENGL 90, MUSIC 15                               | Investigation of a variety of chamber orchestra styles through practice and performance; emphasis will be on literature of the Baroque period in music history. May be repeated three times. P/NP |
|             |                                                  |       |                                                                          | LMC: DA                                                                                      |
|             |                                                  |       |                                                                          | Transfer: UC, CSU                                                                            |
| MUSIC-021   | Seminar in Chamber Music: Baroque II             | 1     | Audition by instructor; ENGL 90, MUSIC 15                               | A continuing investigation of the vast musical literature of the Baroque period. The emphasis will be on the practice and performance activities of selected literature. May be repeated three times. P/NP |
|             |                                                  |       |                                                                          | LMC: DA                                                                                      |
|             |                                                  |       |                                                                          | Transfer: UC, CSU                                                                            |
| MUSIC-022   | Seminar in Chamber Music: Classical               | 1     | Audition by instructor; ENGL 90, MUSIC 15                               | Investigation of a variety of chamber ensemble and chamber orchestra styles through practice and performance; emphasis will be on literature of the Classical period in music history. May be repeated three times. P/NP |
|             |                                                  |       |                                                                          | LMC: DA                                                                                      |
|             |                                                  |       |                                                                          | Transfer: UC, CSU                                                                            |
| MUSIC-023   | Seminar in Chamber Music: Contemporary           | 1     | Audition by instructor; ENGL 90, MUSIC 15                               | Investigation of contemporary chamber ensemble and chamber orchestra styles through practice and performance; emphasis will be on performance demands of contemporary musical literature. May be repeated three times. P/NP |
|             |                                                  |       |                                                                          | LMC: DA                                                                                      |
|             |                                                  |       |                                                                          | Transfer: UC, CSU                                                                            |
| MUSIC-026   | Survey of Music Literature - Educators Band       | 3-1   | Fundamental skill in the medium of performance emphasis; ENGL 90, MUSIC 15. | Development of rehearsal or sight treading techniques through group activities in one or more of the following fields of the student’s choice: 1) choral, 2) Instrumental (band), 3) Jazz, 4) Chamber, 5) Vocal, 6) Instrumental (orchestral), and 7) Marching Band. Each area of concentration deals with a particular aspect of music literature including sight reading, rehearsal techniques, or organizational aspects of specific musical situations. Investigation and performance of standard music literature; possible public performance. May be repeated nine times. P/NP |
|             |                                                  |       |                                                                          | LMC: DA                                                                                      |
|             |                                                  |       |                                                                          | Transfer: CSU                                                                                 |
### MUSIC-028  Songwriting I
3 hours lab  1 Unit

**Advisory:** Eligibility for ENGL 90

An introductory course in the basics commercial songwriting, combining the creative and business aspects of the craft. Students will develop lyric and melody writing skills and examine the marketing strategy for commercial music. May be repeated one time. SC

LMC: DA  
Transfer: CSU

### MUSIC-029  Songwriting II
3 hours lab  1 Unit

**Advisory:** MUSIC 28; eligibility for ENGL 90. It is advisable to talk to the instructor to determine proper course placement for your skill level.

The advanced course in the craft and business aspects of commercial song writing. Students will continue to develop lyric and melody writing skills and examine advanced marketing techniques for commercial music. May not be repeated. P/NP

LMC: DA  
Transfer: CSU

### MUSIC-030  Basic Keyboard Skills
1 hour lecture, 2 hours lab  1.5 Units

This course is designed to develop reading skills in basic musical notation in relation to the keyboard. Study of piano technique, ensemble and solo playing, easy repertoire preparation and interpretation will be covered. Recommended for students not majoring in music, or for music majors who need reinforcement or experience with fundamental music skills. May be repeated one time. LR

LMC: DA  
Transfer: UC, CSU

### MUSIC-030A  Continuing Piano Workshop
24 total hours lab  .5 Unit

**Advisory:** Any piano class

A carry-over class from Spring semester to Fall semester classes, covering skills of technique, sight-reading, repertoire, and theory, for all levels of piano. This class will retain acquired skills through the summer. May be repeated three times. P/NP

LMC: DA

Transfer: UC, CSU

### MUSIC-030C  Piano for Families: Learning and Teaching
54 total hours lab  1 Unit

This two-faceted course introduces age-appropriate keyboard methods to the grade-school age child as well as teaches parents and educators about the methods and materials available for the grade-school age child. Beginning keyboard skills are emphasized, including rhythm, intervals, pre-reading, and the importance of following musical instruction. Prepares the student for more advanced piano study. May be repeated three times. SC

LMC: DA

### MUSIC-031  Piano I
1 hour lecture, 2 hours lab  1.5 Units

**Advisory:** Ability to read music at elementary level

This is the first semester of piano for music majors. Includes basic keyboard techniques, easy piano repertoire, scales, chords, simple transposition and sight reading skills. May be repeated one time. LR

LMC: DA  
Transfer: UC, CSU

### MUSIC-032  Piano II
1 hour lecture, 2 hours lab  1.5 Units

**Advisory:** MUSIC 1 or equivalent skills

This course is a continuation of MUSIC 31. Also includes some keyboard harmony. May be repeated three times. LR

LMC: DA  
Transfer: UC, CSU

### MUSIC-033A  Intermediate Piano Workshop
1 hour lecture, 2 hours lab  1.5 Units

**Advisory:** MUSIC 2 or instructor's consent

Piano study with an emphasis on stylistic interpretation, preparation, and performance of advanced level keyboard literature from all historical periods. Ensemble and accompaniment skills will be covered as well as keyboard theory and technical aspects of piano playing. May be repeated three times. LR

LMC: DA  
Transfer: UC, CSU

### MUSIC-033B  Advanced Piano Performance
1 hour lecture, 2 hours lab  1.5 Units

**Advisory:** MUSIC 33A

Piano study with an emphasis on stylistic interpretation, preparation, and performance of advanced level keyboard literature from all historical periods. Ensemble and accompaniment skills will be covered as well as keyboard theory and technical aspects of piano playing. May be repeated three times. SC

LMC: DA  
Transfer: UC, CSU

### MUSIC-034  Jazz/Rock Keyboard
1 hour lecture, 2 hours lab  1.5 Units

Investigation of fundamental keyboard skills necessary to perform contemporary jazz and rock music. Keyboard styles from 1950 to the present will be discussed, with emphasis on today's keyboard demands. Content includes the function and voicings of chords, melodic harmonization of tunes, and basic improvisational theory. May be repeated three times. LR

LMC: DA  
Transfer: UC, CSU
MUSIC-035 Introduction to the Guitar
3 hours lab 1 Unit
Students must supply own guitars. A graded sequence of material designed to develop facility on the guitar through a study of techniques, repertoire, and harmonization; basic chords for classical and folk guitar. May be repeated two times. LR
LMC: DA
Transfer: UC, CSU

MUSIC-036 Intermediate Guitar
3 hours lab 1 Unit
Students must supply own guitars. A continuation of the material presented in MUSIC 35 designed to develop facility on the guitar through a study of techniques, repertoire, and harmonization; basic chords for classical and folk guitar. May be repeated three times. LR
LMC: DA
Transfer: UC, CSU

MUSIC-037 Advanced Guitar Techniques
3 hours lab 1 Unit
Advisory: MUSIC 36. It is advisable to talk to the instructor to determine proper course placement for your skill level.
A sequence of materials designed to develop techniques for advanced guitar performance. Hand techniques, repertoire, sight reading, and harmonization will also be discussed. May be repeated three times. LR
LMC: DA
Transfer: UC, CSU

MUSIC-038 Commercial Jingle Production
3 hours lab 1 Unit
Advisory: Completion of RA 20. It is advisable to talk to the instructor to determine proper course placement for your skill level. Eligibility for ENGL 90.
Designed for students who have demonstrable engineering/producing and/or performance proficiency. Students will interact to produce public service announcements, commercial jingles, and cover version of musical selections. Instructor will act as coordinator, while students perform all creative and production-oriented tasks. May be repeated three times. LR
LMC: DA
Transfer: UC, CSU

MUSIC-040 Concert Band I
6 hours lab 2 Units
Advisory: ENGL 90
Fundamental skill on band instrument is suggested. Investigation of the fundamentals of concert band performance, including concepts of intonation, balance, blend, basic articulations, and an introduction to basic band literature; extensive practice and frequent public performance. May be repeated three times. LR
LMC: DA
Transfer: UC, CSU

MUSIC-041 Concert Band II
6 hours lab 2 Units
Fundamental skill on band instrument is suggested. A continuation of basic material in MUSIC 40 with an investigation of classical and contemporary band literature as well as scales, chords, and extensive work in sight-reading; extensive practice and frequent public performance. May be repeated three times. LR
LMC: DA
Transfer: UC, CSU

MUSIC-042 Concert Band III
6 hours lab 2 Units
Advisory: ENGL 90
Fundamental skill on band instrument is suggested. A continuation of basic material in MUSIC 41 with advanced performance concepts, individual solos, critical sight reading, studies in interpretation, and extended technical exercises; extensive practice and frequent public performance. May be repeated three times. LR
LMC: DA
Transfer: UC, CSU

MUSIC-044 Brass Band I
3 hours lab 1 Unit
Advisory: Eligibility for ENGL 90
Fundamental skill on a brass or percussion instrument is suggested. Development of band techniques through large group activities structured in the style of traditional brass bands. Historical references and representative literature will be included; frequent public performance. May be repeated three times. LR
LMC: DA
Transfer: UC, CSU

MUSIC-045 Brass Band II
3 hours lab 1 Unit
Advisory: Eligibility for ENGL 90
Fundamental skill on a brass or percussion instrument is suggested. A continuation of basic material in MUSIC 44 with the investigation and performance of standard band literature; frequent public performance. May be repeated three times. LR
LMC: DA
Transfer: UC, CSU

MUSIC-046 Brass Band III
3 hours lab 1 Unit
Advisory: Eligibility for ENGL 90
Fundamental skill on a brass or percussion instrument is suggested. A continuation of basic material in MUSIC 45 in addition to the discussion of brass and percussion techniques from elementary through advanced levels of performance. Representative literature will be used for sight reading and frequent public performance. May be repeated three times. LR
LMC: DA
Transfer: UC, CSU
MUSIC-050  Chamber Ensembles: Emphasis - Brass and Percussion I
5 hours lab  1 Unit
Fundamental skill on a brass or percussion instrument is suggested. This initial chamber ensembles course is designed to act as an introduction to literature and small ensemble performance techniques; frequent public performance. May be repeated three times. LR
LMC: DA
Transfer: UC, CSU

MUSIC-051  Chamber Ensembles: Emphasis - Brass and Percussion II
5 hours lab  1 Unit
Advisory: Fundamental skill on a brass or percussion instrument.
Fundamental skill on a brass or percussion instrument is recommended. A continuation of the basic material in MUSIC 50. Discussions of concepts dealing with interpretation, performer interaction, prominent composers, and aural analysis of selected recordings; frequent public performance. May be repeated three times. LR
LMC: DA
Transfer: UC, CSU

MUSIC-052  Chamber Ensembles: Emphasis Strings I
3 hours lab  1 Unit
Advisory: Fundamental skill on a string instrument
Fundamental skill on a string instrument. The initial chamber ensemble course is designed to act as an introduction to literature and small ensemble performance techniques; frequent public performance. May be repeated three times. LR
LMC: DA
Transfer: UC, CSU

MUSIC-053  Chamber Ensembles: Emphasis Strings II
3 hours lab  1 Unit
Advisory: Fundamental skill on a string instrument
Fundamental skills on a string instrument is recommended. Concepts include literature selection, small ensemble rehearsal techniques, style, and the technical demands on the ensemble performer; frequent public performance. May be repeated three times. LR
LMC: DA
Transfer: UC, CSU

MUSIC-054  Chamber Ensembles: Emphasis - Woodwinds and Vocal I
5 hours lab  1 Unit
Advisory: Fundamental skill on a woodwind instrument or in vocal techniques
Fundamental skill on a woodwind instrument or in vocal techniques is suggested. Discussion of concepts dealing with interpretation, performer interaction, prominent composers, and aural analysis of selected recordings; frequent public performance. May be repeated three times. LR
LMC: DA
Transfer: UC, CSU

MUSIC-055  Chamber Ensembles: Emphasis - Woodwinds and Vocal II
5 hours lab  1 Unit
Advisory: Fundamental skill on a woodwind instrument or in vocal techniques
Fundamental skill on a woodwind instrument or in vocal techniques is highly suggested. A continuation of the basic material in MUSIC 54. Concepts include literature selection, small ensemble, rehearsal techniques, style and the technical demands on the ensemble performer; frequent public performance. May be repeated three times. LR
LMC: DA
Transfer: UC, CSU

MUSIC-056  Chamber Ensembles VI: Woodwinds, Vocal, Piano
5 hours lab  1 Unit
Fundamental skill on a woodwind instrument, piano or in vocal techniques is highly suggested. A continuation of the basic material in MUSIC 54 and 55. Concepts include literature selection, small ensemble rehearsal techniques, style, and the technical demands on the ensemble performer; frequent public performance. May be repeated three times. LR
LMC: DA
Transfer: UC, CSU

MUSIC-058  Musical Theatre: Orchestra I
54 total hours lab  1 Unit
Advisory: Eligibility for ENGL 90
Fundamental skill requirement; audition by instructor is suggested. This course is devoted to the preparation and presentation of an orchestra for selected musicals. It allows student musicians the opportunity to obtain the experience of performing in a pit orchestra playing the same music as professional theatre orchestras. May be repeated four times. Offered periodically. LR
LMC: DA
Transfer: UC, CSU

MUSIC-059  Musical Theatre: Orchestra II
54 total hours lab  1 Unit
Advisory: Audition by instructor; fundamental skill requirement; eligibility for ENGL 90
Similar to MUSIC 58, the course will concentrate on a selected musical. Concepts discussed include interpretation, technical and musical demands, and proper performance techniques. The instrumentation will vary according to the needs of the musical score. May be repeated three times. Offered periodically. LR
LMC: DA
Transfer: UC, CSU
<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Hours/Units</th>
<th>Advisory</th>
<th>Description</th>
<th>LMC</th>
<th>Transfer</th>
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<tbody>
<tr>
<td>MUSIC-060</td>
<td>College Chorus I</td>
<td>6 lab/2</td>
<td>Eligibility for ENGL 90</td>
<td>Investigation of basic choral group fundamentals. Development of basic vocal techniques through large group activities; extensive practice and frequent public performance. May be repeated three times. LR</td>
<td>DA</td>
<td>UC, CSU</td>
</tr>
<tr>
<td>MUSIC-061</td>
<td>College Chorus II</td>
<td>6 lab/2</td>
<td>Piano, Basic Music; eligibility for ENGL 90</td>
<td>Continuation of basic group vocalizing and basic vocal techniques. Emphasis on sigh treading techniques and classical literature; extensive practice and frequent public performance. May be repeated three times. LR</td>
<td>DA</td>
<td>UC, CSU</td>
</tr>
<tr>
<td>MUSIC-062</td>
<td>College Chorus III</td>
<td>6 lab/2</td>
<td>Eligibility for ENGL 90, Piano, Basic Music</td>
<td>Investigation of advanced sight-reading techniques, classical and contemporary literature, and aspects of choral techniques as applied to interpretations; extensive practice and frequent public performance. May be repeated three times. LR</td>
<td>DA</td>
<td>UC, CSU</td>
</tr>
<tr>
<td>MUSIC-063</td>
<td>Oratorio and Cantata Chorus I</td>
<td>12-18/2-1</td>
<td></td>
<td>The production of one of the larger choral masterworks from the Baroque or Classical periods of history including a large chorus, an orchestra, and selected soloists. May be repeated three times. Offered only one semester each year. P/NP</td>
<td>DA</td>
<td>UC, CSU</td>
</tr>
<tr>
<td>MUSIC-064</td>
<td>Oratorio and Cantata Chorus II</td>
<td>36-54 lab</td>
<td>Basic Music, Voice; eligibility for ENGL 90</td>
<td>This class consists of the rehearsal and performance of one of the large choral masterworks from the late Classical or Romantic periods of history including a large chorus, an orchestra, and selected soloists. May be repeated three times. P/NP</td>
<td>DA</td>
<td>UC, CSU</td>
</tr>
<tr>
<td>MUSIC-065</td>
<td>Class Voice</td>
<td>3 lab/1</td>
<td>Choir, Piano, Basic Music</td>
<td>Investigation of vocal techniques such as breathing, diction, vowel production, and tone quality; care of the voice; music reading and vocal interpretation. Singing and basic repertoire include an introduction to foreign language diction and pronunciation. This is a multi-level course in which each student will concentrate on content areas suited to particular ability levels. Possible public recital will be included. May be repeated three times. LR</td>
<td>DA</td>
<td>UC, CSU</td>
</tr>
<tr>
<td>MUSIC-066</td>
<td>Gospel Choir</td>
<td>5 lab/1</td>
<td></td>
<td>The Gospel Choir will offer an introductory experience in the dynamics of performing choral literature from the Gospel Music tradition. The emphasis of this course will be on developing understanding and skills in complex rhythm structure phrasing and vocal production and intonation needed for singing Gospel Music from the traditional to the present modern day contemporary style. May be repeated three times. LR</td>
<td>DA</td>
<td>UC, CSU</td>
</tr>
<tr>
<td>MUSIC-067</td>
<td>Jazz and Popular Vocal Techniques</td>
<td>3 lab/1</td>
<td></td>
<td>Investigation of techniques involved with performing jazz and popular vocalizing. Areas of discussion and practice include style, phrasing, use of microphones, working with backup groups and literature selection. This course is designed to apply to vocalists of all levels of experience. May be repeated three times. LR</td>
<td>DA</td>
<td>UC, CSU</td>
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<tr>
<td>MUSIC-068</td>
<td>Musical Theatre: Vocal I</td>
<td>3 lab/1</td>
<td>College Chorus, ENGL 90</td>
<td>This class consists of the rehearsal and performance of a contemporary Broadway musical with chorus and leads being selected from the class members. Emphasis will be on fundamentals of vocal techniques as applied to this style of vocal literature. May be repeated three times. LR</td>
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<td>UC, CSU</td>
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<tr>
<td>MUSIC-069</td>
<td>Musical Theatre: Vocal II</td>
<td>3 lab/1</td>
<td>Basic Voice, College Chorus, ENGL 90</td>
<td>This class consists of the rehearsal and performance of a contemporary Broadway musical with chorus and leads being selected from the class members. Emphasis will be on contemporary approaches to interpretation and intensive work with vocal leads. May be repeated one time. LR</td>
<td>DA</td>
<td>UC, CSU</td>
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</tbody>
</table>
MUSIC-070  Jazz Ensemble I
6 hours lab  2 Units
Advisory: Eligibility for ENGL 90
Suggest that one has fundamental skill on jazz band instrument; concurrent enrollment in Concert Band, Brass Band, or College Chorus; audition by instructor. Investigation of the fundamental techniques associated with jazz ensemble performance; extensive practice and frequent public performance. May be repeated three times. LR
LMC: DA
Transfer: UC, CSU

MUSIC-071  Jazz Ensemble II
6 hours lab  2 Units
Suggest that one has fundamental skill on jazz band instrument; concurrent enrollment in Concert Band, Brass Band, or College Chorus; audition by instructor. Investigation of the literature associated with several professional big bands; discussion of early jazz styles and interpretations; extensive practice and frequent public performance. May be repeated three times. LR
LMC: DA
Transfer: UC, CSU

MUSIC-072  Jazz Ensemble III
6 hours lab  2 Units
Advisory: Eligibility for ENGL 90
Suggest that one has fundamental skill on jazz band instrument; concurrent enrollment in Concert Band, Brass Band, or College Chorus; audition by instructor. Investigation of contemporary big band styles and related literature; advanced techniques in soloing and jazz performance; extensive practice and frequent public performance. May be repeated three times. LR
LMC: DA
Transfer: UC, CSU

