

Los Medanos College Catalog 2009-2010

2700 East Leland Road
Pittsburg, CA 94565
(925) 439-2181
(925) 439-5709 TDD

www.losmedanos.edu



Contra Costa Community College District



Governing Board

Sheila A. Grilli	President
Dr. Anthony T. Gordon	Vice-President
John T. Nejedly	Secretary
Jess Reyes	Member
Tomi Van de Brooke	Member

District Administration

Dr. Helen Benjamin, Chancellor

Campuses

Los Medanos College, Contra Costa College, Diablo Valley College

Los Medanos College Administration

President	Peter Garcia
Vice President	TBA
Senior Dean, Information Technology	Cherry Li-Bugg
Computer & Network Services Supervisor	TBA
Senior Dean, Instruction	Richard Livingston
Dean, Liberal Arts and Sciences	Gil Rodriguez
Dean, Occupational Education	Kiran Kamath
Senior Academic Manager, Instruction	Tawny Beal
Office of Instruction Supervisor	Eileen Valenzuela
Senior Dean, Student Services	Gail Newman
Director of Admissions and Records	Robin Armour
Director of Financial Aid	Loretta Canto-Williams
Dean of Student Development	TBA
Bookstore Manager	Bob Estrada
EOPS Program Manager	Newin Orante
Student Outreach Coordinator	Jorge Cea
Director of Business Services	TBA
Director of College Advancement	Ruth Goodin
Foundation Director	Lindy Wille
Director of Marketing and Media Design	Barbara Cella
Building and Grounds Manager	Jim Taylor
Custodial Manager	Glenn Wilson
Police Services Manager	TBA

2009-2010 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

Los Medanos College complies with all Federal and state rules and regulations and does not discriminate on the basis of race, color, national origin, gender or disability. This holds true for all students who are interested in participating in educational programs and/or extracurricular school activities. Harassment of any employee/student with regard to race, color, national origin, gender or disability is strictly prohibited. The lack of English language skills will not be a barrier to admission and participation in the college's education programs. Inquiries regarding compliance and/or grievance procedures may be directed to the Los Medanos College Title IX Officer and/or the Section 504/ADA Coordinator.

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.

Table of Contents

Section 1: General College Information

About the College.	2
Admission and Course Enrollment	3
College Admission	
Resident Status	
International Students	
Matriculation and Course Enrollment	
Prerequisites/Advisories	
Non-Discrimination Policy	
Standards of Scholarship.	7
Attendance	
Grading	
Honors Status	
Pass/No Pass Grade Option	
Withdrawal and Drop Policy	
Probation and Dismissal	
Credit Accepted at Los Medanos College	
High School Credit	
Policies and Procedures for Repeating a Course Taken in the District	
Academic Renewal Without Course Repetition	
Transcripts	
Rights of Instructors	
Fees, Benefits and Financial Aids	12
Enrollment Fee	
Tuition Fee for Non-California Residents	
Refund Policy	
Enrollment Fee Deferments	
Parking Fees	
Veterans' Benefits	
Extended Opportunity Programs & Services	
Vocational Rehabilitation	
Financial Aid	
Student Services	17
Philosophy	
Business Services Office	
Career Center	
Child Care Services	
Counseling Services	
Disabled Students Program and Services	
Employment Center	
Food Service	
Gay and Lesbian Resource Center	
Health Services Referral	
Mustang Corner Bookstore	
Parking	
Police Services	
Student Activities	
Transfer Center	
Instructional Services.	21
Athletics	
Campus Labs	
Cooperative Education Services	
Honors Program	
Library and Learning Resource Center	
Math Lab	
Puente Project	
Reading and Writing Center	
Science Audio-Tutorial Center	
Tutoring Services	

Student Rights and Responsibilities	24
Academic Freedom	
Participation in Institutional Government	
Student Responsibilities and Educational Goals	
Off-Campus Activities	
Progress Evaluation by Faculty	
Grievance Process	
Student Discipline and Suspension	
Student Code of Conduct	
Drug-Free Campus Policy	
Smoking Policy	
Matriculation Rights and Responsibilities	
Matriculation Waivers, Appeals, and Complaints	
Student Record Privacy Law	
Student Right-To-Know and Campus Security Act	
Section 2: College Transfer Requirements	
Transfer Information	29
CSU Admission Requirements	
UC Admission Requirements	
Special Transfer Admissions Programs and Cooperative Admissions Program	
Intersegmental General Education (CSU and UC)	
Private Colleges and Universities (California and Nationwide)	
CSU General Education Requirements Chart	33
IGETC Requirements Chart	34
Section 3: Graduation Requirements	
Associate Degree and Certificate Requirements	36
Preparing for Graduation	
Associate Degree Programs and Requirements	
Certificate of Achievement Requirements	
Locally Approved Certificates	
Basic Skills/Competency Requirements	
Pathways to an Associate Degree at LMC	38
LMC Associate Degree Requirements	39
Degrees and Certificates in Major Programs	40
CCCCD Programs	41
Major Program Requirements	43
Section 4: Program Student Learning Outcomes	
Program Student Learning Outcomes Descriptions	70
Section 5: Course Offerings	
Understanding the Course Descriptions	80
Guidelines on Units of Credits	82
Course Descriptions	83
Section 6: Appendices	
Faculty/Staff	200
Catalog Acknowledgement	207
College Phone Directory	208
College Terms	209
Index	210

College Calendar

Summer Intersession

Instruction Begins	May 26
Independence Day—Legal Holiday	July 3 – 4
End of Summer Intersession.	Aug 14

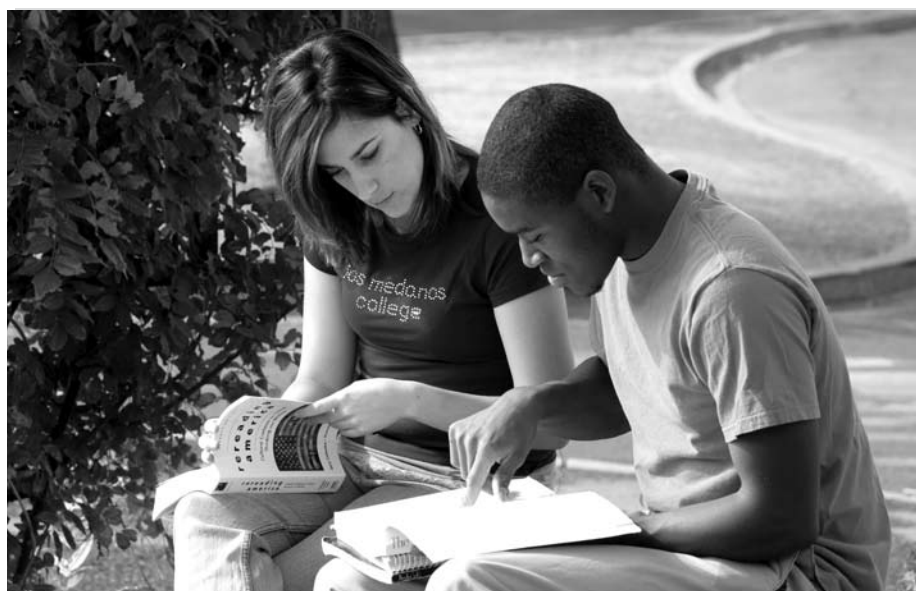
Fall Semester 2009

Begin accepting applications for Fall Semester	March 1
Course Enrollment.	See Fall Schedule of Courses
Instruction Begins	Aug 17
Labor Day—Legal Holiday	Sept 7
Last day to file drop for semester-length courses to avoid “W” on transcript.	Sept 11
Last day to petition for pass/no pass option (SC) for semester-length courses	Sept 11
Native American Day - Holiday.	Sept 25
Veteran’s Day—Legal Holiday	Nov 9
Last day to file drop for semester-length courses.	Nov 20
Thanksgiving—Legal and Board Holiday	Nov 26 – Nov 27
Last day of instruction and final exams.	Dec 19

Spring Semester 2010

Begin accepting applications for Spring Semester	Oct 1
Course Enrollment	See Spring Schedule of Courses
Martin Luther King Jr.’s Birthday—Board Holiday	Jan 18
Instruction Begins.	Jan 22
Lincoln’s Birthday—Legal Holiday	Feb 12
Washington’s Birthday—Legal Holiday.	Feb 15
Last day to file drop for semester-length courses to avoid “W” on transcript	Feb 19
Last day to petition for credit/no credit option (SC) for semester-length courses	Feb 19
Spring Recess	April 5 – 9
Last day to file drop for semester-length courses	April 23
Last day of instruction—Graduation.	May 28
Memorial Day—Legal Holiday	May 31

General College Information



Section 1

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 and online. 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.
- 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 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) 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 should pay enrollment fees at the time of course enrollment; however fees must be paid in full prior to registration for the following term.

Course Enrollment Priority

Enrollment is based on Title 5 mandates and college policy. 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. Continuing concurrently enrolled high school students may register at the end of continuing student registration. New, returning, and transfer students may then register according to established timelines. New and returning concurrently enrolled high school students may register during open registration.

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 "P" 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. All are available to regular day students as well as to those persons who can take courses only at night. 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

Los Medanos College complies with all Federal and state rules and regulations and does not discriminate on the basis of race, color, national origin, gender or disability. This holds true for all students who are interested in participating in educational programs and/or extracurricular school activities. Harassment of any employee/student with regard to race, color, national origin, gender or disability is strictly prohibited. The lack of English language skills will not be a barrier to admission and participation in the college's education programs. Inquiries regarding compliance and/or grievance procedures may be directed to the Los Medanos College Title IX Officer and/or the Section 504/ADA Coordinator.

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. Llama 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 cualquier petición semejante para revisar casos de discriminación de empleo.

Preguntas Quejas a Base de Incapacidad

Preguntas en cuanto al acceso, tratamiento o empleo a base de incapacidad, deben ser dirigidas al Decano Servicios Estudiantiles De El Colegio Los Medanos, 2700 East Leland Rd., Pittsburg, CA 94565, (925) 439-2181, ext. 3372, o TDD (925) 439-5709.

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 information 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 college web site at www.losmedanos.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

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

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 (pass) grade represents a letter grade of A, B, or C.
- An NP (no pass) 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 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 printed 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 "W". A student with extenuating circumstances may petition for a "W" after the deadline for withdrawal. Extenuating circumstances are verified cases of accident, illness, or other circumstances beyond the control of the student.

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).
Units Enrolled: A, B, C, D, F, W, I, P, and NP (for calculation of progress).

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.

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.
- 3) Credit by examination is evaluated on a pass/no pass basis. No letter grade will be given.
- 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 department 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.