MUSIC-073  Jazz Studio I
5 hours lab  1 Unit
Advisory: Eligibility for ENGL 90
Fundamental skill on jazz band instrument is suggested. Investigation of the fundamental techniques associated with big band jazz performance; extensive practice and frequent public performance. May be repeated three times. LR
LMC: DA
Transfer: UC, CSU

MUSIC-074  Jazz Studio II
5 hours lab  1 Unit
Advisory: Eligibility for ENGL 90
Fundamental skill on jazz band instrument is suggested. Investigation of the fundamental techniques associated with big band jazz performance; extensive practice and frequent public performance. May be repeated three times. LR
LMC: DA
Transfer: UC, CSU

MUSIC-075  Jazz Studio III
5 hours lab  1 Unit
Advisory: Eligibility for ENGL 90
Fundamental skill on jazz band instrument is recommended. Investigation of the fundamental techniques associated with big band jazz performance; discussion of various jazz styles and improvisation; extensive practice and frequent public performance. Students will be placed on appropriate parts, based on audition by instructor. May be repeated three times. LR
LMC: DA
Transfer: UC, CSU

MUSIC-076  Chamber Chorale I
6 hours lab  2 Units
Advisory: ENGL 90 or 100
Audition by instructor, testing for sight reading, musical ear and vocal ability. Suggested concurrent enrollment in College Choir, Concert Band, Jazz Ensemble, or Cantata Choir to ensure performance competencies. Designed to give students experience in chamber choir music from madrigal style to earlier classical styles. The course will develop singing techniques to aid students in performing with proper historical, technical, and stylistic aspects. Frequent public performances included. May be repeated three times. LR
LMC: DA
Transfer: UC, CSU

MUSIC-077  Chamber Chorale II
6 hours lab  2 Units
Suggested concurrent enrollment in College Choir, Concert Band, or Brass Band, and audition by instructor. This course is for the continuing vocalist who wants experience in analyzing, preparing and performing choral music suitable for the vocal chamber ensemble and taken from the classical era through contemporary. The vocal literature will cover the important stages of change in choral chamber literature during this time span. The advanced work in choral musicianship and vocal training as well as the historical and stylistic understandings are necessary for the singer to reach the skill and understanding level to perform chamber music from these periods at a collegiate level. Qualifies as elective or requirement for Music Major for AA as well as CSU. May be repeated three times. LR
LMC: DA
Transfer: UC, CSU
MUSIC-079  Chamber Chorale III
6 hours lab 2 Units
Suggested concurrent enrollment in College Chorus, Concert Band, or Brass Band, and audition by instructor. This course is for the continuing vocalist who wants experience in analyzing, preparing and performing choral music suitable for the vocal chamber ensemble and taken from the annals of early vocal music to contemporary jazz. The vocal literature will cover the important stages of change in choral chamber music as well as the elements of the more traditional music that have helped to shape the jazz idiom. The advanced work in chamber musicianship and vocal training as well as the historical and stylistic understandings are necessary for the singer to reach the skill and understanding level to perform music of these periods and styles at a collegiate level. Qualifies as elective or requirement for Music Major for AA as well as CSU. May be repeated three times. LR
LMC: DA
Transfer: UC, CSU

MUSIC-081  Introduction to Improvisation
5 hours lab 1 Unit
Advisory: It is advisable to talk to the instructor to determine proper course placement for your skill level; ENGL 90, MUSIC 015
Investigation of various techniques for improvisation. This course is designed to introduce the student to the improvised and aural traditions comprising the bulk of most of the music of the Western and non-Western world. The well-rounded musician of the 1990’s should have at least a rudimentary ability to improvise on her/his instrument. Stylistic areas covered will be jazz, Latin, funk, blues, rock, African, and contemporary classical approaches. May be repeated three times. Music Major requirement. LR
LMC: DA
Transfer: UC, CSU

MUSIC-082  Intermediate Jazz/Funk/Latin Workshop
5 hours lab 1 Unit
Advisory: Fundamental skill on an instrument or voice, and prior or concurrent enrollment in MUSIC 81. It is advisable to talk to the instructor to determine proper course placement for your skill level; ENGL 90.
Investigation of contemporary techniques for musical improvisation; extensive listening and small group practice. This course will deal with scales and chords commonly associated with jazz, rock, Latin, and pop music. May be repeated three times. LR
LMC: DA
Transfer: UC, CSU

MUSIC-083  Advanced Jazz/Funk/Rock Workshop I
5 hours lab 1 Unit
Advisory: MUSIC 82 or audition by instructor
Further investigation of improvisational techniques with an emphasis on aural perception and some small group participation. May be repeated three times. Usually offered only once a year. LR
LMC: DA
Transfer: UC, CSU

MUSIC-084  Advanced Jazz/Funk/Latin Workshop II
5 hours lab 1 Unit
Advisory: MUSIC 82 or 83 and audition by instructor; ENGL 90, MUSIC 15
Advanced investigation of techniques for musical improvisation in Jazz, Funk and Latin styles, extensive listening and small group practice; aural analysis and ear training; several compositional assignments will be required. May be repeated three times. LR
LMC: DA
Transfer: UC, CSU

MUSIC-089  Music Business Management
2 hours lecture, 3 hours lab 2 Units
Advisory: Eligibility for ENGL 90
An overview of the structure of the music business with an emphasis on the interrelationships among the various career specialties. Attention will be given to career planning strategies. May be repeated one time. LR
LMC: DA
Transfer: CSU

MUSIC-091  Music Technology for Music Majors
5 hours lab 1 Unit
Advisory: Prior or concurrent enrollment in MUSIC 15
This course is a hands-on intro to notation and sequencer programs using MIDI (Musical Instrument Digital Interface). Students will be able to produce professional looking music score and lead sheets using current music notation software, and MIDI sequences using current sequencing software. With notation programs, students will understand the concept of notation, score layout and advanced notation techniques. Students will be able to reproduce simple songs for publication, distribution, copyright and archive. With sequencing programs, students understand the MIDI language, the basics of putting together a MIDI sequence, and some multiple MIDI channels and sound modules, and records their project unto a standard professional recording media. Students will be able to demonstrate how synthesizers, computers and electronic musical devices are connected. Students will learn to use MIDI studio equipment (synthesizers, computers, drum machines, effects, modules, multi-track recorders) for musical compositions and performance. May not be repeated. SC
LMC: DA
Transfer: CSU

MUSIC-093  Studio Music Production I
1 hour lecture, 4 hours lab 2 Units
For students wanting to produce music using professional music studio equipment. With this lecture/demonstration and hands-on class, students will be able to build music studio and learn the basic operation of electronic musical equipment. The pieces of electronic musical equipment include MIDI synthesizer, music workstations, computer workstations, groove boxes, drum machines, soft-synthesizers, sequencers, and new products as the industry advances. This is an introductory course and it is intended to build a strong foundation in understanding studio music operation, whether the student is interested in composing, making beats and/or being a producer. May be repeated one time. P/NP
LMC: DA
Transfer: CSU
MUSIC-094 Studio Music Production II
1 hour lecture, 4 hours lab 2 Units
Advisory: Successful completion of MUSIC 15; concurrent enrollment in MUSIC 16 or MUSIC 28.
For students wanting to produce music using professional music studio equipment. Students will be able to learn various styles of music production. Music styles to be explored include Rap, Jazz, Classical, Rock, Metal, Popular, R&B, and new styles as they emerge. With this lecture/demonstration and hands-on class, students will also be able to learn intermediate level operation of electronic musical equipment. The pieces of electronic musical equipment include MIDI synthesizer, music workstations, Digital Audio workstations, samplers, groove boxes, drum machines, soft-synthesizers, sequencers, and new products as the industry advances. This is an intermediate level course and it is intended to improve upon the strong foundation in understanding studio music operation. The course is aimed at students who are interested in composing, making beats and/or being a producer. May be repeated three times. P/NP
LMC: DA
Transfer: CSU

MUSIC-095 Studio Music Production III
1 hour lecture, 4 hours lab 2 Units
For students wanting more advanced production of music using professional music studio equipment. Students will learn various styles of music production in depth. Music styles to be discussed include Rap, Jazz, Classical, Rock, Metal, Popular, R&B, and new styles as they emerge. With this lecture/demonstration and hands-on class, students will also be able to learn advanced level operation of electronic musical equipment. The pieces of electronic musical equipment include MIDI synthesizer, music workstations, Digital Audio workstations, multi-track recorders, samplers, groove boxes, drum machines, soft-synthesizers, sequencers, and new products as the industry advances. This is an advanced level course and it is intended to further improve upon the foundation in operating studio music equipment. The course is aimed at students who are further interested in composing, making beats and/or being a producer. May be repeated three times. P/NP
LMC: DA
Transfer: CSU

MUSIC-098 Independent Study in Music
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC
LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.
Transfer: Independent Study courses may be DA or transferable depending on specific course. See your counselor.

MUSIC-099 Cooperative Education in Music
Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. SC
LMC: DA
Transfer: CSU

MUSIC-250 Night Jazz Band
5 hours lab 1 Unit
Advisory: Advanced mastery of instrument(s) commonly used in a large jazz ensemble, including mastery of sight reading and soloing
A course for musicians wishing to investigate challenging professional level material in the jazz canon ranging from Duke Ellington and Fletcher Henderson (1920’s) to the present day (Maria Schneider, Bob Belden). Frequent public performances. May be repeated three times. P/NP
LMC: DA
Transfer: UC, CSU

MUSIC-251 Night Jazz Band II
5 Hours Lab 1 Unit
Advisory: Advanced mastery of instrument(s) commonly used in a large jazz ensemble, including of sight-reading and soloing.
A continuation of MUSIC 250, this course is for musicians wishing to further investigate challenging professional level material in the jazz canon ranging from Duke Ellington and Fletcher Henderson (1920’s) to the present day (Maria Schneider, Bob Belden). Frequent public performances. May be repeated three times. P/NP
LMC: DA
Transfer: UC, CSU

MUSIC-252 Night Jazz Band III
5 Hours Lab 1 Unit
Advisory: Advanced mastery of instrument(s) commonly used in a large jazz ensemble, including of sight-reading and soloing.
A continuation of MUSIC 251, this course is for musicians wishing to further investigate challenging professional level material in the jazz canon ranging from Duke Ellington and Fletcher Henderson (1920’s) to the present day (Maria Schneider, Bob Belden). Frequent public performances. May be repeated three times. P/NP
LMC: DA
Transfer: UC, CSU

MUSIC-253 Night Jazz Band IV
5 Hours Lab 1 Unit
Advisory: Advanced mastery of instrument(s) commonly used in a large jazz ensemble, including of sight-reading and soloing.
A continuation of MUSIC 252, this course is for musicians wishing to further investigate challenging professional level material in the jazz canon ranging from Duke Ellington and Fletcher Henderson (1920’s) to the present day (Maria Schneider, Bob Belden). Frequent public performances. May be repeated three times. P/NP
LMC: DA
Transfer: UC, CSU

MUSIC-254 Night Jazz Band V
5 Hours Lab 1 Unit
Advisory: Advanced mastery of instrument(s) commonly used in a large jazz ensemble, including of sight-reading and soloing.
A continuation of MUSIC 253, this course is for musicians wishing to further investigate challenging professional level material in the jazz canon ranging from Duke Ellington and Fletcher Henderson (1920’s) to the present day (Maria Schneider, Bob Belden). Frequent public performances. May be repeated three times. P/NP
LMC: DA
Transfer: UC, CSU

Music
MUSIC-253  Night Jazz Band IV
5 Hours Lab  1 Unit
Advisory: Advanced mastery of instruments(s) commonly used
in a large jazz ensemble, including sight-reading and soloing
A continuation of MUSIC 252, this course is for musicians wish-
ing to further investigate challenging professional level mate-
rial in the jazz canon ranging from Duke Ellington and Fletcher
Henderson (1920’s) to the present day (Maria Schneider, Bob
Belden). Frequent public performances. May be repeated
three times. P/NP
LMC: DA
Transfer: UC, CSU

MUSIC-298  Community Music Activity
30 to 90 total hours lab  .5-1 Unit
Prerequisite: Skill in a musical performance medium related to
the type of class / audition by instructor
Advisory: Eligible for ENGL 90
A performance-oriented activity ranging from marching band
techniques to sight-reading music to orchestral techniques.
Units and required hours vary depending on activity. Each may
be repeated three times.
298 A/B - Marching Band Techniques /
298C/D - Educators Band /
298 E/F - Contra Costa Chamber Orchestra /
298 G/H - Concert Band Sight-reading /
298 I/J - Jazz Band Sight-reading /
298 K/L - Choral Ensemble /
298 M/O - Choral Sight-reading. P/NP
LMC: DA
Transfer: CSU

MUSIC-299  Honors Music Activity
30 to 90 total hours lab  .5-1 Unit
Prerequisite: Selection for participation into Honors Musical
Performance Group / Consent of Instructor
Advisory: Eligible for ENGL 90
Development of advanced musical performance techniques
through the selection to and participation in a community-
sponsored select performance group in one or more of the
following fields: Each may be repeated three times.
(299A) Instrumental - Band,
(299B) Instrumental - Wind Ensemble,
(299C) Instrumental - Jazz,
(299D) Instrumental - Orchestra,
(299E) Instrumental - Chamber,
(299F) Instrumental - Marching,
(299G) Vocal - Choral,
(299H) Vocal - Vocal Ensembles,
(299I) Vocal - Jazz. SC
LMC: DA
Transfer: CSU

MUSIC-900s  Selected Topics in Music
DA varies with course content.
RNURS-020  Transition to the RN Program
18 total hours lecture  1 Unit
Prerequisite: Must be accepted to the LVN to RN Transition Program
This course, designed for the LVN who is transitioning into the Registered Nursing Program, introduces the LVN to the program's goals and expectations, reviews pertinent LVN course content (drug calculations; labor and delivery), and provides guidance on critical thinking, test taking, and clinical decision making. May not be repeated.  P/NP
LMC: NDA
Transfer: CSU

RNURS-022  Fundamentals of Nursing Practice
4 hours lecture, 17.5 hours lab  9.5 Units
Prerequisite: Must be admitted to the Registered Nursing Program.
Co-requisite: Concurrent enrollment in RNURS 23 and 24
Basic concepts that provide the foundation upon which homeostasis is maintained in adults and/or children. Common threads integrated throughout the program are initiated: Nursing Process, Nutrition, Pharmacology, Developmental Levels, Cultural Diversity, Communication and Professional Role. Concurrent practice in the college laboratory and community agencies is included. May not be repeated.  LR
LMC: DA
Transfer: CSU

RNURS-023  Nursing Skills Simulation I
3 hours lab  1 Unit
Prerequisite: Must be admitted to the Registered Nursing Program.
Co-requisite: Concurrent enrollment in RNURS 22 and 24
Instructor demonstration and student return demonstration of nursing skills related to Foundations of Nursing Practice. Simulation of patient care situations provide for development of proficiency in preparation for actual patient care in the clinical setting. May not be repeated.  LR
LMC: DA
Transfer: CSU

RNURS-024  Pharmacology for the RN Program I
1 hour lecture  1 Unit
Prerequisite: Must be admitted to the Registered Nursing Program.
Co-requisite: Concurrent enrollment in RNURS 22 and 23
This course is designed to introduce beginning nursing students to their role and responsibilities during safe administration of medications in the clinical setting. Basic principles of medication administration such as the Five Rights (Right Patient, Right Drug, Right Dose, Right Time and Right Route). Pharmacodynamics of drug absorption, metabolism, and distribution through various routes along with other basic principles of pharmacology are introduced. Basic calculation of drug dosages is also initiated. May not be repeated.  LR
LMC: DA
Transfer: CSU

RNURS-026  Nursing in Health and Illness I
4 hours lecture, 17.5 hours lab  9.5 Units
Prerequisite: Must have been admitted to the RN Program and have completed RNURS 22, 23 and 24 or equivalent satisfactorily.
Co-requisite: Concurrent enrollment in RNURS 27 and 28.
This course expands upon the concepts presented in RNURS 22. This semester includes Medical-Surgical, Peri-Operative, Maternity and New Born Nursing Care. Concepts include principles of care to maintain and restore homeostatic mechanisms in patients of all ages with and emphasis on Patient and Family Teaching, Disease Prevention and Health Promotion. Concurrent practice in the college laboratory and clinical experience in community facilities is provided. May not be repeated.  LR
LMC: DA
Transfer: CSU

RNURS-027  Nursing Skills Simulation II
3 hours lab  1 Unit
Prerequisite: Must have been admitted to the RN Program and have completed RNURS 22, 23 and 24 or equivalent satisfactorily.
Co-requisite: Concurrent enrollment in RNURS 26 and 28.
Instructor demonstration and student return demonstration of higher level nursing concepts related to Medical-Surgical, Peri-Operative, Maternity, and Newborn Nursing Care. Simulation of patient care situations provide for development of proficiency in preparation for actual patient care in the clinical setting. May not be repeated.  LR
LMC: DA
Transfer: CSU

RNURS-028  Pharmacology for RN Program II
1 hour lecture  1 Unit
Prerequisite: Must have been admitted to the RN program and have completed RNURS 22, 23 and 24 or equivalent satisfactorily.
Co-requisite: Concurrent enrollment in RNURS 26 and 27.
Second semester of pharmacology expands upon the principles and drug administration techniques introduced in the first semester. Specific drug classifications covered include medications used in Peri-Operative, Maternity, Newborn, and Diabetic Care. Antibiotic drug classes are presented in dept. Drug dosage calculations including insulin administration algorithms continue to be a focus of this course. May not be repeated.  LR
LMC: DA
Transfer: CSU
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>RNURS-030</td>
<td>Leadership/Management and Professionalism in Nursing</td>
<td>1</td>
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<td>Prerequisite: Must have been admitted to the Registered Nursing Program.</td>
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<td>Co-requisite: Concurrent enrollment in RNURS 36, 38 and 39.</td>
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<td>This course introduces the students to the professional role of the registered nurse in the healthcare setting. Topics covered include, but are not limited to, nursing practice and the law; ethics and ethical principles; dealing with problems and conflicts; organizational structures in healthcare; delegation of client care; scope of practice and management of client care. Leadership and management principles are applied to the health care field. May not be repeated. LR</td>
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<td>Transfer: CSU</td>
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<tr>
<td>RNURS-031</td>
<td>Nursing in Health and Illness II</td>
<td>4</td>
<td>9.5</td>
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<td>Prerequisite: Must have been admitted to the Registered Nursing Program and have completed RNURS 26, 27, and 28 or equivalent satisfactorily.</td>
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<td>Co-requisite: Concurrent enrollment in RNURS 33 and 34.</td>
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<td>Expands upon the concepts presented in RNURS 22 and 26 by introducing principles of care to maintain and/or restore homeostatic mechanism in acute health problems. Prototype disease processes associated with each concept are studied in relation to preventive and restorative nursing care. Concurrent practice in the college laboratory and clinical experience in community facilities. May not be repeated. LR</td>
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<td>LMC: DA</td>
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<td>Transfer: CSU</td>
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<td>RNURS-033</td>
<td>Nursing Skills Simulation III</td>
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<td>Prerequisite: Must have been admitted to the Registered Nursing Program and have completed RNURS 26, 27, and 28 or equivalent satisfactorily.</td>
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<td></td>
<td>Co-requisite: Concurrent enrollment in RNURS 31 and 34.</td>
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<td>Instructor demonstration and student return demonstration of higher level nursing concepts related to Suctioning and Tracheostomy Care, Chest Tube Management, IV Management, Epidural and Patient Controlled Analgesia, Ostomy Care, and Laboratory Values. Simulation of patient care situations provide for development of proficiency in preparation for actual patient care in the clinical setting. May not be repeated. LR</td>
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<td>Transfer: CSU</td>
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<td>RNURS-034</td>
<td>Pharmacology for RN Program III</td>
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<td>Prerequisite: Must have been admitted to the Registered Nursing Program and have completed RNURS 26, 27, and 28 or equivalent satisfactorily.</td>
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<td>Co-requisite: Concurrent enrollment in RNURS 31 and 33.</td>
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<td>Third semester of pharmacology principles expands upon the principles and drug administration techniques introduced in the previous two semesters. Specific drug classifications covered include but are not limited to Cardiac Glycosides, Anticoagulants, Antifungal, Antiviral, Pain, Anti-Diabetic Medications. Drug dosage calculations for IV drip rates and pediatric drug dosages are introduced. May not be repeated. LR</td>
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<td>RNURS-036</td>
<td>Nursing in Health and Illness III</td>
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<td>9.5</td>
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<td>Prerequisite: Must have been admitted to the RN program and have completed RNURS 31, 33, and 34 or equivalent satisfactorily.</td>
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<td>Co-requisite: Concurrent enrollment in RNURS 30, 38 and 39.</td>
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<td>Presents advanced concepts and skills in caring for the client with critical or multiple health problems. Emphasizes rehabilitation and adaptation to a compromised and/or declining health status. Concurrent practice in the college laboratory and clinical experience in community facilities. May not be repeated. LR</td>
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<td>RNURS-038</td>
<td>Nursing Skills Simulation IV</td>
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<td>Prerequisite: Must have been admitted to the RN program and have completed RNURS 31, 33 and 34 or equivalent satisfactorily.</td>
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<td>Co-requisite: Concurrent enrollment in RNURS 36 and 39.</td>
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<td>Instructor demonstration and student return demonstration of higher level nursing concepts including but not limited to IV bolus medications, IV insertion, blood draws, central lines, and rhythm strip interpretation. Simulation of patient care situations provide for development of proficiency in preparation for actual patient care the clinical setting. May not be repeated. LR</td>
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<td>LMC: DA</td>
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<td>RNURS-039</td>
<td>Pharmacology for RN Program IV</td>
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<td>Prerequisite: Must have been admitted to the RN program and have completed RNURS 31, 33 and 34 or equivalent satisfactorily.</td>
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<td>Co-requisite: Concurrent enrollment in RNURS 36 and 38.</td>
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<td>This fourth semester of pharmacology expands upon the principles and drug administration introduced in the previous three semesters. Specific drug classifications covered include, but are not limited to anti-anxiety agents, anti-depressive agents, anti-psychotics, sedative-hypnotics, and drugs to control cardiac dysrhythmia and seizures. Drug dosage calculations continue to be a focus of this course. May not be repeated. LR</td>
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<td>LMC: DA</td>
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<td>Transfer: CSU</td>
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</tbody>
</table>
RNURS-098 Independent Study in Registered Nursing
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC
LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.
Transfer: Independent Study courses may be DA or transferable depending on specific course. See your counselor.