Advanced Placement

Examination	Score	LMC Course Equivalents- Semester Units	LMC AA/AS Degree Requirements Satisfied	Semester Units Toward CSU GE/Breadth Area Certification	CSU Semester Units For Transfer	IGETC Area Credit Allowed	UC Semester Units For Transfer
Art History	3, 4, 5	No equivalent-N/A	N/A	3 units Area C1 or C2	6	3A or 3B	5.3
Biology	3, 4, 5	BIOSC 10 -4 units	Science	4 units Area B2&B3	6	5B with lab	5.3
Chemistry	3, 4, 5	CHEM 25-5 units	Science	4 units Area B1&B3	6	5A with lab	5.3
Chinese Language & Culture	3, 4, 5	No equivalent -N/A	N/A	3 units Area C2	6	3B & 6A	5.3
Computer Science A	3, 4, 5	COMSC 44-3 units	N/A	N/A	3**	N/A	1.3
Computer Science AB	3, 4, 5	COMSC 44 + 48-6 units	N/A	N/A	6**	N/A	2.7
Economics: Macro	3, 4, 5	ECON 11-3 units	Social Science	3 units Area D2	3	4B	2.7
Economics: Micro	3, 4, 5	ECON 10-3 units	Social Science	3 units Area D2	3	4B	2.7
English: Language & Comp.	3	Eligible for ENGL 100	N/A	3 units Area A2	6	1A	5.3
English: Language & Comp.	4, 5	ENGL 100-3 units	Reading-Writing	3 units Area A2	6	1A	5.3
English: Literature & Comp.	3	Eligible for ENGL 100	N/A	6 units Area A2&C2	6	1A or 3B	5.3
English: Literature & Comp.	4, 5	ENGL 100-3 units	Reading-Writing	6 units Area A2&C2	6	1A or 3B	5.3
Environmental Science	3, 4, 5	BIOSC 7-4 units	Science	4 units Area B1&B3 or 4 units Area B2 & B3 *	4	5A with lab	2.7
French Language	3, 4, 5	No equivalent-N/A	N/A	3 units Area C2	6	3B & 6A	5.3
French Literature	3, 4, 5	No equivalent-N/A	N/A	3 units Area C2	6	3B & 6A	5.3
German Language	3, 4, 5	No equivalent-N/A	N/A	3 units Area C2	6	3B & 6A	5.3
Govt. & Politics: U.S.	3, 4, 5	No equivalent-N/A	N/A	3 units Area D8	3****	4H	2.7
Govt. & Politics: Comparative	3, 4, 5	No equivalent-N/A	N/A	3 units Area D8	3	4H	2.7
History: United States	3, 4	N/A	N/A	3 units Area D6 or C2	6****	3B or 4F	5.3
History: United States	5	HIST 36 + 37-6 units	Social Science	3 units Area D6 or C2	6	3B or 4F	5.3
History: European	3, 4, 5	No equivalent-N/A	N/A	3 units Area D6 or C2	6	3B or 4F	5.3
History: World	3, 4	N/A	N/A	3 units Area D6 or C2	6	3B or 4F	5.3
History: World	5	HIST 34 + 35-6units	Social Science	3 units Area D6 or C2	6	3B or 4F	5.3
Human Geography	3, 4, 5	No equivalent-N/A	N/A	3 units Area D5	3	4E	2.7
Italian Language & Culture	3, 4, 5	No equivalent-N/A	N/A	3 units Area C2	6	3B & 6A	5.3
Japanese Language & Culture	3, 4, 5	No equivalent-N/A	N/A	3 units Area C2	6	3B & 6A	5.3
Latin: Vergil	3, 4, 5	No equivalent-N/A	N/A	3 units Area C2	3	3B & 6A	2.7
Latin: Literature	3, 4, 5	No equivalent-N/A	N/A	3 units Area C2	6	3B & 6A	2.7
Mathematics: Calculus AB	3	N/A	N/A	3 units Area B4	3**	2A	2.7
" : Calculus BC	3	N/A	N/A	3 units Area B4	6**	2A	5.3
" : Calculus AB	4, 5	MATH 50-4 units	Mathematics	3 units Area B4	3**	2A	2.7
" : Calculus BC	4, 5	MATH 50 + 60-8 units	Mathematics	3 units Area B4	6**	2A	5.3
Music Theory	3, 4	Music 15-3 units	Creative Arts	3 units Area C1*****	6	N/A	5.3
Music Theory	5	Music 15 + 16 -6 units	Creative Arts	3 units Area C1*****	6	N/A	5.3
Physics B	3, 4, 5	PHYS 35 + 36-8 units	Science	4 units Area B1&B3	6***	5A with lab	5.3***
Physics C: Mechanics	3, 4, 5	PHYS 40-4 units	N/A	4 units Area B1&B3	4***	5A with lab	2.7***
Physics C: Magnetism	3, 4, 5	PHYS 41-4 units (3)	N/A	4units Area B1&B3	4***	5A with lab	2.7***
Psychology	3, 4, 5	PSYCH 11-3 units	Behavioral Science	3units Area D9	3	4I	2.7
Spanish Language	3, 4	SPAN 52-5 units	N/A	3 units Area C2	6	3B & 6A	5.3
Spanish Language	5	SPAN 53-5 units	N/A	3 units Area C2	6	3B & 6A	5.3
Spanish Literature	3, 4, 5	No equivalent-N/A	N/A	3 units Area C2	6	3B & 6A	5.3
Statistics	3, 4, 5	MATH 34-4 units	Mathematics	3 units Area B4	3	2A	2.7
Studio Art: 2D Design	3, 4, 5	ART 10-3units	N/A	N/A	3	N/A	5.3
Studio Art: 3D Design	3, 4, 5	ART 11-3units	N/A	N/A	3	N/A	5.3
Studio Art: Drawing	3, 4, 5	ART 20-3 units	N/A	N/A	3	N/A	5.3

Notes: 1. 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.

2. Units awarded for Advanced Placement exams may not be used to meet the residency requirements for the associate degree.

3. AP tests may not satisfy the requirements for specific majors at four-year colleges. Please consult with a counselor or a university representative.

*If test was taken in Fall 2009 or earlier, credits may apply to either B1 & B3 or B2 & B3. After Fall 2009, these credits apply only to B1 & B3.

**If more than one exam passed in calculus or computer science, only one exam may be used for transfer.

***If more than one exam passed in physics: maximum of four units for CSU GE, six units for CSU transfer, 5.3 units for UC.

****Partially fulfills the American History & Institutions requirement. California government requirement can be fulfilled after transfer.

*****If taken prior to Fall 2009.

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 examinations as listed under course equivalents.

- * Students with a score of 4 on the Physics B or C examination must have subarea advisement; contact department chair for information.

Note that credit granted at LMC based on AP scores will not necessarily be accepted at other institutions.

High School Credit

Students may use credit for courses completed at Los Medanos College toward completion of a high school diploma providing the high school agrees to accept the course for such purposes. Responsibility for making equivalency arrangements with the high school rests with the student.

Course Repetition Policy

Courses are not repeatable unless noted within the course descriptions listed in the catalog. Students may repeat a non-repeatable course only to alleviate a substandard grade of 'D,' 'F' or 'NP.' If a student has three substandard grades in the same course, he/she may not repeat the course unless there has been a significant lapse of time or extenuating circumstances (petition required).

When a course is repeated to alleviate a substandard grade, only the last grade and its units will be used in computing the student's grade point average. The substandard grade will remain on the student's transcript with a notation that the course has been repeated.

Courses that are repeatable are noted in the college catalog with the number of repeats allowed. Students may not repeat a course beyond the maximum repeats, even to alleviate substandard grades.

Course repetition cannot be used to make up an incomplete 'I' grade.

Withdrawals

- * A student may not receive more than four 'W's from the same credit course
- * A 'W' shall not be assigned if the student withdraws due the impact of fire, flood or other extraordinary conditions
- * Students may petition to take a course a fifth time due to extenuating circumstances, however a fifth 'W' may not be recorded; the student must receive a grade or a non-evaluative symbol
- * A student who has withdrawn from a credit course, then receives a substandard grade will fall under the course repetition guide lines listed above
- * In the case of a discriminatory treatment or retaliation for discriminatory treatment a 'W' shall not be assigned

Repeat of Biology Courses

Students who have received two substandard grades or 'W's or any combination in the same Biology 40, 45 or 50 course will be blocked from future enrollment in that course. Students may appeal the policy using the *Course Repetition Appeal Process* form.

Academic Renewal Policy

Based on the Academic Renewal Policy, substandard grades may be disregarded if they are not reflective of a student's demonstrated academic ability. If Academic Renewal is approved, the student's permanent record will be notated with appropriate comments and the substandard (D, F, NC/ NP) unit values will not be computed in the cumulative grade point average. The "renewed" courses and the related grades will not be removed from the record, as the district is required to show a complete and accurate academic record for every student (Title 5, Section 55046).

Students **MUST** meet with a counselor to review options for Academic Renewal, as this procedure is irreversible.

- 1) The student may only utilize Academic Renewal one time in the district.
- 2) Only substandard grades may be "renewed".
- 3) Immediately following the course work with substandard grades, the student must have completed at least 20 units* with 'C' grades or better from LMC or any other accredited college or university. (*The unit count begins the semester after the substandard grade is received.)
- 4) Academic renewal may be applied for up to 24 units. District courses can be combined up to the maximum of 24 units however, each college must adjust the academic record for courses completed through that location. An Academic Renewal request form should be submitted at each college.
- 5) Courses/related grades that have already been removed from the cumulative grade point average based on course repetition will not be "renewed".
- 6) There is no time limit for academic renewal.

Students who qualify for Academic Renewal must fill out the form, obtain a counselor signature and turn it in to any college within the district. If the student is using non-district courses to qualify for the 20 units (see item #3 above), official transcripts must be on file in Admissions & Records prior to submitting Academic Renewal.

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 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 \$184 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 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 Refunds

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 credit will be issued according to the same refund processing cycle as enrollment fee refunds.

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 Cashiers 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.

Further details regarding the refund policy are available from the Cashiers 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.

Students who qualify for the Board of Governors Enrollment Fee Waivers may purchase a parking permit at a discounted price.

Parking Permit 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. **Lost or stolen parking permits are not refundable.**

Parking permits are sold through a third party vendor. Please go to our website to purchase parking permits. Refunds will be provided by the vendor that sold the parking permit.

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 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:

- The instructional and other materials required for the course have a continuing value to the student outside of the classroom setting, or
- 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's 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), unit requirements are as follows: 4 units or more = full benefits; 3 units = 3/4 benefits; 2 units = 1/2 benefits.

Veteran students must report any change in academic program to the Admissions and Records Office immediately. Failure to report changes, such as withdrawal from courses or from the college, will be interpreted as a violation of the Educational Benefits Act.

A GPA of 2.0 is required to meet graduation requirements. A veteran or eligible person whose GPA falls below the required minimum average will be placed on academic probation for a maximum of two semesters/terms. If the veteran or eligible person does not improve their GPA to the required minimum by the end of this period, their veterans benefits will be terminated. Additionally, repeated withdrawals from courses may also result in unsatisfactory progress. Unsatisfactory progress resulting in a status of progress probation beyond the maximum of two semesters/terms will also result in the termination of benefits.

Six elective semester units will be granted toward the associate degree for honorably discharged veterans, provided that 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 U.S. Armed Forces.

Additional information may be obtained from the Admissions Office or from the Veterans Administration Regional office, San Francisco, 1-800-827-1000.

Extended Opportunity Programs & Services (EOPS)

EXTENDED OPPORTUNITY PROGRAMS & SERVICES (EOPS) is funded by the State to provide academic/economic support services to eligible students. EOPS can assist students with the cost of books, on-campus child care, tutoring, priority registration, and counseling.

Through its collaboration with the Cooperative Agency Resources for Education (CARE) program, EOPS students who are both, single parents with children under age 14, and recipients of TANF/CalWorks, can receive additional services; these services include-- special workshops for college success, and assistance for the purchase of books and supplies. CARE students are also eligible for grants, subsidized campus dining and child care, provided through the LMC Cafeteria and Child Study Center, respectively.

For more information on EOPS or CARE, visit Room CC3-435, Monday-Thursday, 9:00 am-7:00 pm, and Fridays 9:00 am- 3:00 pm, or call 439-2181 Ext. 3138.

Vocational Rehabilitation

The State Bureau of Vocational Rehabilitation provides financial assistance in some cases to students who require vocational training. Aid covers fees and books. Applicants should see a Vocational Rehabilitation Counselor well in advance of the school term to work out necessary arrangements. Contact the Office of Vocational Rehabilitation, 3656 Delta Fair Blvd., Antioch; phone 754-7700.

Financial Aid

The Los Medanos College Office of Financial Aid, in compliance with Titles VI and VII of the Civil Rights Act of 1964, and Title IV of the Higher Education Act of 1965, P.L. 89-329, as amended and the Rehabilitation Act of 1973, does not discriminate on the basis of race, creed, color, national origin, mental or physical handicaps, age, or sex in any of its policies, practices or procedures.