RNURS-099 Cooperative Education in Registered Nursing
Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC
LMC: DA
Transfer: CSU

RNURS-900s Selected Topics in Registered Nursing
DA varies with course content.

Nursing - Vocational

VONUR-004 Introductory Concepts to Clinical Pharmacology
18 total hours lecture 1 Unit
Prerequisite: Admission to Vocational Nursing Program
Co-requisite: Concurrent enrollment in VONUR 5, 6, and 7
Presents introductory core concepts of pharmacology including drug regulations, classifications, schedules, categories, delivery systems calculations, drug administration, effects of medications on older adults, management of pain in older adults and substance abuse. May not be repeated. LR
LMC: DA

VONUR-005 Fundamentals of Vocational Nursing
6 hours lecture 6 Units
Prerequisite: Admission to the Vocational Nursing Program.
Co-requisite: Concurrent enrollment in VONUR 4, 6, and 7
Emphasizes basic nursing skills necessary to create and maintain a hygienic, comfortable, safe patient environment. Utilizes the concept of homeostasis as the basis for organizing nursing content. May not be repeated. LR
LMC: DA

VONUR-006 Fundamentals of Vocational Nursing Practice
19 hours lab 5.5 Units
Prerequisite: Admission to the Vocational Nursing Program.
Co-requisite: Concurrent enrollment in VONUR 4, 5, and 7
Supervised clinical instruction in the implementation of basic fundamental nursing skills introduced in VONUR 5. Concurrent supervised practice in college lab with collaborative peer study groups and instructor. May not be repeated. LR
LMC: DA

VONUR-007 Vocational Nursing Role Relationships
18 total hours lecture 1 Unit
Prerequisite: Admission to the Vocational Nursing Program.
Co-requisite: Concurrent enrollment in VONUR 4, 5, and 6
Introduces the student to role-relationships, and the ethical and legal responsibilities of the student nurse. Explores the evolution of the Vocational Nursing practice roles. May not be repeated. LR
LMC: DA

VONUR-008 Medical Terminology for Healthcare Occupations
1 hour lecture 1 Unit
Advisory: Eligibility for ENGL 90
Provides an integrated approach to medical terminology for the healthcare professional and/or student. The course may also be used for continuing education units (CEU’s) for the LVN. May not be repeated. LR
LMC: DA

VONUR-010 Intermediate Concepts to Clinical Pharmacology
18 total hours lecture 1 Unit
Prerequisite: Admission to Vocational Nursing Program. Completion of VONUR 4, 5, 6, and 7 or equivalent.
Co-requisite: Concurrent enrollment in VONUR 11 and 12
Presents intermediate medical / surgical core concepts of clinical pharmacology which includes major body systems, diseases / disorders, and methods drugs are used therapeutically to treat them. May not be repeated. LR
LMC: DA

VONUR-011 Medical Surgical Nursing
5 hours lecture 5 Units
Prerequisite: Completion of VONUR 4, 5, 6, and 7 or equivalent and BIOSC 30
Co-requisite: Concurrent enrollment in VONUR 10, 12 and NUTRI 55
Presents the basic causes and symptoms of disease and/or health problems of adults. Introduces nursing principles to maintain and/or restore homeostasis, and provide physiological and emotional comfort and safety. Builds on the nursing process as a systematic approach to providing preventive and restorative nursing care. May not be repeated. LR
LMC: DA
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>VONUR-012</td>
<td>Medical-Surgical Nursing Practice</td>
<td>19</td>
<td>Supervised clinical instruction in the planning, implementation and evaluation of care given to adult clients with medical/surgical conditions in community agencies. Concurrent supervised practice in college lab with collaborative peer study teams and instructor. May not be repeated. LR</td>
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<td></td>
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<td>5.5</td>
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<tr>
<td></td>
<td><strong>Prerequisite:</strong> Completion of VONUR 4, 5, 6, and 7 or equivalent and BIOSC 30</td>
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<tr>
<td></td>
<td><strong>Co-requisite:</strong> Concurrent enrollment in VONUR 10 and 11</td>
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<tr>
<td>VONUR-015</td>
<td>Advanced Concepts to Clinical Pharmacology</td>
<td>18</td>
<td>Presents advanced core concepts of clinical pharmacology which includes medications used in the treatment of maternity, newborn, pediatric and psychiatric clients. May not be repeated. LR</td>
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<td></td>
<td><strong>Prerequisite:</strong> Admission to Vocational Nursing Program. Completion of VONUR 4, 5, 6, 7, 10, 11, and 12 or equivalent.</td>
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<tr>
<td></td>
<td><strong>Co-requisite:</strong> Concurrent enrollment in VONUR 16, 17, and 18</td>
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<tr>
<td>VONUR-016</td>
<td>Family Centered Nursing</td>
<td>6</td>
<td>Introduces the concept of family centered nursing practice. Instruction includes principles of nursing to maintain and/or restore homeostasis in clients with common disease conditions and health needs seen in pregnancy, infancy, childhood, and the adult client with psychiatric disorders. In addition the effects of illness on the family unit and on individual development. May not be repeated. LR</td>
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<td></td>
<td><strong>Prerequisite:</strong> Completion of VONUR 4, 5, 6, 7, 10, 11, and 12 or equivalent and BIOSC 30 and NUTRI 55</td>
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<tr>
<td>VONUR-017</td>
<td>Family Centered Nursing Practice</td>
<td>19</td>
<td>Family centered clinical practice of the family including pregnancy, infancy, childhood, and the adult psychiatric client. Concurrent supervised practice in college lab with collaborative peer study groups and instructor. May not be repeated. LR</td>
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<tr>
<td></td>
<td><strong>Prerequisite:</strong> Completion of VONUR 4, 5, 6, 7, 10, 11, and 12 or equivalent and BIOSC 30 and NUTRI 55</td>
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<tr>
<td>VONUR-018</td>
<td>Professional Issues in Vocational Nursing</td>
<td>1</td>
<td>Introduces the student to the role, responsibilities and the changes in society affecting nursing education and practice. May not be repeated. LR</td>
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<td><strong>Prerequisite:</strong> Completion of VONUR 4, 5, 6, 7, 10, 11, and 12 or equivalent and BIOSC 30 and NUTRI 55</td>
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<tr>
<td>VONUR-020</td>
<td>Clinical Pharmacology and Skills for Medication Administration for Health-care Occupations</td>
<td>3</td>
<td>A systematic review of mathematics and a simplified method of calculating drug dosages for medication administration, common drug classifications and examples of common drugs in each classification. This course is open to anyone who is presently in or interested in the Allied Health field. This class can be used to fulfill the CEU requirements for LVN relicensure. May not be repeated. LR</td>
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<tr>
<td>VONUR-030</td>
<td>Core Curriculum in IV Therapy for Licensed Vocational Nurses</td>
<td>28</td>
<td>Instruct LVN’s in the purpose of IV therapy, legal aspects, nursing management of IV’s, and possible complications. Upon attending all class sessions, passing a post test with 75% and successfully completing three IV venipunctures, the participant will receive a state certificate for IV therapy. Certification requires a valid LVN license. Thirty CE hours will be awarded upon completion of class room activities. Provider #00209. They class may be taken for CEU’s only. A $20.00 lab fee is required. May not be repeated. SC</td>
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<td></td>
<td><strong>Prerequisite:</strong> Must be a Licensed Vocational Nurse</td>
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<td>VONUR-098</td>
<td>Independent Study in Vocational Nursing</td>
<td>3</td>
<td>Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC</td>
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<td>VONUR-099</td>
<td>Cooperative Education in Vocational Nursing</td>
<td>3</td>
<td>Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC</td>
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<tr>
<td>VONUR-900s</td>
<td>Selected Topics in Vocational Nursing</td>
<td></td>
<td>DA varies with course content.</td>
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</table>
Nutrition

NUTRI-055 Introduction to Nutrition
3 hours lecture 3 Units
Advisory: ENGL 90
A study of the basic principles of nutrition to be utilized for personal and family needs. Topics covered include the significance of food in the life of man; the various nutrients and energy; nutrition throughout the life cycle; selection of an adequate diet for health and disease prevention; the problems of over nutrition and under nutrition; and sources of valid nutrition information. May not be repeated. LR
LMC: DA
Transfer: UC, CSU

NUTRI-098 Independent Study in Nutrition
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) SC
LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.
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NUTRI-099 Cooperative Education in Nutrition
Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. SC
LMC: DA
Transfer: CSU

NUTRI-900s Selected Topics in Nutrition
DA varies with course content.

Philosophy

PHIL-002 Contemporary Ethical Issues
3 hours lecture, 1 hour lab 3 Units
Prerequisite: Eligibility for or completion of ENGL 100
(Formerly PHIL 2LS) An introduction to ethics that focuses on classical ethical theories and their application to selected contemporary ethical issues such as environmental protection, reproductive rights, genetic engineering, and affirmative action. This course meets the General Education requirement for Ethical Inquiry. May not be repeated. LR
LMC: GE: Humanities; GCR: Ethical Inquiry; DA
Transfer: UC, CSU Gen. Ed. Area C2, IGETC Area 3B

PHIL-033 Introduction to the History of Political Thought: The Problem of Democracy
3 hours lecture 3 Units
Advisory: ENGL 100
(Formerly PHIL 33LS) Same as POLSC 33. This course will examine the history and development of a 2,500 year old tradition of political thought; a traditional originating and in the 18th century, reanimating itself with the concern to understand the fragility of "republican democracy". While a comparative attempt to review certain non-democratic ideas and experiences will be made, the primary goal of instruction is to introduce students to the difficulties inherent in sustaining any viable democratic regime, including notably the American system of which they are part. The course will use an interdisciplinary, transcultural and comparative approach which is compatible with the discursive, analytical and interpretive nature of the study of primary texts and authors in historical context. May not be repeated. SC
LMC: GE: Humanities; DA
Transfer: UC, CSU Gen. Ed. Area C2, D8, IGETC Area 3B, 4H

PHIL-040 Introduction to Philosophy
3 hours lecture 3 Units
(Formerly PHIL 40LS) This course introduces the student to philosophy in both the Western and non western traditions. Treatment of the Western tradition emphasizing an historical development that begins with Classical Greece and ends with 20th century existentialism. Discussion of philosophers between these two periods will focus on the tension between faith and reason during the Middle Ages, the eventual triumph of a paradigm uniting reason and empirical science since the Renaissance, and attempts to remodel this paradigm in modern times. Spinoza, Kierkegaard, and existentialist philosophy serve as a bridge to the spiritual paths offered by Buddhism, Taoism and other philosophies of the Eastern tradition. The application of metaphysical principles to everyday life is also demonstrated through certain North American shamanic systems. Meets the LMC General Education Requirement for Humanities. May not be repeated. LR
LMC: GE: Humanities; DA
Transfer: UC, CSU Gen. Ed. Area C2, IGETC Area 3B

PHIL-041 Critical Thinking
3 hours lecture 3 Units
(Formerly PHIL 41LS) An understanding of how the principles of critical analysis can help to solve pressing current issues. The course will stress methods of locating arguments and critically evaluating their structural elements. The interrelationship of knowledge across disciplines will be demonstrated, particularly linkage of the reasoning process with other disciplines. Reasoning skills will be applied to the arguments of major thinkers from a variety of cultures, and opportunities will be provided for students to create arguments for and against a current issue of their choice. Meets the LMC General Education Requirement for Communication / Critical Thinking. May not be repeated. LR
LMC: GE: Communication/Critical Thinking; DA
Transfer: UC, CSU Gen. Ed. Area A3
PHIL-042 Comparative Religion
3 hours lecture 3 Units
(Formerly PHIL 42LS) Comparison of the great religions of the world, first in regard to their ethical teachings and then in regard to their theory of first principles, ultimate reality, the nature of being, and the structure of the universe. Comparisons will be primarily drawn from Hinduism, Buddhism, Confucianism, Judaism, Christianity, and Islam. May not be repeated. SC
LMC: GE: Humanities; DA
Transfer: UC, CSU Gen. Ed. Area C2, IGETC Area 3B

PHIL-098 Independent Study in Philosophy
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC
LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.
Transfer: Independent Study courses may be DA or transferable depending on specific course. See your counselor.

PHIL-099 Cooperative Education in Philosophy
Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC
LMC: DA
Transfer: CSU

PHIL-900s Selected Topics in Philosophy
DA varies with course content.

Physical Education

PE-002 Beginning Step Aerobics
1.5-3 hours activity .5-1 Unit
Introduction to step aerobics, designed especially for beginning students, but open to those with experience. An exciting, high intensity, low impact workout, set to music. May be repeated three times. SC
LMC: DA
Transfer: UC, CSU

PE-006 Physical Fitness
1.5-3 hours activity .5-1 Unit
Designed to introduce the student to the elements, understanding and knowledge of physical fitness. Course activities such as walking or jogging, floor exercises with hand weights, and low impact aerobics will be implemented to improve and maintain one’s fitness level. May be repeated three times. SC
LMC: DA
Transfer: UC, CSU

PE-008 Weight Training
1.5-3 hours activity .5-1 Unit
This course includes instruction in all elements of weight training. It will involve techniques, safety procedures, knowledge of muscle groups, equipment use, warm-up, strength and endurance training, exercise progression and improved fitness. May be repeated three times. SC
LMC: DA
Transfer: UC, CSU

PE-010 Circuit Training
1.5 to 3 hours activity .5-1 Unit
Circuit training is an aerobic workout designed to increase strength, muscular endurance, cardiovascular endurance, and flexibility. Students will learn about basic muscle groups used, and cardiovascular fitness by learning to monitor and control their heart rate during exercise. Circuit training will help attain physical fitness and maintain wellness. May be repeated three times. SC
LMC: DA
Transfer: UC, CSU

PE-011 Super Shape-Up
1.5-3 hours activity .5-1 Unit
Super shape-up provides a total fitness exercise program for the individual interested in developing flexibility, cardiovascular fitness, muscular strength, and endurance; nutrition and weight control; and stress management. This course meets the Proficiency / Graduation Requirement for Physical Education. May be repeated three times. SC
LMC: DA
Transfer: UC, CSU

PE-012 Power Walk, Stretch and Tone
1.5-3 hours activity .5-1 Unit
Power Walk, Stretch and Tone provides a total fitness exercise program, with an emphasis on lifelong fitness and developing flexibility, cardiovascular fitness, muscular toning, and weight control. This course meets the Proficiency / Graduation Requirement for Physical Education. May be repeated three times. SC
LMC: DA
Transfer: UC, CSU

PHIL-042 Comparative Religion
PHIL-098 Independent Study in Philosophy
PHIL-099 Cooperative Education in Philosophy
PHIL-900s Selected Topics in Philosophy

Physical Education

PE-002 Beginning Step Aerobics
PE-006 Physical Fitness
PE-008 Weight Training
PE-010 Circuit Training
PE-011 Super Shape-Up
PE-012 Power Walk, Stretch and Tone
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Activity</th>
<th>Units</th>
<th>Advisory</th>
<th>Description</th>
<th>Transfer Areas</th>
</tr>
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<tbody>
<tr>
<td>PE-013</td>
<td>Introduction to Triathlon</td>
<td>1 hour</td>
<td>.5-1 Unit</td>
<td>Some basic swimming skills</td>
<td>This course is designed to incorporate a varied program of training for both the fitness/recreational athlete as well as the competitive age group racer. The class will cover training and racing techniques for each of the three sports as well as putting them together in the popular formats or Duathlons and Triathlons. Personal goal setting will be a major emphasis in this course. May be repeated three times. SC</td>
<td>UC, CSU</td>
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<tr>
<td>PE-014</td>
<td>Volleyball</td>
<td>1.5-3 hrs</td>
<td>.5-1 Unit</td>
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<td>This course is designed to help the student with basic volleyball skills such as serving, blocking, digging, setting, and spiking. Also emphasis will be placed on knowledge of rules and team strategies. May be repeated three times. SC</td>
<td>UC, CSU</td>
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<tr>
<td>PE-016</td>
<td>Beginning Swimming</td>
<td>1.5-3 hrs</td>
<td>.5-1 Unit</td>
<td></td>
<td>This course will introduce the student to beginning swimming. A broad range of beginning swim skills will be taught including overcoming the fear of water and instruction in basic swimming strokes and skill, along with safety skills. May be repeated three times. SC</td>
<td>UC, CSU</td>
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<tr>
<td>PE-017</td>
<td>Lap Swimming for Fitness</td>
<td>1.5 to 3 hours</td>
<td>.5-1 Unit</td>
<td></td>
<td>Increasing your physical fitness through lap swimming and improving your skills through swimming workouts are both forms of healthy conditioning. Swimming is an activity with which to improve your fitness and both muscular and cardio-respiratory endurance may be developed through participation. May be repeated three times. SC</td>
<td>UC, CSU</td>
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<tr>
<td>PE-020</td>
<td>Exerjazz for Fitness</td>
<td>1.5-3 hrs</td>
<td>.5-1 Unit</td>
<td></td>
<td>Designed for the student with little experience in rhythmic exercise or dance; this course is designed for the beginner as an exciting low-impact aerobic activity that combines exercise (exertion) and dance steps (rhythical movement) to promote lifelong fitness. May be repeated three times. SC</td>
<td>UC, CSU</td>
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<tr>
<td>PE-022</td>
<td>Bowling</td>
<td>1.5 to 3 hrs</td>
<td>.5-1 Unit</td>
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<td>Instruction and practice in the stance, approach, release and roll; study of rules, scoring and etiquette; participation in league bowling. May be repeated three times. SC</td>
<td>UC, CSU</td>
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<tr>
<td>PE-024</td>
<td>Team Sports</td>
<td>1.5-3 hrs</td>
<td>.5-1 Unit</td>
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<td>This course is designed to introduce the student to all the basic elements of the sports of basketball, volleyball and softball. The intent of the course will be to engage the students in the practice of all the basic skills through individual and group drills. May be repeated three times. SC</td>
<td>UC, CSU</td>
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<tr>
<td>PE-026</td>
<td>Soccer-Coed</td>
<td>1.5-3 hrs</td>
<td>.5-1 Unit</td>
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<td>This course will introduce the student to a broad range of soccer skills such as kicking, trapping, throwing, and teamwork in soccer. Knowledge of the rules and strategies will be discussed. May be repeated three times. SC</td>
<td>UC, CSU</td>
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<tr>
<td>PE-030</td>
<td>Tennis</td>
<td>1.5-3 hrs</td>
<td>.5-1 Unit</td>
<td></td>
<td>Instruction in fundamentals of tennis including forehand and backhand ground strokes; serve and volley; rules, scoring system and tennis etiquette. The basic tactics of singles and doubles and how to play the game, involving strategy, will be taught. Some competition may be included toward the end of the semester. Student must supply own racket and three new balls. May be repeated three times. SC</td>
<td>UC, CSU</td>
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<tr>
<td>PE-033</td>
<td>Cardio Kickboxing</td>
<td>1.5-3 hrs</td>
<td>.5-1 Unit</td>
<td></td>
<td>Cardio kickboxing will combine punches, kicks, sports conditioning, and drills to provide a workout that will improve cardiovascular fitness, muscular strength and flexibility. Designed for all fitness levels. May be repeated three times. SC</td>
<td>UC, CSU</td>
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<tr>
<td>PE-042</td>
<td>Golf</td>
<td>1.5 to 3 hrs</td>
<td>.5-1 Unit</td>
<td></td>
<td>This course includes instruction in all aspects of the game of golf. It will involve knowledge of the stance, grip, swing, chipping, putting, etiquette, scoring, and strategy. May be repeated three times. SC</td>
<td>UC, CSU</td>
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</tbody>
</table>
PE-046 Basketball
3 hours activity  1 Unit
This course is designed to introduce the student to all the basic elements of the sport of basketball. The intent of the course will be to engage the students in the practice of all the basic skills through individual and group drills. This course meets the Proficiency / Graduation Requirement for Physical Education. May be repeated three times. SC
LMC: DA
Transfer: UC, CSU