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:

- Complete a Free Application for Federal Student Aid.
- 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, a home school certificate, have completed 6 units toward an accredited program or pass the Ability to Benefit Test (ATB).
- Not be in default on a Federal student loan or owe a repayment on a Federal grant.
- Be registered with Selective Service (male students).

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.

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.
- 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 Affairs.

BOGW – B:

You must meet the following income criteria for the 2009-2010 academic year:

Family Size	2008 Income
1	\$15,600
2	\$21,000
3	\$26,400
4	\$31,800
5	\$37,200
6	\$42,600
7	\$48,000
8	\$53,400
Each Additional Family Member: \$5,400	

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)

Educational Opportunity Programs & Services (EOPS)

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 should submit a suspension appeal from and supporting documentation outlining the circumstances to the financial aid office. The appeals will be reviewed by the Director of Financial Aid.

Refusal of Financial Aid Award

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

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 upon District-wide Financial Aid Processing Schedule.

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 all classes before completing 60% of the semester. The Office of Financial Aid will calculate the percentage of 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, repayment 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.

- 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

The Office of Student Life supervises and authorizes all campus publicity on official Student Life Bulletin Boards in the College Complex. All individuals or organizations wishing to post on these LMC bulletin boards must bring 5-10 copies of their postings directly to the Office of Student Life (room 800A) or campus mailbox 28 for approval and posting.

The posting, distributing or disseminating of printed materials that advertise, publicize or otherwise provide notice of activities, events or information must include a clearly identified organization name and contact person, including a working telephone number and/or email address.

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 for drop in. 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. 3252.

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.

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 Infants Toddlers and Preschoolers.** Children aged 0-6 may attend the part time child care program in 4-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 4-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.
 - 10) Offer orientation & college success courses such as Career Development and Transfer Planning.

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 Work Experience Education
- 3) Occupational Work Experience Internships

The Cooperative Work Experience Program at Los Medanos College grants college credit for what students learn and accomplish on the job. Students, with faculty and employer approval, develop and successfully complete one learning objective for each unit of transferable college credit in which they enroll.

An internship involves working in a skilled or professional level assignment in the area of a student's vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen field.

Typically, intern candidates are 3rd or 4th semester students seeking to apply their knowledge and in a practical setting. Internships may be paid or unpaid and can result in transferable college credits.

The Employment Center is located on Level 3, Room CC3-435. Hours of operation Monday – Thursday 9:00 am – 5:00 pm and Friday 9:00 am – 3:00 pm. Call 439-2181, ext. 3331 or drop by for further information.

Extended Opportunity Programs & Services (EOPS)

(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.

Q Spot: LMC's GLBTQ* Center

Q Spot, LMC's GLBTQ Center, offers information and support to the LMC community on issues related to sexual orientation and gender identity. Q Spot sponsors a collection in the LMC library featuring fiction, poetry and drama by GLBTQ people, biographies of famous GLBTQ people, and books addressing GLBTQ history, the coming out-process, religion and GLBTQ people, GLBTQ civil rights, and other issues. We also have a selection of GLBTQ-themed films available for check-out. In addition, Q Spot provides referral information for outside resources, including counseling and support groups for GLBTQ youth. Q Spot works to ensure that all members of the LMC community are valued and served with dignity and respect, regardless of sexual orientation or gender identity, and provides a safe and supportive place for GLBTQ people to meet at LMC.

* GLBTQ: Gay, Lesbian, Bisexual, Transgender, Queer/Questioning

Q Spot is located on Level 1, in room 117. For information call (925) 439-2181, ext. 3259, or email LMC-QSpot@yahoo.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

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.

The College District assumes no responsibility for damage or loss to vehicles or persons using parking facilities.

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 Life

LMC offers a range of extracurricular activities for students. The activities help students make friendships, connect with faculty and staff outside of the classroom, and build their leadership skills in clubs and organizations.

The Office of Student Life provides leadership opportunities that support students in becoming agents of positive social change. Student Life is comprised of the following programs and services.

For more information about any of these programs, contact (925) 439-2181 ext.3266, visit Room 800A – Next to the Cafeteria, or check them out on the web at www.losmedanos.edu/studentlife.

Student Government (LMCAS)

The Los Medanos College Associated Students (LMCAS) is the official student government at LMC. Their primary purpose is to advance the welfare of all students. They do this by providing programs and services designed to meet the varied needs of students, sponsoring activities and events, and representing the student body on many College and District committees.

The LMCAS Board holds open public meetings on Fridays and members of the student government are available throughout the week for consultation in the Office of Student Life.

Student Ambassadors

Student Ambassadors are a select group of student leaders who represent the diverse population of Los Medanos College. These students assist with the outreach, recruitment, and retention of LMC students by hosting at College Events, providing information and directions during the beginning of each semester, leading campus tours, and holding information sessions for students throughout the year. To learn about how to become a Student Ambassador visit the Office of Student Life.

Student Clubs & Organizations

Students are encouraged to organize and participate in clubs that reflect their interests. Each club is registered with the Student Life Office and has a faculty/staff advisor who helps organize meetings and plan activities.

The Office of Student Life provides support and advising to all LMC clubs by holding orientations and retreats for club leaders.

In addition, the office advises and coordinates the Inter-Club Council (ICC) – the coordinating body for many of the clubs. ICC members collaborate on joint club events and recommend the allocation of funds to support club activities. Contact the Office of Student Life to join a club or start one of your own!

Leadership Programs

The Office of Student Life provides a variety of leadership development programs and opportunities to support the many student leaders engaged throughout the fabric of LMC. These programs include orientations, workshops, courses for credit, campus retreats, trips to regional conferences, film discussion series, and more. All LMC students are encouraged to participate in the many opportunities provided by the office. To find out what's currently going on or to sign-up for programs, stop by the office in Room 800A or visit Student Life on the web at www.losmedanos.edu/studentlife.

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.

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).

Computer labs for use by the general student body are located in the Library, and CO3.

Computer Science Lab

The Computer Science Lab 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.

Cooperative Education Services

The Cooperative Work Experience Program at Los Medanos College grants college credit for what students learn and accomplish on the job. Students, with faculty and employer approval, develop and successfully complete one learning objective for each unit of credit in which they enroll. There are three types of Cooperative Work Experience.

COOP-160 - General Work Experience Education is for students whose work is not related to their major. Students may repeat for a maximum of six units of general work experience during community college attendance which may be applied as electives toward graduation.

COOP-170 - Occupational Work Experience Education is for students whose work is related to their major. Students may earn up to 8 units per semester and may repeat for a maximum of 16 units during community college attendance which may be applied as electives toward graduation.

COOP-170A - Occupational Work Experience Internship is for students who have declared a major, have taken classes in the major, are ready for on-the-job experience in a paid or unpaid position and meet program-level minimum qualifications. Students may earn up to 8 units per semester and repeat for a maximum of 16 units during community college attendance.

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 must meet both of the following two requirements:

English Requirement. To meet this requirement a student must:

- Be eligible for English 100 by receiving an A in English 90 or an assessment placement score indicating readiness for English 100; OR
- Have completed English 100, 221 or 230 with a grade of A or B; OR
- Have receive a score of 4 or 5 on the Advanced Placement English.

Academic Requirement. To meet this requirement a student must have:

- A cumulative College GPA of 3.25 or higher with a minimum of 12 degree applicable units; OR
- A cumulative High School GPA of 3.25 or higher (first time LMC students only); OR
- A letter of recommendation from a previous teacher, plus an admission essay, plus approval by Honors Advisory Board.

For further information and an application go to the Honors Website at www.losmedanos.edu/honors.

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 20,000 electronic books. In addition, the Library provides roughly 150 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, orientations 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 textbooks 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 the 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.

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 has a full-time lab coordinator, English instructors, and English graduate students 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

The mission of tutoring services at LMC is to assist students in becoming critical thinkers as well as independent, self-reflective, lifelong learners. General tutoring is available Monday through Thursday 9am to 8pm and Friday from 9am to 3pm in the Tutoring/ Reading & Writing Center at the Pittsburg campus and Monday

through Thursday at the Brentwood Center (schedule may vary). Tutoring is provided by LMC students who have succeeded in their classes and are trained as peer tutors. Subject-specific tutoring is available in various labs on campus, including the Biology Lab, DSPS High Tech Center, EOPS, Math Lab, Music Lab, and the Reading & Writing Center. For more information, call ext. 3176.

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 in their public expressions or demonstrations, students or student organizations speak only for themselves.
- 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.

Student Grievance Process

The Student Grievance Procedures are available to every Los Medanos College student, offering an equitable means of seeking an appropriate remedy for a grievance related to any college-related matter (other than as defined under the unlawful discrimination section of this catalog). Grievance procedures are provided for the following: grade appeals process, complaints regarding a faculty member, complaints regarding a staff member, or complaints about a manager. Copies of the Student Grievance Procedures are available in the following locations:

- Office of Student Life, Room 880a, extension 3266
- Office of Instruction, CO4-400, extensions 3105 or 3272
- Information Center, CC3-400, extension 3422
- Counseling Center, CC3-414, extension 3334

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.

Failure of a student to fulfill the responsibilities listed above may result in the suspension or termination of college services as listed in section 55520 of the Matriculation Regulations, except for services required under other provisions of law.

Student Rights Under Title 5 Matriculation Regulations

Los Medanos College students are guaranteed the following rights under the State of California Title 5 Matriculation Regulations (California Code Regulations, Sections 55520-55534.)

- 1) **Assessment:** Students are allowed to submit scores from assessment tests taken at another college within the last two years in lieu of taking the assessments at LMC, if the assessment instrument is state-approved and correlation with LMC courses can be established. These scores should be submitted to the Assessment Center, Room 121 or the Information Center. (Section 55530 (c).)
- 2) **Prerequisites:** Prerequisite challenges will be considered up to one week after the beginning of instruction in semester length courses; or the last day to add a short-term class. A student may challenge a course prerequisite on the following grounds:
 - a) The prerequisite course is not available. (Section 55534 (a).)
 - b) The prerequisite course is discriminatory or is being applied in a discriminatory manner. (Section 55534 (b), section 58106 (d).)
 - c) The prerequisite is not valid because it is not necessary to success in the course for which it is required. (Section 58106 (d).)
 - d) The student has the knowledge or ability to succeed in the course without taking the prerequisite. (Section 58106 (d).)
 - e) The basis upon which the college has established an enrollment limit does not, in fact exist.
- 3) **Complaints:** A student may file a complaint if he/she believes LMC has failed to make a good faith effort to develop an educational plan or provide specified services once the student has declared a specific educational goal. (Section 55525 (d).)

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 Dean of Student Development 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 Dean of Student Development, or to campus mailbox 34.
- 2) The Dean of Student Development 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 rights to further appeal and the correct procedures to follow.

B. Appeal to the Senior 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 Senior Dean of the appropriate area for further review.
- 2) The Senior 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 Senior 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 education 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 enroll 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 administering 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 2004, 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, 17.2 percent attained a certificate or degree or became 'transfer prepared' during a three-year period, from Fall 2004 to Spring 2007. Students who are 'transfer-prepared' have completed 60 transferable units with a GPA of 2.0 or better.

Based on the cohort defined above, 20.8 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-semester period, from Spring 2005 to Spring 2007.

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 non-residents 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.los-medanos.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 2009 - 2010

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.

Please check with the counseling department for up-to-date information. The current CSU GE list may be found at www.assist.org.

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, 7, 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)
BIOSC 7, 10, 20, 21, 40, 45, 50
- B3 Laboratory Activity
ASTRO 10 and 11
BIOSC 7, 10, 20, 21, 40, 45, 50
CHEM 6, 7, 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)
Satisfactory completion qualifies for exemption from the ELM examination requirements.
MATH 31, 33, 34, 35, 37, 38, 40, 50, 60, 70, 75, 80

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
HUMAN 40
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, 231
FILIP 60, 61
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
SOCSC 45 |
| D4 Gender Studies | HIST 48 |
| D6 History | ECON 5, HIST 31, 34, 35, 36, 37, 38, 47 |
| D7 Interdisciplinary Social or Behavioral Science | JOURN 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 | SOCIO 15, 16 |

Area E Lifelong Understanding and Self-Development

Minimum of one course, 3 units.

ANTHR 7, BIOSC 5, CHDEV 10, PSYCH 12

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

IGETC: Intersegmental General Education Transfer Curriculum 2009 - 2010

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, 30
 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.

The current list of all CSU and UC transferable courses may be found at www.assist.org. For major requirements see and LMC counselor and go to www.assist.org.

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, SOCS 45
 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 PHYS: 5

5B Biological Science: BIOSC 7, 10, 20, 21, 40, 45, 50

All science courses listed above include lab activity, except for: PHYS 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 PHYS 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, 40; FILIP 60; FRENCH 60, 61; ITAL 60, 61; SIGN 65, 66, 67; SPAN 50, 51

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 be double counted in Area 4.

Group A: POLSC 10, 20

Group B: ECON 5, HIST 36, HIST 37

Graduation Requirements



Section 3

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

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 Technology, 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 Associate of Arts degree or a Certificate of Achievement must satisfy the mathematics competency requirement by one of the following:

Associate Degree

- 1) Complete Math 26 or higher with a grade of "C" or better, or
- 2) Score a grade of 4 or 5 on any AP Calculus Exam, or
- 3) Pass the "Associate Degree Math Competency Exam."

Certificate of Achievement

- 1) Complete 3 units of Math 7 with a grade of "C" or better, or
- 2) Complete Math 9 or any higher course with a grade of "C" or better, or
- 3) Complete Bus 3 with a grade of "C" or better, or
- 4) Score a grade of 4 or 5 on any AP Calculus Exam, or
- 5) 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 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, 10 or 11, or
- 2) "C" grade or better in BUS 18, 35, 65, 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 (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 2009-10

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

Communication/Critical Thinking 3 Units

Many of these courses will also satisfy the CSU requirement in Area A

Complete one of: ENGL 220, 221, PHIL 41, JOURN 10, SPCH 40

Biological or Physical Science 3-5 Units

Many of these courses will also satisfy the CSU requirement in Area B

Complete one of:

Biological: BIOSC 7, 10, 20, 50

OR

Physical: ASTRO 10, CHEM 8, 25, ENGIN 10, ENVSCI 10, GEOG 15, GEOL 70, PHYS 15, 35, PHYS 5

Creative Arts/Humanities 6 Units

Many of these courses will also satisfy the CSU requirement in Area C

Complete two courses: (one from Creative Arts and one from Humanities)

Creative Arts: ART 5, 6, 7, 8, 9
DRAMA 15, 16, 70, 71, MUSIC 10, 12, 15

Humanities: PHIL 2*, 40, 42, HUMAN 3, 19, 20, 21, 22, 24, JOURN 35, ENGL 3, 127, 128, 129, 133, 205, 230, 231

* or completion of Registered Nursing Program

Behavioral Science 3 Units

Many of these courses will also satisfy the CSU requirement in Area D

Complete one course:
ANTHR 5, 6, 7, CHDEV 10, PSYCH 10, 11, SOCIO 15, 16

Social Science/American Institutions & Ideals 6 Units

Complete two courses, one from group A and one from group B.

Group A: POLSC 10, 20

Group B: ADJUS 120, ECON 5, 10, 11, HIST 34, 35, 36, 37, 38, POLSC 43, SOCSC 45

Transfer students should consult with an LMC Counselor regarding meeting the LMC and CSU American Institutions & Ideals requirements.

Graduation & Competency Requirements

Computer Literacy 0-4 Units

Pass proficiency exam
OR

Complete one of: COMSC 10, 11, 40, 49, 60, 83, BUS 18, 35, 65, 66, 67, 68

Ethical Inquiry 3 Units

Complete one of: ENGL 3, PHIL 2*, HUMAN 3

*or completion of Registered Nursing Program

Ethnic/Multicultural Studies 3 Units

Complete one of: CHDEV 50, DRAMA 15, 30, ENGL 127, 128, 129, 133, HIST 46, 47, 48, 52, SOCSC 45, 56

Health Education 3 Units

Complete BIOSC 5
OR
Completion of Registered Nursing, Vocational Nursing or Paramedic Program or Pass Health Science Exam**

** For information on Health Science exam, contact Mark Lewis, extension 3224.

Mathematics 3-4 Units

Pass proficiency exam
OR
Complete: MATH 26 or higher

Physical Education 2 Units

Complete two units of activity courses or FIRE 106
(Does not include lecture courses)

Reading – Writing 3 Units

This course will also satisfy 3 units of the CSU requirement in Area A Complete: ENGL 100

Degrees and Certificates in Major Programs

Program	Certificate	Degree
Administration of Justice.		X
Anthropology		X
Appliance ServiceX.		X
Art		
Fine Arts.		X
Graphic Communications.X.		X
Digital Publishing.X		
Automotive TechnologyX.		X
Biological Science		X
Business		
Accounting.X.		X
Office AdministrationX.		X
Small Business Operations.X.		X
Chemistry		X
Child Development.X.		X
Computer Science.X		
Cosmetology.X		
Electrical/Instrumentation Technology . . .X.		X
Emergency Medical Services.X.		X
Engineering		X
Environmental Science		X
Fire AcademyX		
Fire Technology.X.		X
Journalism		X
Liberal Arts		X
Management and SupervisionX.		X
Mathematics		X
MusicX.		X
Commercial Music–Bus Mgmt.X		
Commercial Music–PedagogyX		
Commercial Music–PerformanceX		

Program	Certificate	Degree
Nursing		
Registered		X
Vocational.X		
Process Technology.X.		X
Psychology		X
Real Estate.X.		X
Recording Arts.X.		X
Sociology.		X
Travel MarketingX.		X
Welding TechnologyX.		X

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
English/ ESL
Fire Academy
Foreign Language (Sign Language, Spanish)
Management and Supervision
Travel Marketing

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

	Certificate of Achievement	Associate Degree		Certificate of Achievement	Associate Degree
Administration of Justice	DVC	CCC, LMC	Microcomputer Software Support	DVC	
Corrections	CCC	CCC			
Law Enforcement	CCC	CCC	Construction		
			Construction & Building	DVC	
African-American Studies		CCC	Inspection		
			Construction Supervision &	DVC	
Alcohol and Drug Studies	DVC		Superintendency		
			Construction Management	DVC	
Anthropology		CCC, LMC			
Appliance Service Technology	LMC	LMC	Cosmetology	CCC, LMC	
(See also Refrigeration &					
Appliance Repair)			Culinary Arts	DVC	
			(Food Service Technology)		
Architecture/Environmental Design	DVC	CCC	Classical Food Preparation	CCC	CCC
			Hotel Administration	DVC	
Art	CCC		Pastry/Baking	CCC, DVC	CCC
Fine Arts		LMC	Restaurant Management	DVC	
Graphic Communication	LMC	LMC			
Digital Publishing	LMC		Dental Assisting	CCC, DVC	CCC
			Dental Hygiene	DVC	
Automotive Services			Dental Laboratory Technology	DVC	
Auto Collision Repair	CCC	CCC			
Auto Mechanics	CCC, LMC	CCC, LMC	Drafting Technology	CCC, DVC	CCC
Biological Science		CCC, LMC	Early Childhood Education	CCC, DVC	CCC
			Child Development	DVC, LMC	LMC
Biotechnology	CCC	CCC	Children's Center Instructor	DVC	
			Foster Care/Day Care	DVC	
Business					
Accounting	CCC, DVC, LMC	CCC, LMC	Economics		CCC
Administration	CCC, LMC	CCC, LMC			
Customer Services	DVC		Electrical/Instrumentation Technology	LMC	LMC
General Business	CCC, DVC	CCC			
Marketing/Merchandising	CCC	CCC	Electronics	DVC	CCC
Small Business Operation	LMC	LMC			
Management & Supervision	DVC, LMC	LMC	Engineering		CCC, LMC
Retailing	DVC		Engineering Technology	DVC	
			Drafting	DVC	
Chemistry		CCC, LMC	Materials Testing	DVC	
			Surveying	DVC	
Computer Information Systems					
Microcomputer	CCC, LMC	CCC	English		CCC
Programmer	CCC	CCC			
Data Entry Operator	CCC	CCC	Environmental Science		LMC
Computer Science		CCC	Environmental Technology	DVC	
AS/400 Programming & Operators	DVC				
Microcomputer System Specialists	LMC		Facilities Maintenance Technician	DVC	
Computer Hardware Support	DVC				

CCCCD Programs

CCC - Contra Costa College

DVC - Diablo Valley College

LMC - Los Medanos College

	Certificate of Achievement	Associate Degree		Certificate of Achievement	Associate Degree
Fire Technology	LMC	LMC	Office Information Systems General Office	CCC, DVC	CCC
French		CCC	Office Administration Administrative Assistant/ Executive Secretary	CCC, DVC, LMC	CCC, LMC
Geography		CCC	Legal Office	DVC	
Graphic Communications	LMC	LMC	Medical Office	DVC	
History		CCC	Medical Transcription	CCC	
Horticulture	DVC		Word Information Processing	CCC, DVC	CCC
Landscape Construction	DVC		Paramedic (Allied Health)	LMC	LMC
Landscape Design	DVC		Physical Education		CCC
Landscape Maintenance	DVC		Physics		CCC
Industrial Technology	CCC	CCC	Political Science		CCC
Inspection Technology	CCC	CCC	Process Technology	LMC	LMC
Journalism	CCC	CCC, LMC	Psychology		CCC, LMC
LaRaza Studies		CCC	Real Estate	DVC, LMC	CCC, LMC
Liberal Arts		DVC, LMC	Refrigeration & Appliance Repair	CCC	CCC
Liberal Studies		CCC	Sociology		CCC, LMC
Library & Information Technology (vocational program, not same as library skills studies)	DVC		Spanish		CCC
Machine Technology	DVC		Television Arts	DVC	
Management & Supervision	LMC	LMC	Travel Marketing	LMC	LMC
Materials Technology Nondestructive Examination	CCC		Welding Technology	LMC	CCC, LMC
Mathematics		CCC, LMC	Women's Studies	DVC	
Medical Assisting & Office Technician	CCC	CCC			
Music		CCC, LMC			
Commercial Music	LMC				
Recording Arts	LMC				
Nursing					
Registered		CCC, LMC			
Vocational	LMC				

Administration of Justice

Degree: Associate of Science:
Administration Of Justice

Certificate: College Skills Certificate:
Basic Police Academy

College Skills Certificate:
Criminal Law Specialist

For the Associate of Science Degree in Administration of Justice, 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:		Units
ADJUS 42	Introduction to Corrections	3
ADJUS 120	Introduction to the Criminal Justice System	3
ADJUS 121	Concepts of Criminal Law	3
ADJUS 122	Criminal Procedures	3
ADJUS 130	Cultural Issues in Public Safety	3
ADJUS 221	Introduction to Evidence	3

And select a minimum of 1 elective course:

ADJUS 150	Criminal Investigations	3
ADJUS 151	Basic Drug Laws and Investigation	3
ADJUS 152	Gang Theory, Practice & Suppression	3
ADJUS 222	Juvenile Laws and Procedures	3
ADJUS 260	Patrol Procedures	3
ADJUS 900*	Selected Topics	3

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

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

College Skills Certificates in Administration of Justice:

College Skills Certificate: Basic Police Academy

The Academy is certified by the California Commission on Peace Officer Standards and Training and the student will receive P.O.S.T. certification and earn Certificate of Completion from LMC.