PE-048 Adaptive Physical Education
1.5-3 hours activity   .5-1 Unit
Prerequisite: Student must bring a medical release form to the first class meeting.
Student must bring a medical release form to the first class meeting. Adaptive P.E. is designed to meet the needs of the physically limited student. This course will provide activities in the three major areas: 1) general strengthening/conditioning; 2) hydrotherapy/swim; 3) cardiovascular conditioning. May be repeated three times. SC
LMC: DA
Transfer: UC, CSU

PE-049 Total Body Sculpting
1.5 to 3 hours activity   .5-1 Unit
Designed for total body toning through use of resistance bands, handweights, Pilates exercises for core strength and flexibility for lifelong fitness. May be repeated three times. SC
LMC: DA
Transfer: UC, CSU

PE-050 Introduction to Ballet and Jazz Dance
1.5-3 hours activity   .5-1 Unit
An introductory course for the beginning dance student. Emphasis is on ballet technique and vocabulary and its application to beginning lyrical jazz dance. This is an excellent foundation course for beginners, as well as being an excellent supplemental technical training for others. This course meets the Proficiency / Graduation Requirement for Physical Education. May be repeated three times. SC
LMC: DA
Transfer: UC, CSU

PE-051 Group Dance Choreography
1.5-3 hours activity   .5-1 Unit
Co-requisite: PE 50 (Dance)
Advisory: PE 54 or PE 55
Group Dance Choreography provides an opportunity for the beginning dance student to discover his/her own innate capacity for the communication of ideas, thoughts, and feelings through the medium of dance. Students learn to create their own dances from problem-solving assignments of spatial design, rhythm, quality of energy—with the enrichment of multicultural perspectives in dance history, art, music, literature, or poetry. May be repeated three times. SC
LMC: DA
Transfer: UC, CSU

PE-052 Beginning Jazz Dance
1.5-3 hours activity   .5-1 Unit
Designed for the student with little experience in ballet or jazz dance; this course teaches students basic dance technique and choreography. May be repeated three times. SC
LMC: DA
Transfer: UC, CSU

PE-053 Intermediate Jazz Dance
1.5-3 hours activity   .5-1 Unit
Designed for the student with experience in ballet or jazz dance; this course teaches students intermediate dance technique and choreography. May be repeated three times. SC
LMC: DA
Transfer: UC, CSU

PE-054 Advanced Jazz Dance
3 hours activity   1 Unit
Advisory: Prior beginning dance; eligibility for ENGL 90
Designed for the dance student with training in ballet, jazz, modern, Afro, or trend styles of dance. May be repeated three times. SC
LMC: DA
Transfer: UC, CSU

PE-055 Dance Production Workshop
1.5-3 hours activity   .5-1 Unit
Advisory: PE 53 or PE 54 or PE 55 or equivalent
Dance Production Workshop provides an opportunity for the dance student to perform. This course is designed to transform dance composition into a performance experience. Students may audition for the spring performance and use Dance Production Workshop as a foundation for dance composition, technical refinement, artistic and emotional expression, group or solo rehearsal, costuming, staging, and performance. May be repeated three times. SC
LMC: DA
Transfer: UC, CSU

PE-056 Yoga for Health and Fitness
3 hours activity   1 Unit
This course introduces the student to basic yoga postures and breathing techniques to enhance strength, flexibility, muscle control, mental concentration, alertness and the reduction of stress and tension in everyday life. May be repeated three times. SC
LMC: DA
Transfer: UC, CSU

PE-057A Yoga for Health and Fitness
4.5 hours activity   1.5 Unit
The student will learn basic yoga poses and breathing techniques which will extend into a more progressive routine to enhance increased strength, flexibility, muscle control, heightened mental concentration and alertness in everyday life. This course will help the student progress into yoga using each new skill
to advance to the next more complex movement. This course will also include an extended relaxation technique to help reduce stress and tension in daily living. May be repeated three times. SC

LMC: DA
Transfer: UC, CSU

PE-058 Body Revival
1.5 to 3 hours activity .5-1 Unit

Body revival is a mind-body class incorporating fitness walking and yoga with an emphasis on lifelong fitness, developing cardiovascular fitness, strength and flexibility. May be repeated three times. SC

LMC: DA
Transfer: UC, CSU

PE-066 Intramural Sports
1.5-3 hours activity .5-1 Unit

The director of intramural activities will establish a schedule of activities in competition for various sports and games. These activities will include: basketball, softball, tennis, racquetball, handball, badminton, volleyball, horseshoes, etc. One-half unit of credit will be granted for every 27 hours of participation. May be repeated three times. P/NP

LMC: DA
Transfer: UC, CSU

PE-098 Independent Study in Physical Education
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC

LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.

Transfer: Independent Study courses may be DA or transferable depending on specific course. See your counselor.

PE-099 Cooperative Education in Physical Education
Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC

LMC: DA
Transfer: CSU

PE-900s Selected Topics in Physical Education
DA varies with course content.

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**Physical Science**

**PHYS-005 General Physical Science**
3 hours lecture, 1 hour lab 3 Units

Advisory: Eligibility for ENGL 90

(Formerly PHYSC 5LS) An introduction to the physical sciences. An intradisciplinary approach to significant concepts and principles in physics, chemistry, astronomy, and earth sciences. Emphasis will be placed on the creative process of scientific inquiry by which current scientific understanding has evolved, on the aesthetics of science, and on the limitation and implications of scientific knowledge. Throughout the course and particularly in the lab, opportunities will be provided to develop skills in critical thinking, problem-solving, and effective learning. This course meets the General Education Requirement for Science. May not be repeated. LR

LMC: GE: Physical Sciences; DA
Transfer: UC, CSU Gen. Ed. Area B1, IGETC Area 5A

**PHYS-098 Independent Study in Physical Science**

Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC

LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.

Transfer: Independent Study courses may be DA or transferable depending on specific course. See your counselor.

**PHYS-099 Cooperative Education in Physical Science**

Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC

LMC: DA
Transfer: CSU

**PHYS-900s Selected Topics in Physical Science**

DA varies with course content.
Physics

**PHYS-015 Introduction to Physics**
3 hours lecture, 3 hours lab 4 Units
Prerequisite: One year high school algebra
(Formerly PHYS 15LS) An integrated study of physical concepts and principles with laboratory methods and techniques. An intradisciplinary approach will be used to develop an understanding of the nature of energy and matter interactions through a study of such topics as motion, heat, sound, electricity, light, and magnetism. Emphasis is placed on the creative process of scientific inquiry, on the aesthetics of science, and on the limitations and implications of scientific knowledge. Skills in critical thinking, problem-solving, and effective learning will be developed through the course. This course meets the General Education requirement for Science. May not be repeated. LR
LMC: GE: Physical Sciences; DA
Transfer: UC, CSU Gen. Ed. Area B1, B3, IGETC Area 5A

**PHYS-035 General College Physics I**
3 hours lecture, 4 hours lab 4 Units
Prerequisite: High school physics and trigonometry
(Formerly PHYS 35LS) An integrated study of the basic concepts, principles, and laws underlying physical phenomena and processes. An intradisciplinary approach will be taken in the portrayal of the nature, the aesthetics, and the relevance of science. Energy will be the unifying theme in treating mechanics, thermodynamics, and oscillations. Emphasis will be placed on the creative process of scientific inquiry. Throughout the course, skills in critical thinking, problem-solving, and effective learning will be developed. This is the first semester of a year course in general college physics. This course is offered in the fall only. This course meets the General Education requirement for Science. May not be repeated. (CAN PHYS SEQ A) LR
LMC: GE: Physical Sciences; DA
Transfer: UC, CSU Gen. Ed. Area B1 and B3, IGETC Area 5A

**PHYS-036 General College Physics II**
3 hours lecture, 4 hours lab 4 Units
Prerequisite: PHYS 35 or equivalent
A continuation of PHYS 35, covering the areas of electricity and magnetism, geometrical and physical optics, fluids, sound, quantum physics, relativity, and nuclear physics. This course is offered in the spring only. May not be repeated. (CAN PHYS SEQ A) LR
LMC: DA
Transfer: UC, CSU Gen. Ed. Area B1, B3, IGETC Area 5A

**PHYS-040 Physics for Scientists and Engineers I**
3 hours lecture, 4 hours lab 4 Units
Prerequisite: Prior or concurrent enrollment in MATH 60
An introduction to Newtonian mechanics. Topics will include vectors, rectilinear and planar motion, Newton’s Laws, work and energy, linear and angular momentum, rotational kinematics and dynamics, equilibrium, oscillations, and gravitation. May not be repeated. (CAN PHYS 8) LR
LMC: DA
Transfer: UC, CSU Gen. Ed. Area B1 and B3, IGETC Area 5A

**PHYS-041 Physics for Scientists and Engineers II**
3 hours lecture, 4 hours lab 4 Units
Prerequisite: PHYS 40 and prior or concurrent enrollment in MATH 70
An introduction to electricity and magnetism. Topics will include Coulomb’s Law, Gauss’ Law, electric fields, electric potential, Ohm’s Law, DC circuits, Capacitance, magnetic fields, Faraday’s Law, electric oscillations, electromagnetic waves, Maxwell’s equations and AC circuits. This course is offered in the fall only. May not be repeated. (CAN PHYS 12) LR
LMC: DA
Transfer: UC, CSU Gen. Ed. Area B1, B3, IGETC Area 5A

**PHYS-042 Physics for Scientists and Engineers III**
3 hours lecture, 4 hours lab 4 Units
Prerequisite: PHYS 40 and prior or concurrent enrollment in MATH 70
An introduction to fluids, waves, sound, heat and thermodynamics, geometrical and physical optics and quantum physics. This course is offered in the spring only. May not be repeated. (CAN PHYS 14) LR
LMC: DA
Transfer: UC, CSU Gen. Ed. Area B1, B3, IGETC Area 5A

**PHYS-098 Independent Study in Physics**
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC
LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.
Transfer: Independent Study courses may be DA or transferable depending on specific course. See your counselor.

**PHYS-099 Cooperative Education in Physics**
Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC
LMC: DA
Transfer: CSU

**PHYS-900s Selected Topics in Physics**
DA varies with course content.
Political Science

POLSC-010  Introduction to American Government: Institutions and Ideals

3 hours lecture  3 Units

Advisory: ENGL 100

(Formerly POLSC 5LS) A comprehensive introduction to the issues, institutions and ideals of American government, with special emphasis on the constitutions of the United States and the State of California. The historic development of national, state and local government since the seventeenth century will be emphasized. Special attention will be paid to the rights and obligations of citizenship and our heritage of social and ethnic diversity. This course meets the General Education Requirement for Social Science, and partially fulfills the CSU American Institutions Requirement. May not be repeated. SC

LMC: GE: American Institutions & Ideals; DA
Transfer: UC, CSU Gen. Ed. Area D8, IGETC Area 4H

POLSC-020  Introduction to Politics: Institutions and Ideals

3 hours lecture  3 Units

Advisory: Completion of ENGL 100

(Formerly POLSC 6LS) A comprehensive introduction to the issues, institutions and ideals of modern politics, with emphasis on the constitutional systems of the United States and the state of California. This course offers a thorough, fundamental survey of the basic methods, concepts and theories of political science, and the ways in which they can foster a deeper understanding of our local, national and global communities. Special attention will be paid to the rights and obligations of citizenship and the political effects of social diversity. May not be repeated. SC

LMC: GE: American Institutions & Ideals; DA
Transfer: UC, CSU Gen. Ed. Area D8, IGETC Area 4H

POLSC-033  Introduction to the History of Political Thought: The Problem of Democracy

3 hours lecture  3 Units

Advisory: ENGL 100

(Formerly POLSC 33LS) Same as PHIL 33. This course will examine the history and development of a 2,500 year old tradition of political thought; a tradition originating and in the 18th century, reanimating itself with the concern to understand the fragility of “republican democracy”. While a comparative attempt to review certain non-democratic ideas and experiences will be made, the primary goal of instruction is to introduce students to the difficulties inherent in sustaining any viable democratic regime, including notably the American system of which they are part. The course will use an interdisciplinary, transnational and comparative approach which is compatible with the discursive, analytical and interpretive nature of the study of primary texts and authors in historical context. May not be repeated. SC

LMC: Gen. Ed./ DA
Transfer: UC, CSU Gen. Ed. Area C2, D8, IGETC Area 3B, 4A

POLSC-043  International Relations

3 hours lecture  3 Units

Advisory: POLSC 10 and ENGL 100

(Formerly POLSC 43LS) This course will engage students in the study of the relations among nations, focusing on the policies and issues that nation-states and the people of the world interact and are interconnected. Although based on the concepts of political science, this course will take a multi-dimensional perspective, including trade, technology, geography and economics. An emphasis will be placed on studying the global connections of the local community. Students will have the opportunity to participate in course and classroom activities designed to encourage the development of practical and professional skills, involving for example, report writing, media production and oral presentations. This general education course satisfies LMC graduation requirements and is fully transferable to CSU and UC institutions. May not be repeated. SC

LMC: GE: Social Science; DA
Transfer: UC, CSU Gen. Ed. Area D8, IGETC Area 4G

POLSC-098  Independent Study in Political Science

Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC

LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.
Transfer: Independent Study courses may be DA or transferable depending on specific course. See your counselor.

POLSC-099  Cooperative Education in Political Science

Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC

LMC: DA
Transfer: CSU

POLSC-900s  Selected Topics in Political Science

DA varies with course content.
Process Technology

PTEC-010  Introduction to Process Technology
3 hours lecture 3 Units
Prerequisite: Math 25 or equivalent course
Advisory: Concurrent enrollment in PTEC 12; eligibility for ENGL 100
This introductory course will provide a clear overview of everyday life in this industry. The student will learn about and experience first-hand the variety of equipment used in typical processes and see how important safety and environmental considerations are in petrochemical operations. The student is expected to climb ladders to the top of processing units, wear and carry safety equipment, and work in confined spaces. May not be repeated. SC
LMC: DA

PTEC-012  Petrochemical Safety, Health and Environment
1 hour lecture 1 Unit
Advisory: PTEC 10, eligibility for ENGL 100
This course provides an in-depth view of how important safety and environmental considerations are in the petrochemical industry. Covers the various government regulatory groups that oversee this industry and explains why the use of planning, protection, and preventative procedures enable the petrochemical industries to provide occupations that are interesting, rewarding and safe. May not be repeated. SC
LMC: DA

PTEC-024  Process Instrumentation
2.5 hours lecture, 1.5 hours lab 3 Units
Advisory: PHYSICS 15, PTEC 10; eligibility for ENGL 100
This class puts together all of the typical components of a "control loop" and explains how an instrument control system works. The student will also learn about the instruments that measure and control process variables such as pressure, temperature, and flow, and will gain an appreciation of this critical and applicable knowledge. The student will also see how instruments do most of the work in a typical petrochemical process. May not be repeated. SC
LMC: DA

PTEC-025  Process Technology I - Equipment
3 hours lecture 3 Units
Advisory: PHYSICS 15; eligibility for ENGL 100; MATH 30, PTEC 10, PTEC 12
The student will learn about equipment such as heat exchangers, distillation towers, reactors, valves, and pumps. Not only will you acquire essential skills that will help you pursue a career in the petrochemical industry, but the next time you drive past a chemical plant, you will be able to explain to your family or friends what is really going on. May not be repeated. SC
LMC: DA

PTEC-027  Applied Instrument Analysis
.5 hour lecture, 1.5 hours lab 1 Unit
Prerequisite: CHEM 6 or CHEM 7
Advisory: PTEC 10; eligibility for ENGL 100
An introduction to analytical instruments used in typical laboratories, such as gas chromatographs and chemical titrating instruments. Covers various methods of sampling and analyzing to determine the composition of typical liquids, solids, and gases used in the petrochemical industry. May not be repeated. SC
LMC: DA

PTEC-035  Process Technology II - Systems
3 hours lecture 3 Units
Advisory: PTEC 12, PTEC 25, PTEC 27; CHEM 6 or CHEM 7; and eligibility for ENGL 100
Building on the content learned in Process Technology I - Equipment (PTEC 25), this course covers the various "systems" that tie the equipment together and keep them operating. The student will learn how to interact with these Systems as a technician and will learn about financial considerations which make an operation profitable. May not be repeated. SC
LMC: DA

PTEC-044  Petrochemical Simulation Laboratory
3 hours lab 1 Unit
Prerequisite: PTEC
Advisory: PTEC, PTEC 8; eligibility for ENGL 100
This PTEC laboratory builds upon knowledge gained about equipment and systems in PTEC 25 and PTEC 35. Computer simulation software is used to learn and practice skills in operating typical petrochemical unit operations such as heat exchanger systems and distillation columns. May be repeated three times. P/NP
LMC: DA

PTEC-045  Process Technology III - Operations
2.5 hours lecture, 1.5 hours lab 3 Units
Prerequisite: PTEC 35
Advisory: eligibility for ENGL 100
Drawing on the knowledge and skills learned in Process Technology I (PTEC 25) and II (PTEC 35), the student gains a deeper understanding of the responsibilities of an operating technician, including the specific roles of an operating technician and how to apply operation skills to startup and shutdown. The student will also learn how to operate a petrochemical plant and respond safely in the event of an emergency. Additional skills learned are how to keep a written log of process occurrences and communicate effectively with others. May not be repeated. SC
LMC: DA
PTEC-048  Process Troubleshooting
3 hours lecture  3 Units
Prerequisite: PTEC 35
Advisory: PTEC 44, PTEC 45; eligibility for ENGL 100
This PTEC class teaches problem solving, or commonly referred to in industry as troubleshooting. The student will learn and practice skills such as deductive and inductive reasoning and root cause analysis to troubleshoot real petrochemical problems and to prevent problems from occurring in the future. May not be repeated. SC
LMC: DA