Application and steps for acceptance into the Basic Law Enforcement Academy is completed by the Office of the Sheriff, Contra Costa County. Training is held at the Contra Costa Law Enforcement Training Center at 340 Marina Boulevard, Pittsburg.

Basic Law Enforcement Academy ADJUS 5 Total Units: 17

College Skills Certificate - Criminal Law Specialist

Intro to Criminal Justice	ADJUS 120	3 Units
Criminal Law	ADJUS 121	3 Units
Intro to Criminal Evidence	ADJUS 221	3 Units
Criminal Procedure	ADJUS 122	3 Units

Total Units: 12

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 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:		Units
ANTHR 5	General Anthropology	3
ANTHR 6	Cultural Anthropology	3
ANTHR 7	Anthropology of Culture Change	3

And select:

PSYCH 10*	Psychology: Individual and Social Processes	3
OR		
PSYCH 11*	General Psychology	3
SOCIO 15*	Introduction to Sociology	3
OR		
SOCIO 16*	Introduction to Social Problems	3

And select a minimum of 2 elective courses:

PSYCH 10*	Psychology: Individual and Social Processes	3
OR		
PSYCH 11*	General Psychology	3
PSYCH 12	Family Crisis and Growth	3
PSYCH 14	Psychology of Human Sexuality	3
SOCIO 15*	Introduction to Sociology	3
OR		
SOCIO 16*	Introduction to Social Problems	3
MATH 34	Probability and Statistics	4

*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 back-ground 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:	Units
APPLI 13 Beginning Electrical Appliances Tech I	3
APPLI 14 Advanced Electrical Appliances Tech I	3
APPLI 20 Electrical Appliances Shop Practice	1
APPLI 23 Basic Refrigeration Tech I	3
APPLI 24 Advanced Refrigeration Tech I	3
APPLI 30 Gas Appliance and Refrigeration Shop Practice	1
APPLI 35 Appliance Shop Practice-Intermediate	1
APPLI 36 Appliance Shop Practice-Advanced	1
APPLI 46 Principles and Repair of Microwave Ovens	.5
EETEC 10 Introduction to Electrical Technology	3
ACREF 45 Central Heating & Cooling Troubleshooting	2
Total Units Required in Major Courses.....	21.5

Appliance Technician II (primarily a day program)

Required Courses:	Units
APPLI 15 Electrical Appliances I	4
APPLI 16 Electrical Appliances II	4
APPLI 20 Electrical Appliance Shop Practice	5
APPLI 25 Refrigeration I	4

APPLI 26 Refrigeration II	4
APPLI 30 Gas Appliance and Refrigeration Shop Practice	5
APPLI 35 Appliance Shop Practice-Intermediate	5
APPLI 36 Appliance Shop Practice-Advanced	5
EETEC 10 Introduction to Electrical Technology	3

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

With the approval of an Appliance Technology instructor, APPLI 170 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 & AirConditioning Specialist

APPLI 23 Basic Refrigeration Tech I	3
or	
APPLI 24 Advanced Refrigeration Tech I	3
ACREF 45 Central Heating & Cooling Troubleshooting	2
ACREF 73 Basic Refrigeration R1A	2
ACREF 75 HVAC Tech H1A Heating Technology	2
ACREF 76 Basic HVAC H1B Air Conditioning Repair	2
REFRG 77 HVAC Tech AH1A Duct Testing & Repair	2
ACREF 78 HVAC AH1B Residential Load Calculation	1.5

Total Units 14.5

College Skills Certificate: Electrical Appliance Technician

APPLI 13 or 15 Electrical Appliances I	3
APPLI 14 or 16 Electrical Appliances II	3
APPLI 20 Electrical Appliances Shop Practice	1
APPLI 35 or 36 Electrical Appliances Adv. Shop Practice	1
Total Units	8

College Skills Certificate: Refrigeration Technician

APPLI 23 Basic Refrigeration Tech I	3
Or	
APPLI 25 Refrigeration I	4
APPLI 24 Advanced Refrigeration Tech I	3
Or	
APPLI 26 Refrigeration II	4
APPLI 30 Gas Appliance and Refrigeration Shop Practice	5
APPLI 35 Appliance Shop Practice-Intermediate	1
Or	
APPLI 36 Appliance Shop Practice-Advanced	1
Total Units	8-9

Art

Degrees: Associate of Art – Fine Arts

Associate of Art –
Graphic Communications

Certificates: Certificate of Achievement –
Graphic Communications

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 a Certificate of Achievement in Graphic Communications. 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 OR Graphic Communications

For the Associate of Art Degree, students must 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 Units
ART 5	The Visual Arts	3
ART 6, 7, 8 or 9	Western Art History I, II, III or IV	3
ART 10	Introduction to Two-Dimensional Design	3
ART 11	Introduction to Three-Dimensional Design	3
ART 20	Introduction to Drawing (Fine Arts)	3
ART 12	Design Drawing (Graphic Communications)	3
ART 72	Survey of Digital Photography	3

FINE ART ELECTIVES

Select a minimum of 12 elective units:

ART 21	Advanced Drawing	3
ART 26	Landscape Sketching on Location	.5
ART 40	Introduction to Painting	3
ART 45	Advanced Painting	3
ART 46	Landscape Painting on Location	1
ART 47	Color Dynamics in Painting	1
ART 60	Introduction to Sculpture	3
ART 63	Raku Workshop	1
ART 66	Introduction to Ceramics	1
ART 67	Intermediate Ceramics	3
ART 69	Figurative Ceramic Sculpture	3
ART 73	Location Photography	1
ART 74	Photo II: Developing a Personal Vision	3

GRAPHIC COMMUNICATIONS ELECTIVES

ART 15	Graphic Design	3
ART 25	Advertising, Marketing and Publication Design	3
ART 27	Introduction to Cartooning	3
ART 28	Intermediate Cartooning	3
ART 50	Designing with Adobe InDesign	3
ART 54	Adobe Photoshop	3
ART 57	Designing with Adobe Illustrator	3
ART 85	Introduction to Animation	3
ART 86	Animation and 3D Modeling	3

Select a minimum of 12 elective units:

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		18 Units
ART 5*	The Visual Arts	3
ART 10	Introduction to Two-Dimensional Design	3
ART 12	Design Drawing	3
ART 15	Graphic Design	3
ART 25	Advertising, Marketing and Publication Design	3
ART 72	Survey of Digital Photography	3

And select a minimum of 12 elective units:

ART 15	Graphic Design	3
ART 25	Advertising, Marketing and Publication Design	3
ART 27	Introduction to Cartooning	3
ART 28	Intermediate Cartooning	3
ART 50	Designing with Adobe InDesign	3
ART 54	Adobe Photoshop	3
ART 57	Designing with Adobe Illustrator	3
ART 85	Introduction to Animation	3
ART 86	Animation and 3D Modeling	3
ART 90	Digital Communications Portfolio	1.5
JOURN 10	Writing for the Media	3

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

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

Note: Computer-based courses in graphic communications require familiarity with basic computer operations.

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

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

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

AUTO 40	Automotive Engine Diagnosis I	4
AUTO 41	Automotive Engine Diagnosis II	4
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	2.5

6.5 Total Units

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.

Required Courses		Units
BIOSC 20	Principles of Biology: Cellular	5
BIOSC 21	Principles of Biology: Organismic	5

Select a minimum of 18 units

BIOSC 7	Environmental Biology*	4
CHEM 25	General College Chemistry	5
CHEM 26	General College Chemistry	5
CHEM 28	Organic Chemistry	5
CHEM 29	Organic Chemistry*	5
MATH 50	Calculus and Analytic Geometry	4
MATH 60	Calculus and Analytic Geometry*	4
MATH 34	Probability and Statistics	4
PHYS 35	General College Physics	4
PHYS 36	General College Physics	4

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.

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.

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 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 Accounting, complete 23 units of coursework listed below as well as the LMC General Education and Graduation requirements. Consult

Graduation Requirements

a Los Medanos College counselor to develop your education plan for the Associate of Science Degree.

Required Courses: **Units**

BUS 185	Computer Assisted Accounting	3
BUS 186	Principles of Accounting I (or Bus 14)	4
BUS 187	Principles of Accounting II (or Bus 15)	4
BUS 18*	Introduction to Excel	3
BUS 109	Introduction to Business (or Bus 20)	3

And select 5 units from the following:

BUS 27	Small Business Management	3
BUS 294	Business Law (or Bus 34)	3
BUS 59**	Business Communications	3
BUS 91, 92, 93 or 95	Various one day seminars (each)	.5
BUS 170	Occupational Work Experience Education in Business	1-8
BUS 900***	Selected Topics in Business	varies

Total Units Required in Major Courses..... 20-23

*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**

BUS 181	Accounting: Applied Principles	3
OR		
BUS 186	Principles of Accounting I (or Bus 14)	4
BUS 27	Small Business Management	3
BUS 35*	Using Microsoft Office	3
OR		
BUS 35 A/B/C/D		
OR		

COMSC 60*	Emerging Microcomputer Technologies	4
MANGT 75A-C	Managing Human Resources	3

And select a minimum of 11 units:

BUS 285	Tax Accounting	3
BUS 18*	MS Excel for Windows	3
BUS 109	Introduction to Business (or Bus 20)	3
BUS 294	Business Law (or Bus 34)	3
BUS 35*	Using Microsoft Office	3
BUS 58**	Business English	3
OR		
BUS 35 A/B/C/D		
BUS 59**	Business Communications	3
BUS 91,92,93,95	Various One Day Business Seminars (each)	.5
BUS 900***	Selected Topics in Business	varies
ART 13	Graphic Design	2
COMSC 30	The Internet	1.5
COMSC 31	Internet - Web Site Development	1.5
COMSC 60*	Emerging Microcomputer Technologies	4
JOURN 35	Mass Communication	3
MANGT 50A-C	Introducing Supervision (each)	1
MANGT 55A-C	Communicating with Confidence (each)	1
MANGT 60A-C	Making Effective Decisions (each)	1
MANGT 65A-C	Mastering Management's Essential Tools (each)	1
MANGT 70A-E	Relating in Human Terms (each)	1

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: **Units**

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

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):

Specialization:

Bookkeeping/Account Clerk

BUS 181	Accounting: Applied Principles	3
OR		
BUS 186	Principles of Accounting I	4
BUS 185	Computer Assisted Accounting	3
BUS 45	Office Accounting Essentials	3
BUS 80	Ten-Key / Data Entry Skills	1
BUS 81	Accounts Receivable / Accounts Payable	2
BUS 82	Payroll 1	3

Administrative Assistant

BUS 35**	Using Microsoft Office	3
BUS 56	Database Management Using Microsoft Access	3
BUS 66**	Intermediate Word Processing	3
OR		
BUS 67**	Advanced Word Processing	3

Office Management

MANGT 50A-C	Introducing Supervision	(each) 1
MANGT 60A-C	Making Effective Decisions	(each) 1
MANGT 65A-C	Mastering Management's Essential Tools	(each) 1
MANGT 70A-E	Relating in Human Terms	(each) 1
MANGT 75A-C	Managing Human Resources	(each) 1

Medical/Clerical

BUS 86	Medical Terminology	3
BUS 87	Medical Transcription	3
BUS 88	Patient Billing/Accounting	3

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 Associate in Science Degree and 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.

Required Courses:

BUS 3*	Business Math	3
OR		
MATH 1 AND 2	Applied Mathematics	3
BUS 181	Applied Accounting	3
OR		
BUS 186	Principles of Accounting I	3
BUS 26	Retailing Operations	3
BUS 33	Marketing	3
BUS 35**	Using Microsoft Office	3
OR		
COMSC 60	Emerging Microcomputer Technologies	4
BUS 59***	Business Communications	3
OR		
MANGT 55A-C	Communicating with Confidence	3
MANGT 50A-C	Introducing Supervision	3
MANGT 65A-C	Mastering Management's Essential Tools	3
OR		
MANGT 70A-E	Relating in Human Terms	3
MANGT 75A-C	Managing Human Resources	3

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

* Also meets mathematics competency requirement for Certificate of Achievement

** Also meets computer literacy competency requirement for

Graduation Requirements

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**

BUS 18	Microsoft Excel	3
BUS 181	Accounting Applied Principles	3
BUS 185	Computer Assisted Accounting	3

Choose 1 course from following:

BUS 45		
BUS 81		
BUS 82		3

12 Total Units

College Skills Certificate: Administrative Assistant

BUS 59		
or MANGT 55A/B/C)	Business Communications	3
Introducing Supervision		

MANGT 50 A/B/C		3
----------------	--	---

MANGT 70D	Relating in Human Terms:	
	Leadership Skills	.5
BUS 18	Microsoft Excel	3
BUS 35D	Microsoft Access	1.5

11 Total Units

College Skills Certificate: Basic Clerical

BUS 47	Office Procedures	3
BUS 55	Keyboarding Speed & Accuracy	1
BUS 65	Introduction to Word Processing	3
BUS 91	Managing/Working in a Diverse	
	Workforce	.5
BUS 92	Business Ethics	.5
BUS 93	Dealing with Difficult People	.5
BUS 95	Develop. Customer Service Satisfaction.	.5
BUS 96	Time Management & Goal Setting	.5

9.5 Total Units

College Skills Certificate: Business Computer Skills

BUS 35	Microsoft Office	3
BUS 51	Computer Keyboarding	1
BUS 80	2Ten Key/Data Entry Skills	2

7 Total Units

College Skills Certificate: Business Literacy Skills

BUS 109	Introduction to Business	3
BUS 160	Personal Finance	3

6 Total Units

College Skills Certificate: Business Transfer Preparation

BUS 186	Principles of Financial Accounting	3
BUS 187	Accounting: Managerial Principles	3
BUS 109	Introduction to Business	3
BUS 294	Business Law	3
BUS 18 or		

BUS 18ABC or		
BUS 35	MS Excel or MS Office	3

15 Total Units

College Skills Certificate:**Entrepreneurship/Small Business Start-Up**

BUS 9010	Exploring Entrepreneurship	3
BUS 18	Microsoft Excel	3
BUS 181		
(Formerly BUS 10)	Acct: Applied Principles	3
BUS 29	Quick Books	2

11 Total Units

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

BUS 59	Business Communications	3
BUS 83	Basic CPT & ICD-9CM Coding	3
BUS 88	Patient Billing/Accounting	2
BUS 90	Advanced Patient Billing	2

10 Total Units

College Skills Certificate:**Fundamental Business Skills Business Math**

BUS 3	Business Math	3
BUS 58	Business English	3

6 Total Units

College Skills Certificate: Basic Medical Clerical/Medical Records Clerk

BUS 84	Medical Office Procedures/Records Mangt	2
BUS 86	Medical Terminology	3
BUS 90	Medical Law & Ethics for the Med. Office	1
BUS 91	Managing/Working in a Diverse	
	Workplace	.5
BUS 91	Dealing with Difficult People	.5

7 Total Units

College Skills Certificate: Medical Transcription

BIOSC 30	Introduction to Anatomy & Physiology	3
BUS 87	Beginning Medical Transcript	3
BUS 94	Advanced Medical Transcription	3

9 Total Units

College Skills Certificate: Office Essentials

BUS 66	Intermediate Word Processing	3
BUS 18/18ABC		
Or BUS 35	MS Excel or MS Office	3
BUS 47	Office Procedures	3
BUS 58	Business English	3
BUS 93	Dealing with Difficult People	
BUS 95	Developing Customer Service Satisfaction	.5

12.5 Total Units

College Skills Certificate: Small Business Management and Operations

BUS 27	Small Business Management	3
BUS 294		
(Formerly BUS 34)	Business Law	3
BUS 81 OR 82		
OR 45	Business Accounting Elective	3-6
MANGT 50 OR 55 OR 60 OR 65		
OR 70 or 75	Business Management Elective	3

12 Total Units

Chemistry

Degree: Associate of Science – Chemistry

For the Associate of Science Degree in Chemistry, complete 43-44 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
CHEM 25	General College Chemistry	5
CHEM 26	General College Chemistry	5
CHEM 28	Organic Chemistry	5
CHEM 29	Organic Chemistry	5
OR		
CHEM 27	Quantitative Analysis	4
MATH 50	Calculus and Analytic Geometry	4
MATH 60	Calculus and Analytic Geometry	4
MATH 70	Calculus and Analytic Geometry	4
PHYS 40	Physics for Scientists and Engineers	4
PHYS 41	Physics for Scientists and Engineers	4
PHYS 42	Physics for Scientists and Engineers	4

Total Units Required in Major Courses..... 43-44*Recommended elective courses:*

MATH 75	Linear Algebra	3
MATH 80	Differential Equations	3

Child Development

*Degree: Associate of Science – Child Development**Certificates: Certificate of Achievement – Child Development**College Skills Certificate: Assistant Teacher Permit**College Skills Certificate: Associate Teacher Permit**College Skills Certificate: Specialization Administration: Director of Private Schools**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**College Skills Certificate: School-age Development and Education**College Skills Certificate: School-age Associate Teacher*

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		Units
CHDEV 1	Introduction to the Study of Early Childhood Education	3
CHDEV 10	Child Growth and Development	3
Second semester		
CHDEV 11	Techniques and Methods of Child Observation	3
CHDEV 62	Curriculum Foundations for the Young Child	3
CHDEV 83**	Field Experience at Community Programs	3

Graduation Requirements

Third semester

CHDEV 50	Anti-bias and Multicultural Education for the Young Child	3
Elective(s)*		2-3

Fourth semester

CHDEV 20	Child Family and Community	3
CHDEV 15 or 90	Teaching Practicum	4

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
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

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 required6**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 required9

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 required6**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 required6**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 required6**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 required6**College Skills Certificate: Specialization - School Age Child Care**

CHDEV 32	The School Age Child	3
CHDEV 33	School Age Practicum	3

Total units required6

College Skills Certificate: Specialization - Art and the Creative Process

CHDEV 25	Creative Art for Children	2
	Developing Art Programs for Young Children	1
CHDEV 26	Art and Creative Process for Young Children	2
CHDEV 27	Learning Environments that Support	
CHDEV 28	Art and the Creative Process	1

Total units required6**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 required6**College Skills Certificate: School-age Development and Education**

CHDEV 10	Child Growth and Development	3
CHDEV 20	Child Family and Community	3
CHDEV 22	Guidance and Discipline strategies for the Young Child	2
CHDEV 32	Caring for and Education School Age Children	3
CHDEV 33	Developmentally Appropriate Practice for the School Age Child	3
CHDEV 50	Anti-bias and Multicultural Education and the Young Child	3

Total units required17**College Skills Certificate: School-Age Associate Teacher**

CHDEV 10	Child Growth and Development	3
CHDEV 20	Child Family and Community	3
CHDEV 32	Caring for and Education School Age Children	3
CHDEV 33	Developmentally Appropriate Practice for the School Age Child	3

Total units required12

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:
PC Repair Technician (A+ Certification)

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 44	Introduction to C++ Programming Part I	3
COMSC 51	Introduction to Java Part I	3
And select a minimum of 10 units from any of the remaining Computer Science courses.		
Total units required		33

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	3
OR		
COMSC 44	Introduction to C++ Programming	3
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: PC Repair Technician (A+ Certification)

COMSC 90	PC Repair	3
COMSC 91	PC Repair – Software	3
COMSC 92	A+ Certification Exam Preparation	1.5
		7.5 Total Units

Required Courses:

	Units
COSME 10 Cosmetology –Theory, Principles, and Practice	.5-16
COSME 11 Cosmetology –Theory, Principles, and Practice	.5-16

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

Instruction is offered at three nearby locations:

DELTA BEAUTY COLLEGE trains Tuesday through Saturday; 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. Open mornings, afternoons, and evenings.

1655 Willow Pass Rd.
Concord, CA 94520
(925) 685-7600

ROBINSON'S COSMETOLOGY trains Tuesday through Saturday; 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 the Beauty Schools pay the LMC units fee*, plus the purchase cost of an appropriate training kit:

	Paris	Delta	Robinson
Cosmetologist Kit	\$895	\$437	\$1,095
Instructor Kit	\$150		\$250
Manicurist Kit	\$595	\$250	\$575
Esthetician Kit	\$895	no kit	\$1,095

* 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 part time (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.

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, cosmeticians, 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.

Electrical /Instrumentation 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 ETEC 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:

MATH 12	Pre-Algebra	4
ENGL 90	Integrated Reading, Writing, and Critical Thinking	5

Required Courses:

		Units
First Semester		
EETEC 10	Direct Current Circuits	4
EETEC 12	Alternating Current Circuits	4
MATH 25	Elementary Algebra	5
Second Semester		
EETEC 20	Electric Motor Control	3
EETEC 22	Semiconductor Devices	2
EETEC 24	Digital Devices	2
PHYS 15	Introduction to Physics	4
Third Semester		
EETEC 30	Programmable Logic Controllers	4
EETEC 32	Instrumentation Process Measurement	3
EETEC 34	Instrument Calibration	1
CHEM 6	Introduction to Inorganic and Physical Chemistry	4
	(for Instrumentation Specialization only)	
Fourth Semester: Electrical Specialization		
EETEC 40	National Electrical Code	3
EETEC 42	Wiring Methods and Code Application	1
EETEC 44	Power Distribution & Transformers	3
EETEC 46	DC & AC Motors & Generators	3
Fourth Semester: Instrumentation Specialization		
EETEC 50	Instrumentation Process Control	3
EETEC 52	Applied Process Control	1
EETEC 56	Code for instrument Application	1
EETEC 58	Analytical Instrumentation	2
EETEC 59	System Integration & Troubleshooting	2

Total Units Required in Major Courses - Electrical Specialization42

Total Units Required in Major Courses - Instrumentation Specialization45

Emergency Medical Services

Certificates: *College Skills Certificate: Emergency Medical Services*

College Skills Certificate: Emergency Medical Technician I

EMS 10 Emergency Medical Technician I
6 Total Units

College Skills Certificate: Emergency Medical Technician I Recertification

EMS 11 Emergency Medical Technician I Recertification
1 Total Unit

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 four-year 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
ENGIN 10	Introduction to Engineering	3
ENGIN 20	Programming with C++ for Engineers and Scientists	4
	OR	
ENGIN 22	Programming with MATLAB for Engineers and Scientists	4
ENGIN 25	Engineering Graphics	3
ENGIN 30	Materials Science	4
ENGIN 45	Engineering Circuits	3
CHEM 25	General College Chemistry	5
PHYS 40	Physics for Scientists and Engineers I	4
PHYS 41	Physics for Scientists and Engineers II	4
PHYS 42	Physics for Scientists and Engineers III	4
MATH 50	Calculus and Analytic Geometry	4
MATH 60	Calculus and Analytic Geometry	4
MATH 70	Calculus and Analytic Geometry	4
MATH 80	Differential Equations	3

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

ENGIN 36	Engineering Statics	3
ENGIN 38	Manufacturing Processes	3
ENGIN 46	Engineering Dynamics	3
MATH 75	Linear Algebra	3

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.