Psychology

PSYCH-010  Individual and Social Processes
3 hours lecture  3 Units
Advisory: Eligibility for ENGL 90
(Formerly PSYCH 10LS) This psychology course is designed to deal with selected concepts and principles of Psychology. Emphasis is on the functional aspects of individual and group behavior. It will focus on psychology as a discipline within the Behavioral Sciences and its relationship to Anthropology and Sociology. Areas of study will include the understanding of human behavior from philosophical and theoretical viewpoints, stages in human development and the social and psychological influences on one’s self-concept. This course meets the Graduation Requirement for General Education for Behavioral Sciences. May not be repeated. SC
LMC: GE: Behavioral Science; DA
Transfer: UC, CSU Gen. Ed. Area D9, IGETC Area 4I

PSYCH-011  General Psychology
3 hours lecture  3 Units
Advisory: Eligibility for ENGL 90
(Formerly PSYCH 11LS) This introduction to psychology serves as preparation for further study in this field. The focus of the course is the study of human behavior and its contributions to understanding social evolution, interpersonal relationships, and healthy and disordered functioning. The goals of this field, its evolution as a behavioral science, its varied practical applications, and current controversial issues are discussed and viewed for understanding our present social and world condition. To gain this understanding, the content includes the study of: motivation, mind and body relationship, individual differences, developmental stages, the role of learning and cognitive functioning, gender similarities and differences, and the value and limitations of mental health therapies. An interdisciplinary approach is used to communicate how bioscience, sociology, anthropology, and current affairs are interconnected in the study of history and human evolution. May not be repeated. (CAN PSY 2) SC
LMC: GE: Behavioral Science; DA
Transfer: UC, CSU Gen. Ed. Area D9, IGETC Area 4I

PSYCH-012  Family Crisis and Growth
3 hours lecture  3 Units
Advisory: Eligibility for ENGL 90
(Formerly PSYCH 12S) This class introduces the contention that family crisis may be a result of normal family development or of an non development dysfunction. The student will assess 1) the components of functional and dysfunctional family systems, 2) how families define and interpret crisis (both predictable and unpredictable), 3) an individual's perception of crisis and how this affects the course of a family crisis, and 4) the issue of family violence as crisis. (In particular, the causes, roots, and implications of spouse, child and alcohol abuse as it relates to these areas of concern.) May not be repeated. SC
LMC: DA
Transfer: CSU Gen. Ed. Area E

PSYCH-014  Psychology of Human Sexuality
3 hours lecture  3 Units
Advisory: Eligibility for ENGL 90
The investigation of the subject, human sexuality, with an emphasis on the subject of intimacy from the cognitive and behavioral psychological approaches. Other topics include the psychological aspects of gender differences, sexual anatomy and physiology, sexual dysfunctions and treatment approaches, sexual orientations, contraception, domestic violence, rape, and sexually transmitted diseases. May not be repeated. SC
LMC: DA
Transfer: UC, CSU

PSYCH-098  Independent Study in Psychology
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC
LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.
Transfer: Independent Study courses may be DA or transferable depending on specific course. See your counselor.

PSYCH-099  Cooperative Education in Psychology
Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC
LMC: DA
Transfer: CSU

PSYCH-900s  Selected Topics in Psychology
DA varies with course content.
# Real Estate

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours Lecture</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>REAL-005</td>
<td>Real Estate Principles</td>
<td>3</td>
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<td></td>
<td>Advisory: Eligibility for ENGL 90</td>
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<td>Designed for students preparing to enter the real estate business; includes study of real and personal property acquisition, ownership, estates in real property, joint tenancies, partnership, sales, contracts, homesteads, deeds, and taxes. Required for those preparing to take the real estate salesperson license exam. May not be repeated. SC</td>
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<td>LMC: DA</td>
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<tr>
<td>REAL-010</td>
<td>Legal Aspects of Real Estate</td>
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<td>Advisory: REAL 5 with a “C” or better; eligibility for ENGL 90</td>
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<td></td>
<td>California law as it pertains to the practice of real estate. Students will study real property law and apply the concepts to real estate problems and issues. Applies toward state educational requirements for agents and broker’s license examination. May not be repeated. LR</td>
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<td>LMC: DA</td>
<td>Transfer: CSU</td>
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<tr>
<td>REAL-015</td>
<td>Real Estate Appraising</td>
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<td>Advisory: Real Estate license or REAL 5 with a grade of “C” or better</td>
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<td>Basic principles and influences on valuation; techniques of valuation, including the appraisal process, site analysis and valuation, improvements, functional utility, cost, and depreciation; market data, and income approaches; case studies illustrating the techniques and principles; field work includes narrative appraisal report. Applies toward state educational requirements for broker’s license examination and may be used as a course to validate new Real Estate license. May not be repeated. LR</td>
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<td>REAL-020</td>
<td>Real Estate Practice</td>
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<td>Advisory: Real Estate experience or REAL 5</td>
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<td>A comprehensive presentation of the techniques of operating a real estate business with emphasis on the daily activities of brokers and salespeople. Subjects covered include an introduction to appraising, exchanges, income tax considerations, and specialized brokerage. Applies toward state educational requirements for broker’s license examination. May not be repeated. SC</td>
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<td>REAL-025</td>
<td>Real Estate Finance</td>
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<td>Designed for those employed in real estate and related fields to give them fundamental principles of real estate finance. Applies toward state requirements for sales and broker’s license examination. May not be repeated. SC</td>
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<td>REAL-045</td>
<td>Real Estate Economics</td>
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<td>An overview of the relationship of real estate to the economic system; designed for individuals working in real estate and related fields, and investors. May not be repeated. LR</td>
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<td>Transfer: CSU</td>
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<td>Independent Study in Real Estate</td>
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<tr>
<td>REAL-900s</td>
<td>Selected Topics in Real Estate</td>
<td>DA varies with course content.</td>
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</tbody>
</table>
Recording Arts

RA-010  Recording Arts I
2 hours lecture, 4 hours lab 3 Units
Designed for the general student or the student entering the recording arts program in music. This course includes an introduction to the terminology and practices within recording arts. Emphasis will be placed on broad general concepts, and practical methods in a nontechnical framework. Aspects include studio procedures, microphone techniques, overdubbing, and basic mixing procedures. A multi-track recorder and mixing console will be used for demonstration. Meets the LMC Recording Arts Associate Degree and Certificate requirements. May be repeated one time. LR
LMC: DA
Transfer: CSU

RA-012  Sound Reinforcement
2 hours lecture, 3 hours lab 3 Units
Advisory: Eligibility for ENGL 90
This course is an overview of the field of Concert Sound Reinforcement. This branch of audio engineering is concerned with the installation and operation of in-house and large transportable sound systems. The course provides the student with a working vocabulary and an explanation of how the many components of the sound system function and interrelate. Discussions on the acoustic environment, audio equipment, sound system setup, troubleshooting, sound check, the art of mixing sound for live performance and touring, give the student a behind-the-scene look at how this information is used by concert audio engineers. Meets the LMC Recording Arts Associate Degree and Certificate requirements. May be repeated one time. LR
LMC: DA
Transfer: CSU

RA-015  Music Fundamentals for Audio Professionals
3 hours lecture 3 Units
Advisory: ENGL 90
A basic music course addressing the specific needs of Recording Arts students, providing the specialized musical vocabulary and concepts needed to interact with artists in studio situations, and a grasp of the technological aspects of music making. Meets the LMC Recording Arts Associate Degree and Certificate requirements. May not be repeated. LR
LMC: DA
Transfer: CSU

RA-016  Recording Studio Management
2 hours lecture 2 Units
Advisory: Eligible for ENGL 90
A course in building, managing, marketing and maintaining a professional recording studio. Includes visits to professional recording facilities. May not be repeated. SC
LMC: DA
Transfer: CSU

RA-017  Recording Industry Employment Strategies
2 hours lecture 2 Units
Advisory: ENGL 90
A course in techniques for finding work in the recording industry and related fields. Includes strategic planning to enhance employment and career opportunities for Recording Arts Program graduates. May not be repeated. SC
LMC: DA
Transfer: CSU

RA-020  Recording Arts II
2 hours lecture, 4 hours lab 3 Units
Prerequisite: RA 10
Second semester course in the Recording Arts sequence. Designed to familiarize the student with the professional recording environment and the fundamentals of engineering. Topics include: overview of recording studio design, the recording team, detailed description of the recording chain with emphasis on LMC’s state-of-the-art recording system, fundamentals of acoustics, the role of the engineer, microphones, microphone technique and mixing consoles. Meets the LMC Recording Arts Associate Degree and Certificate requirements. This course is offered in the spring only. May be repeated one time. LR
LMC: DA
Transfer: CSU

RA-021  Basic Session Producing
2 hours lecture, 2 hours lab 2 Units
Designed to develop strong competencies in the field of producing records. The student will learn information including studio procedures, talent and song-writing evaluation, budget analysis, licenses, publishing, promotion, merchandising, aspects of manufacturing, wholesaling and retailing music business, publishing, copyrighting, other legalities, and other current trends and problems in the field. Meets the LMC Recording Arts Associate Degree and Certificate requirements. This course is offered in the spring only. May be repeated two times. LR
LMC: DA
Transfer: CSU

RA-025  Basic Tracking Sessions
36 total hours lecture, 54 total hours lab 3 Units
Prerequisite: Prior or concurrent enrollment in RA 10.
Advisory: ENGL 90
Techniques for producing multi-track and overdub sessions for demos and commercial projects. Course meets the LMC Recording Arts Associate Degree and Certificate requirements. May be repeated two times. SC
LMC: DA
Transfer: CSU
### Course Descriptions

#### RA-030  Recording Arts III
2 hours lecture, 4 hours lab  
**Prerequisite:** RA 20  
**Advisory:** Eligibility for ENGL 90  
This third semester course in the Recording Arts sequence begins with a detailed discussion of studio design. A semester-length studio design project broadens the student’s knowledge of the recording environment. Computer-based console automation with a particular emphasis on Otari’s Diskmix 3 is then examined. The course includes an in-depth study of analog and digital storage devices. Topics include: recording media, analog servo-mechanisms, analog tape machine alignments, digital basics and tape machine operation. Meets the LMC Recording Arts Associate Degree and Certificate requirements. This course is offered in Fall only. May be repeated one time. LR  
**LMC:** DA  
**Transfer:** CSU

#### RA-032  Recording Arts Workshop
3 hours lab  
**Advisory:** Eligibility for ENGL 90; completion of RA 10 and 20  
Suggested that one is currently enrolled in second year of R.A. program. First year R.A. students should be recommended by instructor. Investigation of various selected activities associated with the recording arts program. The class will be assigned selected activities such as overdubbing, recording sessions, mixdowns, basic console and deck maintenance, and on-location recording. Second year R.A. students will be teamed up with instructor-selected first year students to work as engineering teams to simulate professional recording studio procedures. Meets the LMC Recording Arts Associate Degree and Certificate requirements. May be repeated three times. LR  
**LMC:** DA  
**Transfer:** CSU

#### RA-033  Summer Recording Workshop
2 hours lecture, 2 hours lab  
**Prerequisite:** Prior or concurrent enrollment in RA 20  
This course is designed for advanced students. Students will receive detailed training in the use of LMC’s high-end recording equipment and gain hands-on experience through involvement in recording sessions. Students will work in teams based on their skill level. The most advances students will work on recording sessions while other students receive further training on specific recording equipment and studio procedures. The initial focus of the course is a review of system interconnection and the primary components of the recording system. Topics include: working with clients, recording formats, documentation, session setup, microphone technique, signal flow through the console, console automation, linear and non-linear digital recording systems, analog multitrack recording with Dolby NR noise reduction, the Lexicon 480L and other signal processors, time code and synchronized recording systems, automated mixing, digital editing, time code DAT recorders and preparing the final product. May be repeated three times. SC  
**LMC:** DA  
**Transfer:** CSU

#### RA-035  Protools Production and Editing
36 total hours lecture, 54 total hour lab  
**Advisory:** RA 10 and 20  
Audio Production for radio, television and compact disc release utilizing the ProTools systems. Course meets the LMC Recording Arts Associate Degree requirements. May be repeated two times. SC  
**LMC:** DA  
**Transfer:** CSU

#### RA-040  Recording Arts IV
2 hours lecture, 4 hours lab  
**Prerequisite:** RA 30  
**Advisory:** Eligibility for ENGL 90  
Fourth semester course in the Recording Arts sequence. This course focuses on four primary areas of study: audio post-production for film/video, signal processors, mixing and mastering. The details of post-production are examined with an emphasis on synchronization techniques, time code and digital audio editing. An overview of signal processors is presented including computer control of signal processors via MIDI system exclusive messages. Information from previous courses in the sequence is applied when studying mixing. Course concludes with a description of the mastering process. Meets the LMC Recording Arts Associate Degree and Certificate requirements. This course is offered in Spring only. May be repeated one time. LR  
**LMC:** DA  
**Transfer:** CSU

#### RA-098  Independent Study in Recording Arts
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC  
**LMC:** Independent Study courses may be DA or transferable depending on specific course. See your counselor.  
**Transfer:** Independent Study courses may be DA or transferable depending on specific course. See your counselor.

#### RA-099  Cooperative Education in Recording Arts
Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC  
**LMC:** DA  
**Transfer:** CSU

#### RA-900s  Selected Topics in Recording Arts
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC  
**LMC:** Independent Study courses may be DA or transferable depending on specific course. See your counselor.  
**Transfer:** Independent Study courses may be DA or transferable depending on specific course. See your counselor.
Refrigeration & Air Conditioning

ACREF-045 Central Heating and Cooling Troubleshooting
1 hour lecture, 3 hours lab 2 Units
Advisory: APPLI 25 or APPLI 26; eligibility for ENGL 90
(Formerly REFRG 45) This class is designed to teach the fundamentals of domestic heating and air conditioning. Information will be presented on installation of HVAC units. Emphasis will be placed on troubleshooting, maintenance and repair procedures as related to HVAC units. May be repeated two times. SC
LMC: DA
Transfer: CSU

ACREF-070 Industrial Refrigeration
3 hours lecture, 3 hours lab 4 Units
Advisory: APPLI 25 or APPLI 26; eligibility for ENGL 90; EETEC 4 (Formerly EETEC 10) or the equivalent
(Formerly REFRG 70) An introduction to industrial refrigeration which provides a background in the scientific principles related to heat and temperature, transfer of heat, and refrigeration systems. Applied refrigeration concepts will be covered in demonstrations in the classroom and in labs. May be repeated two times. SC
LMC: DA
Transfer: CSU

ACREF-071 Industrial Refrigeration Controls
3 hours lecture, 3 hours lab 4 Units
Advisory: APPLI 25 or APPLI 26 or equivalent; eligibility for ENGL 90; EETEC 4 (Formerly EETEC 10)
(Formerly REFRG 71) An introduction to controls and concepts of industrial refrigeration, service, and repair. This course is designed for the student seeking a career as an industrial refrigeration technician, as well as others seeking knowledge in troubleshooting. May be repeated two times. SC
LMC: DA
Transfer: CSU

ACREF-072 Air Conditioning - Refrigeration Load Calculations and Design
3 hours lecture, 3 hours lab 4 Units
Advisory: EETEC 4 (Formerly EETEC 10) ; APPLI 25 or APPLI 26 or equivalent; eligibility for ENGL 90
(Formerly REFRG 72) This course introduces the student to the ACCA Manual J, and Manual D method of calculating the heating and cooling loads of residential homes. The course will also cover light commercial refrigeration load calculations. Both manual and digital examples will be used in this course. Designed for continuing education for students in the HVAC-R field. May not be repeated. LR
LMC: DA

ACREF-073 Basic Refrigeration R1A
1 hour lecture, 3 hours lab 2 Units
Advisory: APPLI 25 or 26; eligible for ENGL 90; EETEC 4 (Formerly EETEC 10) or equivalent
(Formerly REFRG 73) An introduction to commercial refrigeration which provides a background in the scientific principles related to heat and temperature, transfer of heat and refrigeration systems. Applied refrigeration concepts will be covered in demonstrations in the classroom and in labs. May be repeated two times. SC
LMC: DA
Transfer: CSU

ACREF-074 Basic Refrigeration R1B Commercial Ice Machines
1 hour lecture, 3 hours lab 2 Units
Advisory: APPLI 25 or 26; eligible for ENGL 90; EETEC 4 (Formerly EETEC 10) or equivalent
(Formerly REFRG 74) An introduction to commercial ice machines which provides a background in the scientific principles related to heat and temperature, transfer of heat and refrigeration systems. Applied refrigeration concepts will be covered in demonstrations in the classroom and in labs. May be repeated two times. SC
LMC: DA
Transfer: CSU

ACREF-075 HVAC Technician H1A Heating Technology
1 hour lecture, 3 hours lab 2 Units
Advisory: APPLI 25 or 26; eligible for ENGL 90; EETEC 4 (Formerly EETEC 10) or equivalent
(Formerly REFRG 75) An introduction to residential heating technology which provides a background in the scientific principles related to heat and temperature, and the transfer of heat. Residential central heating concepts will be covered in demonstrations in the classroom and in labs. May be repeated two times. SC
LMC: DA
Transfer: CSU

ACREF-076 Basic HVAC Technician H1B Air Conditioning Repair
1 hour lecture, 3 hours lab 2 Units
Advisory: APPLI 25 or 26; eligible for ENGL 90; EETEC 4 (Formerly EETEC 10) or equivalent
(Formerly REFRG 76) An introduction to residential air conditioning which provides a background in the scientific principles related to heat and temperature, transfer of heat and air conditioning systems. Applied air conditioning concepts will be covered in demonstrations in the classroom and in labs. May be repeated two times. SC
LMC: DA
Transfer: CSU
ACREF-077  HVAC Technician AH1A Basic Residential Duct Testing and Repair
1 hour lecture, 3 hours lab  2 Units
Advisory: APPLI 25 or 26; eligible for ENGL 90; EETEC 4 (Formerly EETEC 10) or equivalent
(Formerly REFRG 77) An introduction to residential Duct Testing and Repair which provides a background in the scientific principles related to residential air distribution. California Energy Commission and utility duct testing techniques and concepts will be covered in demonstrations in the classroom and in labs. May be repeated two times. SC
LMC: DA
Transfer: CSU

ACREF-078  HVAC Technician AH1B Residential Load Calculation and Duct Design
1 hour lecture, 2 hours lab  1.5 Units
Advisory: APPLI 25 or 26; eligible for ENGL 90; EETEC 4 (Formerly EETEC 10) or equivalent
(Formerly REFRG 78) An introduction to residential load calculations and duct design, which provides a background in the scientific principles related to residential load calculations and air distribution. The Air Conditioning Contractors of America manuals J and D methods and concepts will be covered in the classroom. Wrightsoft design software will be used in the labs. May be repeated two times. SC
LMC: DA
Transfer: CSU

ACREF-098  Independent Study in Refrigeration
(Formerly REFRG 98) Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC
LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.
Transfer: Independent Study courses may be DA or transferable depending on specific course. See your counselor.