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:

Required Courses:		Units
FIRE 101	Fire Protection Organization	3
FIRE 102	Fire Behavior and Combustion	3
FIRE 103	Fire Protection Equipment & Systems	3
FIRE 104	Building Construction for Fire Protection	3
FIRE 105	Fire Prevention	3
EMS 10	Emergency Medical Technician I	6

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:

College Skills Certificate: Basic Fire Academy

FIRE 120	Basic Academy	15 Total Units
----------	---------------	-----------------------

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 work force 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 requirements in recommended sequence

1st Semester		
JOURN 10	Writing for the Media	3 units
ELECTIVE	Select from accompanying list	3 units
2nd semester		
JOURN 15-A	Media Writing Practicum I	1 unit
OR	OR	
JOURN 16-A	Visual Storytelling Practicum I	
JOURN 20	Publication Production I*	3 units
ELECTIVE	Select from accompanying list	3 units
3rd semester		
JOURN 15-B	Media Writing Practicum II	1 unit
OR	OR	
JOURN 16-B	Visual Storytelling Practicum II	
JOURN 30	Publication Production II	3 units
4th semester		
JOURN 15-C	Media Writing Practicum	1 unit
OR	OR	
JOURN 16-C	Visual Storytelling Practicum	
OR	OR	
The beginning journalism practicum in the other course sequence (15-A or 16-A)		
JOURN 35	Mass Communication	3 units
TOTAL FOR A.A. in JOURNALISM		21 units

- 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

- ART 15: Graphic Design, 3 units
 ART 20: Introduction to Drawing, 3 units
 ART 27: Introduction to Cartooning, 3 units
 ART 54: Adobe Photoshop, 3 units
 ART 72: Photo 1: A Survey of Digital Photography, 3 units
 ART 962: Advertising, Marketing and Publication Design, 3 units
 ART 965: Designing with Adobe InDesign, 3 units
 ART 966: Designing with Adobe Illustrator, 3 units
- BUS 51: Computer Keyboarding, 1 unit
- COMSCI 30: Web Site Development - Part I, 1.5 units
 COMSCI 31: Web Site Development - Part II, 1.5 units
 COMSCI 32: Web Site Development - Dreamweaver and Flash, 3 units
 COMSCI 986: Introduction to Digital Imaging, 1.5 units
- ENGL 111: Creative Writing, 3 units
 LIBST 14: Library Research and Information Literacy Skills, 1 unit
 LIBST 17: Introduction to Internet Information Resources, .5 units
 LIBST 18: Internet Information Resources –
 Advanced Search Techniques and Strategies, .5 units
- Or other related courses approved by Journalism Department Chair

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, 231
200, 201, 202, 220, 221, 230
Filipino 60, 61
French 60, 61
Humanities 3, 19, 20, 21, 22, 24, 40
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 109, 294
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, 12, 14
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:
Leadership 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.

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:	Units
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.1.5 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 170	Occupational Work Experience Education In Management	1-8
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 Make Effective Decisions	3
D, E	
6 Total	

College Skills Certificate: Leadership Skills for Managers

MANGT 50 A, B, C Introducing Supervision	3
MANGT 70 A, B, C Relating in Human Terms	3
D, E	
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:		Units
MATH 50	Calculus and Analytic Geometry	4
MATH 60	Calculus and Analytic Geometry	4
MATH 34	Probability and Statistics	4
OR		
MATH 38	Statistics for Business or Economics	4
OR		
Physics*		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:		Units
MUSIC 5, 6, OR 7	Recital Class (2 semesters)	2
MUSIC 13	Musicianship I	2
MUSIC 14	Musicianship II	2
MUSIC 15	Basic Music (or pass theory placement exam)	3
MUSIC 16	Fundamentals of Music Theory	3
MUSIC 17	Harmony	4
MUSIC 18	Advanced Harmony	4
MUSIC 31	Piano I	1.5
MUSIC 32	Piano II	1.5
MUSIC 81	Introduction to Improvisation	1
AND		

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):

MUSIC 33 A	Intermediate Piano	1.5
MUSIC 33 B	Advanced Piano	1.5
MUSIC 37	Advanced Guitar	1
MUSIC 40, 41, 42	Concert Band*	(each) 2
MUSIC 60, 61, 62	College Chorus*	(each) 2
MUSIC 298 E/F	Chamber Orchestra*	.5-1

And select three additional ensembles from the following:

MUSIC 34	Jazz/Rock Key Board	1.5
MUSIC 50, 51, 52, 53, 54, 55, 56	Chamber Ensembles	(each) 1
MUSIC 63	Oratorio and Cantata Chorus I	.5-1
MUSIC 64	Oratorio and Cantata Chorus II	.5-1
MUSIC 66	Gospel Choir	1
MUSIC 70, 71, 72	Jazz Ensemble	(each) 2
MUSIC 74, 75, 76	Jazz Studio	(each) 1
MUSIC 77, 78, 79	Chamber Chorale	(each) 1
MUSIC 82, 83, 84	Jazz/Funk/Latin Workshop	(each) 1
MUSIC 250	Night Jazz Band	1

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

NOTE: Summer Ensembles will not fulfill the above requirements.

Graduation Requirements

* Students with an Advanced Guitar or Advance Piano emphasis may choose to fulfill the ensemble requirement by completing four semesters of the following:
MUSIC 33A/B Intermediate/Advanced Piano
OR
MUSIC 37 Advanced Guitar
AND

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:		Units
BUS 186	Principles of Financial Accounting	3
BUS 27	Small Business Management	3
BUS 294	Business Law	3
MUSIC 12	Popular Musics in America	3
MUSIC 13	Musicianship I	2
MUSIC 15	Basic Music (or pass theory placement exam)	3
MUSIC 28	Songwriting I	1
MUSIC 30	Basic Keyboard Skills	1.5
MUSIC 81	Introduction to Improvisation	1
OR		
MUSIC 82, 83, or 84	Jazz/Funk/Latin Workshop	(each) 1
MUSIC 89	Music Business Management	2
MUSIC 93	Intro to MIDI	2
RA 10	Recording Arts I	2
RA 21	Basic Session Producing	2
Any performance classes		4-8
(See list of music major ensemble requirements)		

And select two of the following:
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 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.

Required Courses:		Units
MUSIC 57	Private Lessons (2 semesters)	2
MUSIC 10	Music Literature	3
MUSIC 12	Popular Musics in America	3
MUSIC 13	Musicianship I	2
MUSIC 14	Musicianship II	2
MUSIC 15	Basic Music (or pass theory placement exam)	3
MUSIC 16	Fundamentals of Music Theory	3
MUSIC 17	Fundamentals of Music Harmony	4
MUSIC 28	Songwriting I	1

MUSIC 81	Introduction to Improvisation	1
OR		
MUSIC 82, 83, or 84	Jazz/Funk/Latin Workshop	(each) 1
MUSIC 89	Music Business Management	2
MUSIC 93	Intro to MIDI	2
Any performance classes		4-8
(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.

And select two of the following:
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 35.5-39.5

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.

Required Courses:		Units
MUSIC 10	Music Literature	3
MUSIC 12	Popular Musics in America	3
MUSIC 13	Musicianship I	2
MUSIC 15	Basic Music (or pass theory placement exam)	3
MUSIC 16	Fundamentals of Music Theory	3
MUSIC 28	Songwriting I	1
MUSIC 30	Basic Keyboard Skills	1.5
MUSIC 38	Studio Musicianship	1
MUSIC 81	Introduction to Improvisation	1
OR		
MUSIC 82, 83, or 84	Jazz/Funk/Latin Workshop	(each) 1
MUSIC 89	Music Business Management	2
MUSIC 93	Intro to MIDI	2
MUSIC 94	Composition/MIDI/Synthesizer Workshop I	2
OR		
MUSIC 95	Composition/MIDI Workshop II	2
RA 10	Recording Arts I	2
Any performance classes		4-8
(See list of music major ensemble requirements)		

And select two of the following:
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:

		Units
ENGL 100	College Composition	3
MATH 15 or 18, 25 or 30	See LMC catalog for descriptions and current graduation requirements	3-4
BIOSC 40	Human Anatomy	5
BIOSC 45	Human Physiology	5
BIOSC 50	Intro to Microbiology	4
PSYCH 10 or 11	General Psychology	3

Graduation Requirements

		Units
COMSC 49	Computer Literacy	1.5
POLSC 10 or 20	American Institution & Ideals or Intro to Politics	3
SPEECH 40	Oral Communication	3
Social Science GE Course		3
Creative Arts GE Course		3
Ethnic Multicultural Course		3
PE	(required for graduation)	2

Registered Nursing Curriculum

First Semester

		Units
RNURS 22	Foundations of Nursing Practice	9.5
RNURS 23	Nursing Skills Simulation I	1
RNURS 24	Pharmacology for RN Program I	1

Second Semester

		Units
RNURS 26	Nursing in Health and Illness I	9.5
RNURS 27	Nursing Skills Simulation II	1
RNURS 28	Pharmacology for RN Program II	1

Third Semester

		Units
RNURS 31	Nursing in Health & Illness II	9.5
RNURS 33	Nursing Skills Simulation III	1
RNURS 34	Pharmacology for RN Program III	1

Fourth Semester

		Units
RNURS 30	Leadership/Management/Professionalism	1
RNURS 36	Nursing in Health & Illness III	9.5
RNURS 38	Nursing Skills Simulation IV	1
RNURS 39	Pharmacology for RN Program IV	1

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: Units**

ENGL 100	College Composition	3
MATH 15 or 18, 25 or 30	See LMC catalog for descriptions and current graduation requirements	3-4

BIOSC 40	Human Anatomy	5
BIOSC 45	Human Physiology	5
BIOSC 50	Intro to Microbiology	4
PSYCH 10 or 11	General Psychology	3

Graduation Requirements Units

COMSC 49	Computer Literacy	1.5
POLSC 10 or 20	American Institution & Ideals	3
SPEECH 40	Oral Communication	3
Social Science GE Course		3
Creative Arts GE Course		3
Ethnic Multicultural Course		3
PE		2

Registered Nursing Curriculum

RNURS 20	Bridge for Transition Students (1 week)	1
----------	---	---

Third Semester Units

RNURS 31	Nursing in Health & Illness II	9.5
RNURS 33	Nursing Skills Simulation III	1
RNURS 34	Pharmacology for RN Program III	1

Fourth Semester Units

RNURS 30	Leadership/Management/Professionalism	1
RNURS 36	Nursing in Health & Illness III	9.5
RNURS 38	Nursing Skills Simulation IV	1
RNURS 39	Pharmacology for RN Program IV	1

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). Completion of prerequisite courses is required for admission eligibility to the program. **Only those students formally admitted to the program may enroll in vocational nursing courses.**

Completion of the vocational nursing program qualifies students to take the state board examination (NCLEX-PN) for licensure as a vocational nurse (LVN).