ACREF-099  Cooperative Education in Refrigeration
(Formerly REFRG 99) Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by the instructional area. May be repeated five times. SC
LMC: DA
Transfer: CSU

ACREF-900s  Selected Topics in Refrigeration
DA varies with course content.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisites</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIGN-070</td>
<td>Fingerspelling I</td>
<td>SIGN 65 or equivalent</td>
<td>Provides an introduction to the concentrated instruction in the expressive and receptive practice of beginning fingerspelling. May be repeated three times. SC</td>
</tr>
<tr>
<td>SIGN-071</td>
<td>Fingerspelling II</td>
<td>SIGN 70 or equivalent</td>
<td>This second-semester course is a continuation of the concentrated instruction in the expressive and receptive practice of advanced fingerspelling. May be repeated three times. SC</td>
</tr>
<tr>
<td>SIGN-072</td>
<td>Deaf Culture</td>
<td>SIGN 68 or equivalent</td>
<td>An introduction to the deaf culture as it applies to the historical, cultural and social experiences of our deaf community. Course will cover issues directly related to the deaf including education and assimilation in bilingual/bicultural settings. May not be repeated. SC</td>
</tr>
<tr>
<td>SIGN-098</td>
<td>Independent Study in Sign Language</td>
<td></td>
<td>Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May be repeated three times. SC</td>
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<td>Cooperative Study in Sign Language</td>
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<td>Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC</td>
</tr>
<tr>
<td>SOCSC-045</td>
<td>Issues Facing African Americans</td>
<td>Eligibility for ENGL 100</td>
<td>(Formerly SOCSC 45LS) This course will examine the experience of African Americans from a socially inclusive, transcultural &amp; interdisciplinary perspective. Students will be asked to acknowledge, properly define, &amp; critically engage those issues and concerns most resonant, historically and currently, within ethnic memory. The ultimate goal of our study together is to gain deeper understanding of the unique heritage Blacks possess also to appreciate the pivotal role Blacks have played in founding and sustaining the American sense of becoming a “democratic” nation. May not be repeated. SC</td>
</tr>
<tr>
<td>SOCSC-077</td>
<td>Community Service and Social Responsibility</td>
<td>Concurrent enrollment in ENGL 90 or 90A/B, or eligibility for or completion of ENGL 100</td>
<td>Same as BUS 77. This interdisciplinary course provides an introduction to the theory and practice of community service for citizens and businesspeople. Students will learn through experience while serving in community projects sponsored by local organizations and business firms. May not be repeated. SC</td>
</tr>
<tr>
<td>SOCSC-098</td>
<td>Independent Study in Social Science</td>
<td></td>
<td>Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May be repeated three times. SC</td>
</tr>
<tr>
<td>SOCSC-099</td>
<td>Cooperative Education in Social Science</td>
<td></td>
<td>Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC</td>
</tr>
</tbody>
</table>
Sociology

SOCIO-015 Introduction to Sociology
3 hours lecture 3 Units
Advisory: Eligibility for ENGL 90
(Formerly SOCIO 15LS) Introduction to the principles and theoretical perspectives of sociology. Topics will include sociological research methods, culture, groups, socialization, collective behavior, race, and gender inequality, stratification, and urbanization. Through various reading and writing exercises and assignments, students will be provided an opportunity to develop critical ways of looking at sociological phenomena. Through the examination of the various modes of inquiry used by behavioral scientists, students will be encouraged to develop an awareness of the importance as well as the complexity of data collection and reporting. May not be repeated. (CAN SOC 2) SC
LMC: GE: Behavioral Science; DA
Transfer: UC, CSU Gen. Ed. Area D10, IGETC Area 4J

SOCIO-016 Introduction to Social Problems
3 hours lecture 3 Units
Advisory: Eligibility for ENGL 90
(Formerly SOCIO 16LS) A sociological analysis of some of the major societal problems in the United States. Topics covered will be taken from a range of possible social issues such as crime, juvenile delinquency, violence, drug use, racism, sexism, rapid social change, poverty, educational problems, family stress, urbanization, and variations in human sexuality. Students will be provided an opportunity to discuss reasons and possible solutions to social problems in an interdisciplinary and scientific manner. Reading and writing assignments will help students evaluate the social problems in a critical manner. May not be repeated. SC
LMC: GE: Behavioral Science; DA
Transfer: UC, CSU Gen. Ed. Area D10, IGETC Area 4J

SOCIO-098 Independent Study in Sociology
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit) May be repeated three times. SC
LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.
Transfer: Independent Study courses may be DA or transferable depending on specific course. See your counselor.

SOCIO-099 Cooperative Education in Sociology
Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC
LMC: DA
Transfer: CSU

Spanish

SPAN-044 Conversational Spanish I
3 hours lecture, 1 hour lab 3 Units
Advisory: Eligibility for ENGL 90
(Formerly SPAN 44S) The communicative approach to basic understanding and speaking of Spanish as it is used in Mexico, Central/South America, Spain, and the Southwestern United States. The content used in learning the language is drawn from the rich Mexican, Chicano and Latino cultures. May not be repeated. SC
LMC: DA
Transfer: CSU

SPAN-045 Conversational Spanish II
3 hours lecture, 1 hour lab 3 Units
Advisory: ENGL 90 and SPAN 44
(Formerly SPAN 45S) The communicative approach to basic understanding and speaking of Spanish as it is used in Mexico, Central/South America, Spain, and the Southwestern United States. Conversational Spanish II is a continuation of conversational Spanish I (SPAN 44S) with more emphasis on students’ expressive skills. The content used in learning the language is drawn from the rich Mexican, Chicano and Latino cultures. May not be repeated. SC
LMC: DA
Transfer: CSU

SPAN-046 Spanish for Law Enforcement
18 total hours lecture, 27 total hours lab 1.5 Units
Advisory: Eligibility for ENGL 90
Trains students in the use of Spanish in the law enforcement field. Grammar and vocabulary, specific to police services will be covered. Basic introduction of Spanish-language skills is also integrated into this course. May be repeated three times. SC
LMC: DA

SPAN-047 Spanish for Health Services
18 total hours lecture, 27 total hours lab 1.5 Units
Advisory: Eligibility for ENGL 90
Trains students in the use of Spanish in the health care field. Grammar and vocabulary, specific to health and emergency services will be covered. Basic introduction of Spanish-language skills is also integrated into this course. May be repeated three times. SC
LMC: DA

SPAN-048 Spanish for Business
18 total hours lecture, 27 total hours lab 1.5 Units
Advisory: Eligibility for ENGL 90
Trains students in the use of Spanish in the business field. Grammar and vocabulary, specific to business, commerce, investment and banking service will be covered. Basic introduction to Spanish-language skills is also integrated into this course. May be repeated three times. SC
LMC: DA
### SPAN-049 Conversational Latino Cinema
3 hours lecture  3 Units

**Advisory:** Eligibility for ENGL 90, completion of Span 50 or two years of high school Spanish or appropriate Web Cape Score

Screen film; gain a critical perspective of classic and contemporary Latin American film that explores a wide variety of themes, genres and cultural experiences. Develop critical thinking skills while interacting with film screenings, readings, lectures and class discussions in Spanish. Students screen film works from the United States, Mexico, the Caribbean, Central and South America and Spain. Films in Spanish with/without English Subtitles. May not be repeated. SC

**LMC:** DA

**Transfer:** UC, CSU Gen. Ed. Area C2

### SPAN-050 Elementary Spanish I
5 hours lecture  5 Units

**Advisory:** Eligibility for ENGL 90

(Formerly SPAN 50S) A visual/oral/aural approach to understanding, speaking, reading, and writing Spanish as it is used in Mexico, Central/South America, Spain, and the Southwestern United States. The content used in learning the language is drawn from the rich Mexican, Chicano, and Latino cultures. May not be repeated. SC

**LMC:** DA

**Transfer:** CSU Gen. Ed. Area C2

### SPAN-051 Elementary Spanish II
5 hours lecture  5 Units

**Prerequisite:** SPAN 50 or 2 years of high school Spanish; or WEB CAPE Placement test score of 281-345

**Advisory:** Eligibility for ENGL 90

(Formerly SPAN 51S) Continuation of the visual/oral/aural approach to understanding, speaking, reading, and writing Spanish. Course material emphasizes the cultures of Mexico, Central/South America, the Caribbean, Spain, and the Chicano of the Southwestern United States. May not be repeated. SC

**LMC:** DA

**Transfer:** UC, CSU Gen. Ed. Area C2, IGETC Area 3B

### SPAN-052 Intermediate Spanish I
5 hours lecture  5 Units

**Prerequisite:** SPAN 51 or 3 years high school Spanish; or native fluency in reading and writing of Spanish; or WEB CAPE Placement Test score of 346-403

(Formerly SPAN 52S) This course uses the communicative approach in the acquisition of Spanish. Students will gain skills in listening and understanding conversation at the intermediate level, writing and reading. The third in a series of four semesters of college level Spanish emphasizes the literature and culture of Latin America and Spain. May not be repeated. SC

**LMC:** DA

**Transfer:** UC, CSU Gen. Ed. Area C2, IGETC Area 3B

### SPAN-053 Intermediate Spanish II
5 hours lecture  5 Units

**Prerequisite:** SPAN 52 or 4 years high school Spanish or native fluency in reading and writing of Spanish; or WEB CAPE Placement Test score of 403 and above

(Formerly SPAN 53S) This course uses the communicative approach in the acquisition of Spanish. Students will gain skills in listening, speaking and reading at the advanced intermediate level. The fourth in a series of four semesters of college level Spanish strongly emphasizes high level grammar and literature/writing analysis. May not be repeated. SC

**LMC:** DA

**Transfer:** UC, CSU Gen. Ed. Area C2, IGETC Area 3B

### SPAN-060 Exploring Latino Cinema: A Critical Analysis

54 total hours lecture  3 Units

**Prerequisite:** SPAN 52

(Formerly SPAN 60S) Film screenings, lectures, classroom discussions, analysis of main artistic taste, cultural, and philosophical questions in the Hispanic world as articulated in literature and film, addressing principal currents affecting Latino artistic expression. Discussion activities and analysis conducted in Spanish. May not be repeated. SC

**LMC:** DA

**Transfer:** UC, CSU Gen. Ed. Area C1

### SPAN-080 Elementary Spanish Grammar
4.5 hours lab  1.5 Units

Basic Spanish Grammar online is covered in three courses from elementary through intermediate and more advanced basic skills. All materials related to the course are found on the course LMC website. Students will be graded on exercises, quizzes and tests. This course is self-paced and can be completed at any time during the semester. Twenty lessons must be completed for each level of instruction. This course will count toward B-Clad requirement for teachers. May be repeated two times. SC

**LMC:** DA

### SPAN-081 Intermediate Spanish Grammar I
4.5 hours lab  1.5 Units

Basic Spanish Grammar online is covered in three courses from elementary through intermediate and more advanced basic skills. All materials related to the course are found on the course LMC website. Students will be graded on exercises, quizzes and tests. This course is self-paced and can be completed at any time during the semester. Twenty lessons must be completed for each level of instruction. This course will count toward B-Clad requirement for teachers. May be repeated two times. SC

**LMC:** DA

### SPAN-082 Intermediate Spanish Grammar II
4.5 hours lab  1.5 Units

Basic Spanish Grammar online is covered in three courses from elementary through intermediate and more advanced basic skills. All materials related to the course are found on the course LMC website. Students will be graded on exercises, quizzes, and tests. This course is self-paced and can be completed at any time during the semester. Twenty lessons must be completed for each level of instruction. This course will count toward B-Clad requirement for teachers. May be repeated two times. SC

**LMC:** DA
SPAN-098 Independent Study in Spanish
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC
LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.
Transfer: Independent Study courses may be DA or transferable depending on specific course. See your counselor.

SPAN-099 Cooperative Education in Spanish
Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC
LMC: DA
Transfer: CSU

SPAN-900s Selected Topics in Spanish
DA varies with course content.

Speech

SPCH-038 Interpersonal Communication
3 hours lecture, 1 hour lab 3 Units
Advisory: Recommended as a prerequisite to SPCH 40
Designed to provide experience in being more assertive in communication; designed for both the passive and the aggressive personality; will teach the communication skills which lessen the anxieties felt by people who are too passive as well as those felt by people who are too aggressive. May not be repeated. SC
LMC: DA
Transfer: CSU

SPCH-040 Oral Communication
3 hours lecture, 1 hour lab 3 Units
Advisory: Eligibility for ENGL 90
(Formerly SPCH 40LS) This course is designed to develop skills toward becoming a more effective communicator, both as a speaker and listener. Introduction to the basic concepts and principles of oral communication, including methods of obtaining and organizing material for clarity of thought, and development of both imaginative and discursive modes of verbal expression. Practice in preparing, delivering, listening to, and critiquing various modes of public speaking. Includes and interdisciplinary treatment of the nature of language and the ethics inherent in evaluating persuasive messages. This course meets the General Education Requirement for Communication / Critical Thinking. May not be repeated. (CAn SPCH 4) LR
LMC: GE: Communication/Critical Thinking; DA
Transfer: UC, CSU Gen. Ed. Area A1, IGETC Area 1C

SPCH-098 Independent Study in Speech
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC
LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.
Transfer: Independent Study courses may be DA or transferable depending on specific course. See your counselor.

SPCH-099 Cooperative Education in Speech
Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC
LMC: DA
Transfer: CSU

SPCH-900s Selected Topics in Speech
DA varies with course content.

Tagalog

TAGLG-060 Elementary Tagalog I
5 hours lecture 5 Units
Advisory: Eligibility for ENGL 90
A visual/oral/aural approach to understanding, speaking, reading, and writing Tagalog (Filipino) as it is used in the Philippine Islands. The Content used in learning the language is drawn from the rich Filipino culture. May not be repeated. SC
LMC: DA
Transfer: UC, CSU

TAGLG-061 Elementary Tagalog II
5 hours lecture 5 Units
Prerequisite: TALGLG 60 or two years of high school Tagalog
Advisory: Eligibility for ENGL 90
A visual/oral/aural approach to understanding, speaking, reading, and writing Tagalog (Filipino) as it is used in the Philippine Islands. The content used in learning the language is drawn from the rich Filipino culture. This course meets the UC foreign language Transfer Requirement. May not be repeated. SC
LMC: DA
Transfer: UC, CSU
Travel

TRAVL-071 Orientation to Careers in Travel
6 total hours lecture .3 Unit
This course is an excellent orientation to careers in the travel industry. It also provides an overview of the travel program, the certificate options and courses for students. Speakers from the industry share information about their careers and their segment of the industry during the day. May not be repeated. P/NP
LMC: DA
Transfer: CSU

TRAVL-072 Introduction to Travel
3 hours lecture 3 Units
Advisory: Eligibility for ENGL 90
An introductory course designed to give students an overview of the travel industry and its different components. Familiarizes students with terminology and career options in the Travel industry. Required course for most certificates in the program. May not be repeated. SC
LMC: DA
Transfer: CSU

TRAVL-074 North American Destination Specialist
3 hours lecture 3 Units
A course on travel geography and tourism within North America; familiarization with places of tourist interest, itinerary planning, tour companies and sources of reference. Includes a study of Hawaii, Alaska, Mexico, the Caribbean and other popular tourist destinations in North America. May not be repeated. SC
LMC: DA
Transfer: CSU

TRAVL-075 Western Europe Destination Specialist
3 hours lecture 3 Units
This course familiarizes the student with European cultural and physical geography as it relates to travel. Emphasis will be given to learning about the country, the major cities, tourist attractions and facilities. Some time will be devoted to learning how to use various references and researching different tour companies to Europe. May not be repeated. SC
LMC: DA
Transfer: CSU

TRAVL-076 Travel Sales and Marketing
3 hours lecture 3 Units
Advisory: Eligibility for ENGL 90
This course aims to teach effective techniques and skills for service-oriented sales to succeed in the competitive environment of the travel industry. It aims to develop sales skills and soft skills so that every client is a satisfied client and a repeat client. The course will also teach the basics of marketing the travel product. Required course for most certificates in the program. May not be repeated. SC
LMC: DA
Transfer: CSU

TRAVL-077 Customized Vacation Planning
2 hours lecture 2 Units
Advisory: TRAVL 72
Students will learn how to create and customize tours for an individual traveler or for a group. They will learn how to plan and design an itinerary, select the vendor/s, finalize the tour arrangements, and market the tour. Learning to research travel industry print and electronic references is an indispensable component of creating customized vacations. May not be repeated. SC
LMC: DA
Transfer: CSU

TRAVL-082 All About Cruising
3 hours lecture 3 Units
Advisory: Eligibility for ENGL 90
An introduction to cruising as a vacation alternative. The course will acquaint students with the cruise industry, cruise lines and their ships, the different "personalities" of the cruise ships: cruise destinations and itineraries around the world. It will also include cruise terminology and cruise selling skills. This is the core course of the Cruise Specialist Certificate. May not be repeated. SC
LMC: DA
Transfer: CSU

TRAVL-083 Hawaii Destination Specialist
27 total hours lecture 1.5 Units
Overview of geography, tourist attractions and activities, resort areas and accommodations on each of the major islands of Hawaii. Particular emphasis on each island’s unique appeal. Resources for more in-depth information also covered. May not be repeated. SC
LMC: DA
Transfer: CSU

TRAVL-084 Caribbean Destination Specialist
27 total hours lecture 1.5 Units
This course provides an overview of the geography, major tourist sights and activities, resort areas and accommodations for all of the major islands throughout the Caribbean region. Particular emphasis will be placed on the diversity within the region and on each island’s unique appeal for a visitor. Resources for more in-depth research, including the Internet, will also be covered. May not be repeated. SC
LMC: DA
Transfer: CSU

TRAVL-085 South Pacific Destination Specialist
27 total hours lecture 1.5 Units
The course completely covers the South Pacific region: Australia, New Zealand, and Pacific Islands (Melanesia, Micronesia, and Polynesia). Valuable information for the traveler is presented and discussed; including geography and cultural background, getting there and getting around, sightseeing highlights and popular activities, as well as the types of accommodations available. A key element of the course will be how to match a particular client to a destination and how to sell the destination. May not be repeated. SC
LMC: DA
Transfer: CSU
TRAVL-086  East Asia Destination Specialist
27 total hours lecture  1.5 Units
This course covers the countries of East Asia commonly visited by tourists - Japan, Korea, China, Taiwan, Hong Kong, Macau, Vietnam, Laos, Cambodia, Myanmar, Thailand, Malaysia, Singapore, Brunei, Philippines, and Indonesia. Important information that a travel professional needs to know to assist a traveler will be presented. Asia is culturally very different from North America so students will need to develop an understanding of the culture and be able to advise their clients appropriately. Students will learn how to match each destination to their client. May not be repeated. SC
LMC: DA
Transfer: CSU

TRAVL-095  Advanced Travel Concepts
3 hours lecture  3 Units
Advisory: TRAVEL 72 and eligibility for ENGL 100
This course is intended for students who already have a solid foundation regarding travel terms and concepts. Students will explore currently available tools for researching and booking all components of a travel itinerary. This course will give students the opportunity to deepen their skills and increase their knowledge as they research air travel, evaluate tour companies and accommodations, interpret terms and conditions, and prepare themselves for a professional travel career. Emphasis is placed on practical application of knowledge and skills. May not be repeated. SC
LMC: DA
Transfer: CSU

TRAVL-096  Alaska Destination Specialist
3 hours lecture  1.5 Units
Advisory: Eligibility for ENGL 90
This course will introduce the student to the diverse regions of Alaska. Particular emphasis will be on the five regions of our largest state. Learn about the rich cultural heritage of Alaska's native people. Gain knowledge about how to match various destinations within Alaska with the needs and expectations of individual travelers. May not be repeated. SC
LMC: DA
Transfer: CSU

TRAVL-098  Independent Study in Travel Merchandising
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC
LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.
Transfer: Independent Study courses may be DA or transferable depending on specific course. See your counselor.

TRAVL-099  Cooperative Education in Travel Merchandising
Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC
LMC: DA
Transfer: CSU

TRAVL-101  Home-Based Travel: Is It for You?
9 total hours lecture .5 Unit
This course is an excellent orientation to the home-based travel business. This overview will offer an insight into what it takes to run a successful home-based travel business. It will provide students with information about the different types of home-based businesses set ups and about travel agencies that will host a home-based business. Required course for Home-Based Travel Specialist certificate. May be repeated three times. P/NP
LMC: DA
Transfer: CSU

TRAVL-102  Establishing a Home-Based Travel Business
9 total hours lecture .5 Unit
This course will provide students information on how to set up a home-based travel business, how to manage the business, select a niche, and create a lasting image. This course will discuss the challenges, opportunities and drawbacks of a home based travel business. Students will learn about the demands of a home-based entrepreneurship and how to overcome many of the hurdles associated with running a home-based business. Required course for Home-Based Travel Specialist certificate. May be repeated three times. SC
LMC: DA
Transfer: CSU

TRAVL-103  Marketing and Promoting a Home-Based Travel Business
9 total hours lecture .5 Unit
This course will teach students how to develop, budget and implement a marketing plan for a home-based travel business. This step-by-step seminar teaches students how to grow a business by attracting the right clients. Required course for Home-Based Travel Specialist certificate. May be repeated three times. SC
LMC: DA
Transfer: CSU

TRAVL-104  Resources for the Home-Based Travel Professional
9 total hours lecture .5 Unit
This course teaches students how to take advantage of outside resources that benefit a home-based travel business. Students will learn about the various industry organizations and about which suppliers and vendors to work with. They will gain knowledge of the various support services, web sites, books and groups that offer valuable information. Required course for Home-Based Travel Specialist certificate. May be repeated three times. SC
LMC: DA
Transfer: CSU
### TRAVL-105 Business and Financial Plans for Home-Based Travel
9 total hours lecture .5 Unit
This course teaches students how to develop sound business and financial plans for a home-based travel business. They will learn how to manage their business finances, select an accounting system and a bookkeeping system for their system. Required course for Home-Based Travel Specialist certificate. May be repeated three times. SC
LMC: DA
Transfer: CSU

### TRAVL-106 Home-Based Travel and the Law
9 total hours lecture .5 Unit
This course will teach students about the legal dos and don’ts of home-based travel. They will learn about selecting a legal structure for their business, about selecting and registering their business name, about licenses and permit and tax considerations of owning their own business. Required course for Home-Based Travel Specialist certificate. May be repeated three times. SC
LMC: DA
Transfer: CSU

### TRAVL-114 Group Travel Management
3 hours lecture 1.5 Units
Advisory: TRAVL 72; eligibility for ENGL 100
Students will learn about all aspects of group travel - prospecting, promoting, planning, pricing and escorting. In this course the student will explore and identify various types of groups and where to find them. Students will evaluate costing practices and profit analysis for specific group operations. Students will apply planning strategies and prepare a professional group travel proposal, which will help prepare them for a career in travel. Emphasis is placed on practical application of knowledge and skills. May not be repeated. SC
LMC: DA

### TRAVL-120 Certified Travel Associate (CTA)
3 hours lecture 3 Units
Advisory: Eligibility for ENGL 100. Completion of Level 1 certificate in the Travel Marketing department or 1 year of travel industry experience.
The Certified Travel Associate (CTA) is an elective course for advanced students in the Travel Marketing Program or for employees in the travel industry who have not yet completed this certification. It is the first of two levels of national travel industry certification offered by The Travel Institute. The Travel Marketing Program at LMC is accredited by The Travel Institute to offer this course and to proctor the national certification exam. In addition to successfully passing the certification exam, candidates have to complete 18 months of work experience before they receive their CTA certification from The Travel Institute. May not be repeated. P/NP
LMC: DA
Transfer: CSU

### TRAVL-900s Selected Topics in Travel Merchandising
DA varies with course content.

### Tutoring
SPTUT-020 Supervised Tutoring
May vary. N/A
Individualized tutoring designed to assist students to increase their success in college. Content varies depending on course subject matter and may include assistance with course work, homework, exam preparation or grade improvement. This is a free, noncredit, zero-unit course where tutoring is provided by college staff or student tutors under faculty supervision. May be repeated 9 times. P/NP
LMC: Non-Credit
Transfer: NC

### Welding
WELD-010 Basic Arc Welding Theory
3 hours lecture 3 Units
Required of all beginning arc welding students to assist them in developing the knowledge of safety and safe practices, fundamentals of arc welding, power sources, and A.W.S. classification of electrodes and electrode selection. Included in course: AISI, ASTM, SAE classification, flame cutting, welding symbols, control of distortion, and welding application. May not be repeated. LR
LMC: DA
Transfer: CSU

WELD-011 Basic Shielded Arc Welding Practice
3-9 hours lab .5-3 Units
Advisory: Prior or concurrent enrollment in WELD 10
A lab class required for all beginning arc welding students to enable them to develop the skills required of the trade. Practice in plate welding in various positions to meet minimum welding test requirements; also, practice in flame cutting and gouging and arc air gouging. May be repeated three times. LR
LMC: DA
Transfer: CSU

WELD-015 Basic Oxyacetylene Welding
1 hour lecture, 3 hours lab 2 Units
Oxy-fuel gas welding of steel sheet and pipe in all positions. Braze welding of steel and cast iron, silver brazing of ferrous and nonferrous metals, and fusion welding of cast iron. The lecture provides the necessary information needed for safe procedures, filler wire selection, various fuel gasses, fluxes, control of distortion, and proper welding procedures. May be repeated one time. LR
LMC: DA
Transfer: CSU

WELD-016 Advanced Oxyacetylene Welding
3 hours lab 1 Unit
Advisory: WELD 15 with a grade of “C” or better
The student will have the opportunity to develop additional practical welding skills for advanced welding procedures, job orders as required in the metal working industry. The oxyacetylene welding process will be used in order to accomplish the task of weld-
ing both ferrous and non-ferrous metals, plate, sheet metal, and pipe. Students will also gain additional proficiency in flame cutting operations while using the manual and machine torches. The individual is expected to cut and lay out one’s work for welding. May be repeated two times. LR

LMC: DA
Transfer: CSU

WELD-021  Advanced Arc Welding Practice
1.5-9 hours lab  .5-3 Units
Advisory:  WELD 10 and WELD 11 with a grade of “C” or better; concurrent enrollment in WELD 40
Designed for intermediate to advanced welding students to enable them to develop the skill required to meet entrance requirements of the trade. Practice in welding all positions in open butt vee groove plates which will pass bend or x-ray tests. Layout, fitting, and welding of special projects for various welding experiments. May be repeated three times. LR

LMC: DA
Transfer: CSU

WELD-031  TIG, MIG and FCA Welding Practice
1.5-9 hours lab  .5-3 Units
Advisory:  WELD 11 or WELD 21 with a grade of “C” or better; concurrent enrollment in WELD 40
Designed to develop inert gas welding skills with G.T.A.W., G.M.A.W., and F.C.A.W1. processes required for entry into the trade which includes welding steel, stainless steel, and aluminum in light gauge metals in all positions. May be involved in setting up equipment for various welding experiments and the repair of various parts or projects. May be repeated three times. LR

LMC: DA
Transfer: CSU

WELD-035  Blueprint Reading for Welders
3 hours lecture  3 Units
A combination lecture-lab class for beginning welding students or experienced welders who need blueprint reading skill. Covers basic principles of three-view projections, dimensioning, sections, and freehand sketching. Places emphasis on plate and structural fabrication print reading and interpretation of welding symbols. Cost estimating of materials, layout of material for fabrication. May not be repeated. LR

LMC: DA
Transfer: CSU

WELD-040  TIG, MIG and FCA Welding Theory
3 hours lecture  3 Units
Advisory:  WELD 10 with a grade of “C” or better
Covers welding processes with emphasis on gas tungsten arc, gas metal arc, and flux cored processes. Also a knowledge of filler wires, gases for ferrous and non-ferrous metals, hard facing, welding design, welding codes, nondestructive, and how to make up a resume’. May not be repeated. LR

LMC: DA
Transfer: CSU

WELD-041  Pipe Welding Practice
3-9 hours lab  1-3 Units
Advisory:  Prior or Concurrent enrollment in WELD 11, 21 and 31
An advanced welding course in which students will complete plate welding in all positions and certification. Will begin pipe welding in the 2G, 5G, 6G, and 6GR positions. Welding practice will include SMAW, GMAW, GTAW, and FCAW as per code, procedure, and job requirement. May be repeated three times. LR

LMC: DA
Transfer: CSU

WELD-098  Independent Study in Welding Technology
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit.) May be repeated three times. SC

LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.
Transfer:  Independent Study courses may be DA or transferable depending on specific course. See your counselor.

WELD-099  Cooperative Education in Welding Technology
Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC

LMC: DA
Transfer: CSU

WELD-900s  Selected Topics in Welding Technology
DA varies with course content.

Work Experience

WORK-099  General Work Experience Education
Hours by arrangement. One unit for each 75 hours on the job for paid employment. If unpaid or volunteer work, one unit may be earned for each 60 hours of work. 1-4 Units
Prerequisite:  Approved application and enrollment in a minimum of 7 units including up to 3 for this course
Under agreement of an employer and a faculty member, a contract will be developed for supervised cooperative education as to goals, content, methods, and evaluation. Approved application and enrollment in at least 7 units (including up to 4 for this course). No more than four units may be taken each semester. A maximum of 16 units may be earned. Cooperative education is offered by instructional area. May be repeated three times. SC

LMC: DA
Transfer: CSU
Los Medanos Administrators Emeriti
Alatorre, Arthur ...................... Director of Student Services
Carhart, John ......................... President
Case, Chester H ...................... President
Chin, Stanley H ...................... President
Collins, Charles .................... Dean of Humanistic Studies
Cromer, Lyla ........................ Assistant Dean of Health Sciences
Custadio, Vince ..................... Dean of Behavioral Science
Donatelli, A. Don .................. Director of Learning Resources
Johnson, Thayer .................... Director of Admissions & Records

Los Medanos Faculty Emeriti
Boucher, Gail ......................... Anthropology
Cameron, Jasper C .................. English
Campis, Carmen .................... Business
Cecchini, Eva ........................ Nursing
Cesa, Margaret ..................... English
Clark, Spencer ....................... Electronics
Coats, Elisabeth .................... Nursing
Corioso, April ....................... Librarian
Crouch, William R .................. Nursing
De Anda, Natividad ................ Counseling
Duggan, Curtis J .................... Business
Frates, Jeffrey ...................... Computer Science
Gallup, Terry ......................... Nursing
Garfield, Leo ......................... Administration of Justice
Glennon, James ..................... Administration of Justice
Gonzales, Pablo .................... English
Hagelin, Christine ................ Biology
Hansen, Paul ........................ Biology
Harmon, Lorne ...................... Administration of Justice
Hunnickett, Dora B. (Jane) ...... Geography
Janes, Donal ......................... Computer Science
Jacobs, Stan J ....................... Language Arts
Johnson, Sharon ................... Nursing
Juarez, Angel ....................... Chemistry
Leung, Shirley ...................... Business
Lisle, Chappie ...................... Physical Education
Kester, William ..................... Vice President of Academic and Student Affairs
Knott, Veronica .................... Senior Dean of Occupational Education
McDonald, Diana .................. Dean of Occupational Education
McKeown, Joseph ................ Assistant Dean of Administration of Justice
McNulty, James .................... Buildings & Grounds Manager
Medlinsky, David ................ Career Development Manager
Skapura, Robert ................... Senior Dean of Instructional Technology
Torres, Felipe ....................... Director of Special Programs
Williams, Carlton ................ Dean of Social and Economic Studies
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<th>Name</th>
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<td>A.A., Los Medanos College; B.A., Univ Cal Davis; M.B.A., Cal State Hayward</td>
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<td>Crawford, Anthony</td>
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<td>Computer and Network Services Supervisor</td>
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<tr>
<td>B.A., Univ Cal Santa Cruz</td>
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<tr>
<td>Crowder, Kurt</td>
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<td>Physics</td>
</tr>
<tr>
<td>B.S., Massachusetts Institute of Technology (MIT); M.S., Ph.D, Univ Cal San Diego</td>
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</tbody>
</table>
Faculty and Staff

Cutler, Bruce ................................................................. Director of Business Services
B.A., M.B.A., Univ Cal Berkeley
Davi, Estelle, R. ............................................................... Psychology
B.A., M.A., Cal State San Francisco
Davis, Jerry W. ............................................................... Biological Science
B.A., M.A., Cal State Chico
Dearman, Jason ............................................................. Automotive
AS, Los Medanos College
DeStefano, Jill ............................................................... Mathematics
B.S., M.S., Cal Poly State Univ San Luis Obispo
Doob, Peter ................................................................. Mathematics
B.A, Knox College; MS, Northwestern Univ
Dorritie, Frank ............................................................. Recording Arts
B.A., Manhattan College
Estrada, Robert ............................................................ Bookstore Manager
B.A., Univ of Cal Berkeley
Fisher, Dorrie ............................................................... Physical Disabilities Specialist/Counselor
B.A., M.S., Cal State Hayward
Fithian, Christine ........................................................ Senior Executive Assistant
A.A., College of the Redwoods; B.A., Cal State Humboldt
Francisco, William ....................................................... Counselor
A.A., Contra Costa College; B.A., M.S.W., Cal State San Francisco
Garcia, Peter ............................................................... President
B.A., St. Albert's College; B.A., Cal State Chico; M.Div., Dominican School of Philosophy & Theology
Godinez, Marco .......................................................... Counselor/Puente
A.A., Los Medanos College; B.A., Cal State-East Bay; M.A., J.F.K. Univ
Goff, Christina ............................................................. Librarian, Instructional
B.A., Sonoma State Univ; M.S., Simmons College
Goldstein, Barry .......................................................... Business /Management
B.A., Drew Univ; M.B.A., Univ of Northern Colorado
Goodin, Ruth ............................................................... Senior Foundation Director
B.A., Univ of Bridgeport, Connecticut
Gottlieb, Phillip .......................................................... Counselor
B.A., M.S., Cal State Univ, San Francisco
Gravert, Dennis ........................................................... Chemistry
B.S., Santa Clara Univ; Ph.D., Stanford Univ
Henderson, Silvester ...................................................... Music
B.A., M.A., Cal State San Francisco
Henry, Daniel .............................................................. Vice President
B.A., Univ Cal Santa Barbara; M.A., Univ Cal Berkeley
Hilbrand, Joellen .......................................................... English
B.A. Univ Colorado; M.A., Univ Cal Berkeley
Hobbs, Joann ............................................................... English
A.A., Los Medanos College; B.A., Cal State Chico; M.A., Cal State San Francisco
Holtmann, Erich .......................................................... Mathematics
B.S., M.S., Ph.D., Univ Cal Berkeley
Hsieh, Durwynne .......................................................... Biological Science
B.S., Mass Institute of Technology; Ph.D., Univ Cal Berkeley
Huffman, Laurie .......................................................... Spanish
B.A., Cal State Sacramento; M.S., Cal State Hayward; M.A., Cal State Sacramento; Ph.D., Capella Univ
Johnson, Linda ............................................................ Nursing
B.S.N, Cal State Univ, East Bay; M.S.N., Univ of Phoenix
Johnson, Scott ............................................................ Mathematics
B.A., Univ of Washington
Jones, Erlinda ............................................................. Child Development
B.A., Univ of Stanford; MA, San Francisco State
Jorgensen, Diane ........................................................ Administration of Justice
A.A., Ohlone Community College; B.A., St. Mary's College
Kaiper, Donald ........................................................... History
B.A., Colgate Univ; M.A., Univ of Hawaii; M.Div., Andover Newton Theol. School; Ph.D., Univ Cal Santa Cruz
Kamath, Kiran ............................................................ Dean
B.A., St. Francis College, Osmania; M.A., Simon Fraser Univ
Karp, Marie ............................................................... Occupational Education Counseling
  B.A., New York Univ; M.A., Cal State Hayward
Kishi, Thais ............................................................ Brentwood Center Coordinator
  B.A., Univ of the Pacific; M.A., Cal State San Jose; Ph.D., Univ of Texas at Austin
Lewis, Mark .......................................................... Biology/Physiology
  B.A., Ph.D., Univ of Cal Berkeley
Li-Bugg, Cherry ..................................................... Senior Dean of Information Technology and Services
  B.A., Shanghai International Studies Univ; M.A., M.L.I.S., Univ of Texas
Livingston, Richard ............................................... Senior Dean of Instruction
  A.A., Sierra College; A.B., Stanford Univ; M.A., Univ of the Pacific
Lugani, Shalini ...................................................... Economics
  B.A., M.A., Univ of Delhi; M.A., Jawaharlal Nehru Univ; Ph.D., Univ of Georgia
Maltester, John F ................................................... Music
  B.A., M.A., Cal State Hayward
Martin, Kirsten ..................................................... Nursing
  B.S., Univ Cal Berkeley; M.S., Univ Cal San Francisco
McCaughey, Cathy ................................................ Nursing
  A.A., College of San Mateo; B.S., Cal State Dominguez Hills; M.S., Univ of San Francisco
McDowell, Colin ................................................... Nursing
  A.A., Contra Costa College; B.S.N., Merritt College; M.S., Holy Names College
McGrath, Cynthia ................................................... Journalism
  B.A., Univ of Massachusetts; M.S., San Jose State Univ
McKnight, Donald .................................................. Computer Science
  B.A., Baruch College, New York
McNeal, Sean........................................................ Nursing
  B.A., Utah State Univ, M.S.N. San Francisco State Univ
Mitchell, Jeffrey L ................................................ English
  B.A., M.A., Cal State San Francisco
Moore, A’kilah ....................................................... Mathematics
  B.S., Spellman College, Georgia; M.S., Howard Univ, Washington, DC
Morales, Luis ......................................................... Counselor/ESL
  B.A., Cal State Univ Hayward; M.A., San Francisco State
Moriel, Daniel ....................................................... Philosophy
  A.A., Southwestern College; B.A., Cal State San Diego; M.A.., Ph.D., Univ Cal San Diego
Moy, Frances ........................................................ High Technology Center Specialist
  B.A., M.A., Cal State San Francisco
Nash, Bradford ..................................................... Business
  B.A., Cal State Fresno; M.S., Cal State Chico
Newman, Gail ........................................................ Director of Admissions and Records
  A.A., Fullerton College; B.A., Cal State Long Beach; M.P.A. Cal State Hayward
Nielson, Kathryn .................................................. Director of Early Childhood Lab School
  B.A., Cal State Long Beach
Norris, Michael ..................................................... Mathematics
  B.S., US Air Force Academy; M.S., Univ of Arizona; M.A., Graduate Theological Union
Ochoa, Andres O ................................................... Welding
  B.V.E., M.A., Cal State San Francisco
Orante, Newin ....................................................... Academic/Student Services Manager (EOP&S)
  B.A., San Francisco State; M.A., Cal State Hayward
Ortiz, Earl ........................................................... Automotive
  A.S., Los Medanos College
Pearman, Elizabeth ................................................ Business
  B.S., State College at Framingham, Massachusetts
Perfumo, Pamela ................................................ Child Development
  B.A, Cal State Hayward; M.S., Univ of Oregon
Perry, Josephine ................................................... English/Drama
  B.A., Univ Massachusetts; M.A., Cal State Long Beach; M.F.A., Ohio Univ
Poku, Kwadwo ...................................................... Mathematics
  B.S., Univ of Science & Technology, Kumasi; M.A., Univ Cal Berkeley
Price, Leonard G .................................................. Appliance Service Technology
  A.S., Contra Costa College; Vocational Credential
Puccioni, Madeline ................................................ English
  B.A., M.A., Cal State San Francisco
Rickman, Jancy ......................................................... Biology
  B.S., Emerson College; M.A., San Francisco State
Rodriguez, Gil ......................................................... Dean, Liberal Arts and Sciences
  B.A., Univ Cal Berkeley; M.S., Cal State Hayward
Rust, Tue ................................................................. Mathematics
  B.A., Univ Cal Berkeley; M.S., San Jose State Univ
Saito, Jennifer ......................................................... Mathematics
  B.A., M.A., Univ Cal Berkeley
Sample III, Alexander .............................................. Sociology
  B.A., Ohio State Univ; M.A., Cal State San Francisco
Sansen, Oliver ........................................................ Administration of Justice
  B.A., Univ of San Francisco
Schweickert, Mitch .................................................. Chemistry
  B.A., Univ Cal Santa Barbara; M.S., Univ Cal Davis
Shrieve, Elizabeth ................................................... Nursing
  B.F.A., Tufts Univ; B.S.N., Univ San Francisco; M.S., Univ Cal San Francisco
Skeen, Esther .......................................................... Police Services Lieutenant/Manager
  B.A., Univ Cal Berkeley
Smith, Clayton ......................................................... Computer Science
  B.A., Univ Cal Berkeley
Smith, Erma ............................................................ Articulation Officer/Psychology
  B.A., Cal State San Jose; M.A., Cal State San Francisco
Snell, Myra ............................................................ Mathematics
  B.A., Univ Texas-Austin; M.A., Univ Cal Berkeley
Snow, Lucy ............................................................. Art
  B.S., Tafts Univ; M.F.A. Univ Cal Berkeley
Speer, Denise ........................................................ Biological Science
  B.S., Cal Poly State Univ San Luis Obispo; D.V.M., Univ Cal Davis
Stein, Jeannine ......................................................... Mathematics
  B.A., Cal State San Jose; M.A., Univ of Santa Clara
Sterling, Alex .......................................................... English
  B.A., MA-Purdue Univ; M.A., Cal State East Bay
Subia, Laura .......................................................... Counselor/EOP&S
  B.A., Univ Cal Berkeley; M.S., San Francisco State
Tan, Richard ......................................................... Librarian, Electronic/Technical Services
  B.S. Stanford Univ; M.L.I.S., San Jose State Univ
Taylor, Jim ........................................................... Buildings and Grounds Manager
  B.A., M.A., Univ Cal Santa Barbara
Townsend, Janice .................................................... Child Development
  B.A., M.A., Univ Cal Santa Barbara
Tuttle, Maria .......................................................... English/Puente
  B.F.A. Art Academy of Cincinnati; M.A., University of Cincinnati; M.F.A., Univ of Texas
Valenzuela, Eileen .................................................... Office of Instruction Supervisor
  A.A. Los Medanos College, B.S., M.P.A., Cal State Hayward
Villegas, Richard .................................................... Physical Education
  B.S., Cal State San Bernardino
Von Bergen, Julie .................................................... Mathematics
  B.A., Univ of California, San Diego
Wagener, J. Pat ....................................................... Mathematics
  B.S., St. Edward’s Univ; M.S., Univ of Wisconsin-Superior
Wethington, Katalina ................................................ English
  B.A., Univ of San Diego; M.F.A., St. Mary’s College
Whitman, Nancy ..................................................... Spanish
  B.A., Cal State Chico; M.A., Cal State Sacramento; Ed.D., Univ So Cal
Willett, Kathleen .................................................... Biology
  B.S., Cal State Univ Hayward
Wilson, Glenn ....................................................... Custodial Manager
  B.S., Pepperdine Univ; M.A., Cal State Northridge
Yamakoshi, Lois ..................................................... Mathematics
  B.S., Indiana Univ of Pennsylvania; M.Ed., St. Mary’s College
Yeong, Michael ..................................................... Reading
  B.A., St. Francis College; M.A., Antioch College
Zhu, Yongmin ........................................................ English/ESL
  B.A., Hanzhou Univ - China; M.A., Univ of Utah; Ed.D., St Mary’s College
Zilber, Michael .................................................. Music
   B.A., New England Conservatory of Music; M.A., Tufts Univ
Zimny, David .................................................. Political Science
   B.A., Univ of Chicago; M.A., Ph.D., Yale Univ

Staff
Addiego, Steven ............................................. Laboratory Equipment Technician II
Alves, Stephanie ............................................. Lead Admissions/Records Assistant
   A.A., Los Medanos College
Amaral, Gilbert ............................................. Lead Grounds Worker/Gardener
   B.A. Cal State Univ, Sacramento; M.S., Cal State Univ, East Bay
Amare, Daniel ............................................. Science Laboratory Technician II
   A.A., Los Medanos College
Axel, Cynthia .............................................. Sr. Office Assistant
Bancroft, Robert ........................................... Police Services Officer
Benzler, Camme ............................................. Senior Administrative Assistant
Benzler, Sylvia ............................................. Administrative Assistant
   A.A., Los Medanos College; AAS, Nassau Community College
Bettencourt, Sharrrie ..................................... Media Design Specialist
   A.A., Solano Community College
Betz, Carole ................................................ Counselor Assistant
Butler, Lorie ................................................ Senior Library Assistant
Chapman, Eloine ............................................ Senior Web Administrator
   A.A., Los Medanos College
Chen, San Mei ............................................... Custodian II
Connell, Carmen .......................................... Financial Aid Assistant II
Cullar, Katherine .......................................... Senior Administrative Secretary
Cullison, Linda ............................................. Instructional Assistant
   B.A., UC Berkeley; M. Div., Pacific School of Religion/Instructional
Davies, Daniel ................................................ Custodian II
   A.S., Los Medanos College
Dow, Melissa ................................................ Custodian II
Elejalde, Tatianna ......................................... Financial Aid Assistant I
   A.A., Diablo Valley College
Ellsworth, Ellen ........................................... Customer Services Clerk
Fantuzzi, Angela .......................................... Family Life Education Specialist
   B.A., Pontifical Catholic Univ of Chile
Fay, Jennifer ................................................ Science Laboratory Technician II
   B.A., Sonoma State Univ
Felix, John ................................................... Lead Custodian
Flores Zelaya, Reynaldo ................................ Custodian II
Garcia, Jennifer ........................................... Instructional Assistant
   A.A., Los Medanos College
Garritos-Holer, Gloria ................................ Lead Office Assistant
Garza, Regina ............................................... Senior Account Clerk
   A.A., San Francisco Community College
Gomez, Leticia ............................................. Instructional Assistant
   A.A., Los Medanos College
Gonzalez, Gustavo ........................................ Campus Facilities Assistant
Gonzalez, Leticia .......................................... Instructional Assistant
Gouveia, Lucienne ....................................... Instructional Assistant
Greene, Letta ............................................. Student Services and Instructional Support Coordinator–CalWorks
   B.A., Univ of California Riverside
Griffin, Kathleen .......................................... College Human Resources Assistant
   A.S., Alameda College
Hampton, Janelle ......................................... Equipment Maintenance Worker
Henry, Judy .................................................. Family Life Education Specialist
   A.S., Los Medanos College
Herrera, Rhodora .......................................... Customer Services Clerk
   A.A. Diablo Valley College
Hertstein, Margaret ..................................... Administrative Assistant
   A.A., Los Medanos College

2008 – 2009 Los Medanos College
Faculty and Staff

Hotton, Michael.................................................................................. Senior Parking Services Officer
Jackson, Melissa.................................................................................. Student Services & Instructional Support Coordinator
A.S., Cerro Coso Community College; B.A., Pacific Oaks College
Kohler, Linda...................................................................................... Accountant I
A.A., Diablo Valley College
Kolthoff, James.................................................................................. Alternative Media Specialist
A.A., A.S., Los Medanos College; B.A., Cal State Hayward
Lawrence, Demetria........................................................................... Student Services & Instructional Support Coordinator
A.A., Los Medanos College
Le, Le Pham....................................................................................... Computer-Aided Instruction Lab Coordinator
A.S., Los Medanos College; B.A., Saigon National Univ of Pedagogy, Viet Nam
Lee, Helen.......................................................................................... Research Staff Assistant
B.A., Univ of Manitoba, Canada; M.S. Cal State Hayward
Leung, Chunni.................................................................................... Financial Aid Assistant I
A.A., Los Medanos College; B.A., Cal State Univ East Bay
Long, Mary.......................................................................................... Administrative Assistant
Love, V. Carol..................................................................................... Math Lab Coordinator
A.A., Diablo Valley College; B.A. Cal State Hayward
Macias, Antonio.................................................................................. Building Maintenance Worker
Mallilin, Dennis.................................................................................... Financial Aid Assistant I
A.A., Los Medanos College; B.A. San Francisco State Univ
Maniscalco, Linda................................................................................ Admissions/Records Assistant I
Marquez, Natalia................................................................................ Custodian II
Martin, Analicia.................................................................................. Athletic Trainer
BS, Cal Poly State Univ; M.S., Univ of the Pacific
Mata, Josette........................................................................................ Bookstore Operations Assistant
A.A., Los Medanos College
McEwen, Tennille.............................................................................. Office Assistant II
A.A. A.S, Los Medanos College
McFarland, Lisa.................................................................................. PBX Operator-Receptionist
B.A., Univ Cal Berkeley
McLean, Sharen.................................................................................. Senior Administrative Assistant
A.A., Los Medanos College
Mills, Jr., George................................................................................ EOP&S Assistant
A.A., Los Medanos College
Mills, Jody.......................................................................................... Computer & Network Specialist
A.A.S., Heald Business College
Mills, Sandra...................................................................................... Computer-Aided Instructional Lab Coordinator
A.A., Los Medanos College, B.A., Cal State Hayward
Monteverde, Eva................................................................................ Financial Aid Specialist
Nogarr, Justin..................................................................................... Offset Technician I
A.A., Los Medanos College, B.S., Cal State Univ Sacramento
O’Malley, Margaret............................................................................ Instructional Assistant
B.A., Trinity College
Ornelas, Janine.................................................................................... Police Services Assistant/Dispatcher
A.S., Los Medanos College
Olgin, Anthony.................................................................................. Custodian II
Ortiz, Elaine........................................................................................ Computer and Network Specialist
A.S., Heald College, School of Technology
Pacheco, Carmen................................................................................ Sr. Administrative Secretary
B.A. Univ of San Francisco
Pavich, Joyce..................................................................................... Book Buyer
Paris, Gene.......................................................................................... Equipment Maintenance Worker
Parsons, Keith.................................................................................... Music Laboratory Coordinator
A.A., Southern Suburban College; B.A., Columbia College Chicago
Payton, Carl........................................................................................ Police Services Assistant/Dispatcher
Purdy, Susie....................................................................................... Senior Admissions/Records Assistant
A.A., Los Medanos College; B.A., San Francisco State
Raumer, Rodney.................................................................................. Computer and Network Specialist
A.A., A.S., Contra Costa College
Robertson, Leetha............................................................................... Admissions/Records Assistant I
B.S., Gambling State Univ
Rock, Mary ................................................................. Science Laboratory Coordinator
  A.A., Solano Community College; B.S., Univ of California, Davis
Rush, Robert Roy ........................................................... Athletic Equipment Manager II
  A.A., Diablo Valley College
Sale, Humberto ............................................................. College Research Coordinator
  B.A., M.A., Cal State San Francisco
Sanchez, Salvador .......................................................... Grounds Worker/Gardener II
Scheier, Robin ............................................................... PBX Operator-Receptionist
Schmidt, Sandra ............................................................ Senior Administrative Assistant
Snelling, Jr., John ........................................................... Custodian II
Sobolik, Glenn .............................................................. Lead Maintenance Mechanic
Soto, Annica ................................................................. Admissions/Records Assistant I
  B.A., San Jose State Univ
Spagnol, James ............................................................. Computer Center Technician II
  A.A., Los Medanos College
Stanton, Karen ............................................................. Computer Center Technician II
  B.S., M.S., Univ of Phoenix
Stanton, Kenneth .......................................................... Media Services Specialist II
  A.A., Diablo Valley College; B.A., Sonoma State
Starkie, Ann ................................................................. Lead Account Clerk
Stewart, Jamila .............................................................. PBX Operator-Receptionist
Sutton, Roy ................................................................. Building Maintenance Worker
Terstegge, Ted ............................................................... Police Services Officer
Tiscareno, Spring. .......................................................... Lead Custodian
Turner, Reginald ............................................................ Employment Development Services Specialist
  A.A., Wilkes Community College
Valencia, Steven ........................................................... Custodian II
Vawter, Glenda .............................................................. Locker Room Attendant
Villegas, Grace ............................................................. Scheduling Specialist
Vu, Johnny ................................................................. Custodian II
Wagner, Gilbert ............................................................. Custodian II
Warden, Jennifer .......................................................... Fire Technology/EMS Instructional Laboratory Coordinator
Warthen, Margit ........................................................... Customer Services Clerk
  A.A., A.S., Los Medanos College
Weikum, Sherry ........................................................... Library Assistant II
  A.A., A.S., Los Medanos College
West, Michael ............................................................. Reprographics Production Coordinator
Wille, Linda K. .............................................................. Scholarship Program Coordinator
  A.A., Citrus College; B.A., Cal Poly Pomona
Wright, Eddie .............................................................. Custodian II
Xavier, Gilberta ............................................................ Custodian II

Catalog Acknowledgement:
Produce by the LMC Department of Marketing & Media Design

Los Medanos College has made every reasonable effort to determine that information stated in this catalog is true and correct. Courses and programs offered, together with other matters contained herein, are subject to change without notice by the administration of Los Medanos College for reasons related to student enrollment, level of financial support, or for any other reason at the discretion of the Contra Costa Community College District and the College. The District and the College further reserve the right to add to, amend or repeal any of their rules, regulations, policies, and procedures consistent with applicable laws.

This catalog is supplemented by the Schedule of Courses, which is published each term and provides updated information about courses, services, policies, and procedures.
College Phone Directory

From Oakley/Brentwood — 754-9011
From Concord — 798-3500 • TDD 439-5709

For Information About: Ext/Phone  Room
Admissions & Records Office  ........................................  7500  .................  CC3 401
Assessment Center  .....................................................  3252  ..................  CC3 524
Athletic Programs  ......................................................  3121  ..................  CC3 444
Bookstore  ........................................................................  3143 or 439-2056  .................  CC3 810
Brentwood Center  ..........................................................  513-1625
C.A.R.E. Program  ..........................................................  3131/3138  ..................  CC3 431
Career Center  ...............................................................  3252  ..................  CC3 524
Child Study Center  ......................................................  3197/3198  .................  CS2
Cosmetology  .................................................................  VM 3210  .................  CC3 486
Counseling Appointments  .............................................  3334  ..................  CC3 414
Disabled Students High-Tech Center  .............................  3279  ..................  CC3 625
Disabled Support Services • Learning/Physical (TDD)  .........  3133/3353  ..................  CC3 441
3133/3353  ..................  CC3 441
Employment Center • Work Experience/Coop Education/On Campus Job Placement  3330/3331  ..................  CC3 435
EOP&S Extended Opportunity Programs & Services  ............  3138/3117/3317  ..................  CC3 431
Financial Aid  ...............................................................  3139/3902/3291/3292  ..................  CC3 431
Fire/EMS  ........................................................................  3105  ..................  CC4 480
Foundation Office  .......................................................  3215  ..................  CC3 440
Information Center  ......................................................  3422  ..................  CC3 400
Instructional Dean’s Offices  .........................................  3105  ..................  PS2
Library Services/Learning Resource Center  .......................  3275/3320  ..................  LR3 300
Lost and Found  ............................................................  3228  ..................  CC1 132
Marketing/Public Relations  ...........................................  3242  ..................  LR2 259
Matriculation Services—College Orientations  ....................  3121  ..................  CC3 444
Nursing Programs/Allied Health (CPR)  .........................  3286  ..................  CC4 482
Music and Recording Arts  ............................................  439-0200  ..........  MU3
Police Services/Lost and Found  .....................................  3228  ..................  CC1 132
Refunds/Cashier’s Office  .............................................  3111  ..................  CC3 425
Research Office  ..........................................................  3370  ..................  CC4 472
Scholarship Information  ..............................................  3130  ..................  CC3 402
Student Government/Activities  .....................................  3266/3199  ..................  CC3 800A
Student Outreach  ..........................................................  3383  ..................  CC3 414
Teaching and Learning Center  ........................................  3176  ..................  CC1 100
Transfer Center  ..........................................................  3124  ..................  CC3 434
Veterans Benefits  ..........................................................  3254  ..................  CC3 401

Instructional Labs
Appliance  ........................................................................  3341  ..................  CC3 506
Art  .................................................................................  3384  ..................  CC1 609
Biology  ............................................................................  3208  ..................  CC3 920
Business  ..........................................................................  3202  ..................  CC2 232/235
Computer (General Use)  ..............................................  3176
English-LAB  .................................................................  3263  ..................  CC2 280
Journalism  .......................................................................  3125/3359  ..................  CC3 601
Math Tutorial  ...............................................................  3326  ..................  MA 102
MIDI (Music)  ...................................................................  3385  ..................  MU3 740

Instructional Dean’s Offices
Liberal Arts & Sciences  ..................................................  3105  ..................  PS2
Occupational Education  .................................................  3285  ..................  PS2

Individual instructors may be contacted at their campus phone extensions.
College Terms

A.A. Degree
Associate in Arts Degree, granted to students who have completed 60 units, with a grade point average of 2.0 or better, including major requirements, general education requirements and college competencies.

A.S. Degree
Associate in Science Degree, granted to students who have completed 60 units with a grade point average of 2.0 or better in biological science, chemistry, or a technical vocational major; includes major requirements, general education requirements, and college competencies.

Advisory
A course that is recommended, prior to enrollment in another course; Although courses designated as “advisory” are not required, they are useful as an indication of the desired level of proficiency needed to successfully complete the next course level.

Articulation
Agreement between community college and 4-year college in which 4-year college agrees to accept certain community college courses as equivalent to their own.

Assessment
Evaluation process designed to gather information about individual students to assist in appropriate course placement.

Certificate of Achievement
Awarded to students who have satisfactorily completed the major requirements and competencies in identified occupational programs.

Co-Requisite
A course that must be taken at the same time as the desired course.

Course Number
Identification number for course, such as Psychology 11LS.

Credit/No Credit (CR/NC)
Some courses are designated with CR/NC, which indicates that students may earn a credit (CR = satisfactory or better) or no credit (NC = less than satisfactory) grade. No letter grade will be awarded in these courses.

CSU (California State University)
California State University system includes 23 campuses statewide. Closest CSU campuses to LMC are East Bay (formerly Hayward), San Francisco, San Jose, Sacramento, and the California Maritime Academy.

Competencies
College “exit” requirements in reading, writing, math, and computer literacy. Required for all Associate Degrees and Certificates of Achievement. Satisfied by course or exam.

Degree-Applicable (DA) Courses
Courses designated as DA are those that apply toward completion of an associate degree or certificate of achievement. Degree applicable courses are identified by the abbreviation “DA”, appearing on the last line, below the course description in the catalog.

Elective
Course or subject a student may choose to take rather than one that is required for a particular major or degree.

Faculty Advisor
Instructor in certain major who assists students in developing multi-semester educational plan for courses in that major.

General Education (Breadth) Requirements
Specific courses, outside student’s major area, required for Associate Degree and transfer. Designed to meet the need for broad knowledge. Requirements vary from college to college.

IGETC (Intersegmental General Education Transfer Curriculum)
Program of courses designed to met transfer requirements of either CSU (California State University) or UC (University of California) systems.

Major
Principal field of academic specialization chosen by a college student, such as Computer Science, Music, or Psychology. Requires an organized set of required classes.

Non Degree-Applicable (NDA) Courses
Courses designated as “NDA” cannot be applied toward units required for degrees or certificates. Non Degree-Applicable courses are identified by the abbreviation of “NDA”, appearing on the last line below the course description in the catalog.

Prerequisite
A course or other requirement that must be completed and verified prior to enrollment in a given course.

Repeatability
Not all courses may be repeated, once they have been satisfactorily completed (with a grade of “CR”, “C” or better). If a course is repeatable, it will be stated at the end of the course description. If no statement is made, the course may only be repeated one time, in the event that the first grade received was substandard (“NCR”, “D”, or “F”).

Student Choice (SC)
Some courses are designated with “SC”, which means a student may choose to complete the courses for either a letter grade or a credit/no credit (CR/NCR) grade. See information on this grade option in the “Standards of Scholarship” section of this catalog.

Transfer Course
Any course accepted for credit towards Bachelor’s Degree at 4-year college. Shown in catalog as “Transfer: UC, CSU.”

UC (University of California)
University of California system includes ten campuses statewide: Berkeley (Cal), Davis, Irvine, Los Angeles (UCLA), Merced, Riverside, San Diego, San Francisco, Santa Barbara, Santa Cruz.

Unit of Credit
A measure of how much credit may be earned for any given course. Unit amounts are determined by the type of instruction associated with the course (i.e. lecture, lab) and the number of hours the class meets. See the “Guidelines on Units of Credits” section for further information.
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