Vocational Nursing Certificate**Prerequisite Courses: Units**

RNURS 1	Nursing Careers Seminar	0.3
BIOSC 30	Intro to Anatomy and Physiology	3
COMSC 49	Computer Literacy	1.5
ENGL 90	Integrated Reading, Writing, and Critical Thinking	5

MATH 15 or 18, 25 or 30	See LMC catalog for descriptions and current graduation requirements	3-4
NUTRI 55	Introduction to Nutrition	3
VONUR 8	Medical Terminology	1

First Semester Units

VONUR 4	Introduction to Clinical Pharmacology	1
VONUR 5	Fundamentals of Vocational Nursing	6
VONUR 6	Fundamentals of Vocational Nursing Practice	5.5
VONUR 7	Vocational Nursing Role Relationships	1

Second Semester Units

VONUR 10	Intermediate Core Concepts in Clinical Pharmacology	1
VONUR 11	Medical Surgical Nursing	5
VONUR 12	Medical Surgical Nursing Practice	5.5

Third Semester Units

VONUR 15	Advanced Core Concepts in Clinical Pharmacology	1
VONUR 16	Family Centered Nursing	6
VONUR 17	Family Centered Nursing Practice	5.5
VONUR 18	Professional Issues in Vocational Nursing	1

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 hours 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:

MATH 25	Elementary algebra	5
ENGL 90	Integrated Reading, Writing, and Critical Thinking	5

Required Courses:

PTEC 10	Introduction to Process Technology	3
PTEC 12	Petrochemical Safety, Health and Environment	1
PTEC 24	Process Instrumentation	3
PTEC 25	Process Technology I – Equipment	3
PTEC 27	Applied Instrumentation	1
PTEC 35	Process Technology II – Systems	3
PTEC 44	Petrochemical Simulation Laboratory	1
PTEC 45	Process Technology III – Operations	3
PTEC 48	Process Trouble Shooting	3
MATH 30*	Intermediate Algebra	4
CHEM 6	Introduction to Inorganic and Physical Chemistry	4
OR		
CHEM 7	Introduction General, Organic and Biochemistry	4
PHYS 15**	Introduction to Physics	4

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:

ENGL 90	5
---------	---

Complete any one of these courses:

COMSC 40	Introduction to Computers	4
COMSC 49	Computer Literacy	1.5
COMSC 60	Emerging Microcomputer Technologies and Applications	4
BUS 18	Microsoft EXCEL for Windows	3
BUS 65	Introduction to Word Processing	3
BUS 66	Intermediate Word Processing	3
BUS 67	Advanced Word Processing	2
BUS 68	Intro to Desktop Publishing on the PC	3

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.

Required Courses:

ANTHR 5*	General Anthropology	3
OR		
ANTHR 6*	Cultural Anthropology	3
PSYCH 10	Psychology: Individual and Social Processes	3
PSYCH 11	General Psychology	3
SOCIO 15*	Introduction to Sociology	3
OR		
SOCIO 16*	Introduction to Social Problems	3

And select a minimum of 2 elective courses:

ANTHR 5*	General Anthropology	3
OR		
ANTHR 6*	Cultural Anthropology	3
ANTHR 7	Anthropology of Cultural Changes	3
MATH 34	Probability and Statistics	4
PSYCH 12	Family Crisis and Growth	3
PSYCH 14	Psychology of Human Sexuality	3
SOCIO 16*	Introduction to Social Problems	3
OR		
SOCIO 15*	Introduction to Sociology	3

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

Total Units Required in Major Courses..... 18-19

Real Estate

Degree: Associate of Science – Real Estate

Certificates: Certificate of Achievement – Real Estate

College Skills Certificate: Real Estate Broker

College Skills Certificate: Real Estate Sales

Required Courses:

Units

REAL 5	Real Estate Principles***	3
REAL 10	Legal Aspects of Real Estate*	3
REAL 15	Real Estate Appraising*	3
REAL 20	Real Estate Practice*	3
REAL 25	Principles of Real Estate Finance*	3

And select 15 units of elective courses:

BUS 18****	Microsoft Excel for Windows	3
BUS 109	Introduction to Business	3
BUS 181	Accounting: Applied Principles**	3
BUS 186	Principles of Accounting I	2
BUS 294	Business Law**	3

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

* Required for California Real Estate Broker's License

** Electives for California Real Estate Sales and Broker's License

*** Required for California Real Estate Sales License

The Real Estate courses prepare the student to complete the California State Broker's License Examination.

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:

BUS 181 or 186 or 45 or 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:

REAL10/15/25/45 or BUS 18/181/186/45 or 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:

Units

RA 10	Recording Arts I	3
RA 12	Basic Sound Reinforcement	3
RA 15	Music Fundamentals for Audio Professionals	3
RA 20	Applied Recording Theory	3
RA 21	Basic Session Producing	2
RA 25	Basic Tracking Sessions	3
RA 30	Advanced Studio Procedure	3
RA 32	Recording Arts Workshop	(min) 1
RA 35	Protocols Production & Editing	3
RA 40	Audio for Video Post	3

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

OR

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

SIGN 65	American Sign Language I	3
SIGN 66	American Sign Language II	3
SIGN 67	American Sign Language III	3
SIGN 68	American Sign Language IV	3
SIGN 70	Finger spelling I	.5
SIGN 71	Finger spelling II	.5

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 ethnical 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
ANTHR 5* General Anthropology	3
OR	
ANTHR 6* Cultural Anthropology	3
PSYCH 10* Psychology: Individual and Social Processes	3
OR	
PSYCH 11* General Psychology	3
SOCIO 15 Introduction to Sociology	3
SOCIO 16 Introduction to Social Problems	3

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

SPAN 52 Intermediate Spanish I	5
SPAN 53 Intermediate Spanish III	5

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. Note: Proficiency in English, Math, and Computer Science also required for Certificate of Achievement (see below for details).

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 (11 units):	Units
TRAVL 72 Introduction to Travel	3
TRAVL 76 Travel Sales and Marketing	3
TRAVL 77 Customized Vacation Planning	2
TRAVL 95 Advanced Travel Concepts	3

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
TRAVL 97	Mexico Destination Specialist	1.5

And select a minimum of 7 elective units:

TRAVL 74	North American Destination Specialist	3
TRAVL 75	Western Europe Destination Specialist	3
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 97	Mexico Destination Specialist	1.5
TRAVL 170A	Internship in Travel	1-8
TRAVL 101	Home-Based Travel – Is it for You?	.5
TRAVL 102	Establishing a Home-Based Travel Business	.5
TRAVL 103	Marketing and Promoting a Home Based Travel Business	.5
TRAVL 104	Resources for the Home-Based Travel Professional	.5
TRAVL 105	Business and Financial Plans for Home-Based Travel	.5
TRAVL 106	Home-Based Travel and the Law	.5
TRAVL 120	Certified Travel Associate (CTA)	3
TRAVL 900*	Selected Topics in Travel	.3 – 3

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

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

Proficiency Requirements

Los Medanos College requires the Certificate of Achievement candidate to complete 3 proficiency requirements:

1. English – This can be achieved by completing English 90 or a higher level English course or by taking the Assessment Test and achieving a high score.
2. Math – See the requirements on page 36.
3. Computer literacy – This can be achieved by completing Computer Science 40 or 49 or by taking the Assessment Test and achieving a high score.

It is highly recommended that you take the Assessment Test for these three subject areas in your first semester to determine if you can “test out” or if you need to take the course.

College Skills Certificate Options in Travel Marketing**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):

Required Courses (7 units):		Units
TRAVL 72	Introduction to Travel	3
TRAVL 76	Travel Sales and Marketing	3
TRAVL 95	Advanced Travel Concepts	3

And select a minimum of 3 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 97	Mexico Destination Specialist	1.5
TRAVL 170A	Internship in Travel	1-8
TRAVL 101	Home-Based Travel – Is it for You?	.5
TRAVL 102	Establishing a Home-Based Travel Business	.5
TRAVL 103	Marketing and Promoting a Home Based Travel Business	.5
TRAVL 104	Resources for the Home-Based Travel Professional	.5
TRAVL 105	Business and Financial Plans for Home-Based Travel	.5
TRAVL 106	Home-Based Travel and the Law	.5
TRAVL 120	Certified Travel Associate (CTA)	3
TRAVL 900*	Selected Topics in Travel	.3–3

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.

Required Courses (9 units):

Required Courses (9 units):		Units
TRAVL 72	Introduction to Travel	3
TRAVL 76	Travel Sales and Marketing	3
TRAVL 101	Home-Based Travel – Is it for You?	.5
TRAVL 102	Establishing a Home-Based Travel Business	.5
TRAVL 103	Marketing and Promoting a Home Based Travel Business	.5
TRAVL 104	Resources for the Home-Based Travel Professional	.5
TRAVL 105	Business and Financial Plans for Home-Based Travel	.5
TRAVL 106	Home-Based Travel and the Law	.5

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
TRAVL 97	Mexico 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 97	Mexico Destination Specialist	1.5
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 Certificate

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 (8 units):		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.

Program Student Learning Outcomes



Section 4

Administration of Justice

Program Completion/Learning Outcomes:

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.

Appliance Service Technology

Program Completion/Learning Outcomes:

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/Humanities

Program Completion/Learning Outcomes:

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.

Art/Fine Arts

Program Completion/Learning Outcomes:

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

Program Completion/Learning Outcomes:

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.

Astronomy

Program Completion/Learning Outcomes:

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.

Automotive Technology

Program Completion/Learning Outcomes:

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.

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

Program Completion/Learning Outcomes:

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

Program Completion/Learning Outcomes:

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

Program Completion/Learning Outcomes:

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

Program Completion/Learning Outcomes:

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

Program Completion/Learning Outcomes:

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

Program Completion/Learning Outcomes:

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

Program Completion/Learning Outcomes:

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 screen play 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/Instrumentation Technology

Program Completion/Learning Outcomes:

1. Gain entry-level or mid-level employment in the electrical or instrumentation field. (ISLO #1)
2. Troubleshoot, analyze, operate, repair, and install electrical systems equipment. (ISLO #2)
3. Communicate the technical status of equipment in writing and verbally; be able to work and communicate with teams. (ISLO #3)
4. Safely use electrical or instrumentation test equipment. (ISLO #4)
5. Demonstrate the operational concepts of equipment and technology used in the electrical or instrumentation field. (ISLO #4)
6. Demonstrate the skills and knowledge necessary to take and pass certification exams for career advancement in electrical or instrumentation fields (ISLO #5)

Emergency Medical Services

Program Completion/Learning Outcomes:

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

Program Completion/Learning Outcomes:

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)

Program Completion/Learning Outcomes:

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.

- Value reading for academic, vocational and personal development
 - Apply the information gained through reading to understand self and others
4. As a writer, students will be able to:
 - See value in writing and appreciate language in multiple settings
 - Use writing independently as a tool for learning and communicating
 - Engage in writing as a recursive process
 - Use a standard academic essay format, maintaining structure, focus and syntax when writing about academic and vocational themes

English (Developmental)

Program Completion/Learning Outcomes:

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

Students who have completed the Environmental Science program at LMC will know and have the ability to:

1. Apply the scientific method to the environmental sciences via critical review of pertinent scientific literature, laboratory exercises, field studies, problem sets, and classroom discussions and analysis.
2. Demonstrate comprehension and application of the principles, techniques, methods, practices, skills, and ethics of modern environmental science professionals including (but not limited to):
 - Cycles in mass and energy transfer (e.g. Krebs cycle, hydrologic cycle, nutrient cycles, life cycles, food webs); illustrating that people and nature are intimately interconnected.
 - Natural resource sustainability, preservation, and conservation; why we must learn to sustain our environmental resources.
 - Ecological complexity and biodiversity; how human beings affect the environment of the entire planet.
 - Population growth and human interaction with their environment; why rapid human population growth is a fundamental global environmental issue.
 - Environmental racism and environmental justice; why urban environments need special attention.
 - Weather and climate; why solutions to environmental problems involve making value judgments based on scientific knowledge.
3. Demonstrate critical thinking regarding environmental problems via the design, implementation, and analysis of laboratory experiments, field studies, classroom debates, field journals, notebooks, topical research papers and presentations that teach students how to think through environmental issues so that they can arrive at their own decisions.
4. Engage in hands-on learning experiences via the design of practical and economical laboratory and field studies to gain marketable skills sets and a realistic view of career opportunities within the discipline.
5. Compare and contrast the traditional single discipline approach to scientific inquiry to the interdisciplinary approach of environmental problem solving spanning the entire spectrum of relationships between people and the environment.

English-as-a-Second Language

Learners will acquire skills that integrate academic literacy, acculturation, and vocational/professional skills. These courses prepare the non-native speaker for transfer, professional and /or personal development based on the integrated program outcomes as follows:

1. As a learner, students will be able to:
 - Observe, monitor and (self/peer) evaluate strengths and weaknesses, and use feedback to improve learning
 - Independently use college resources to expand learning effectiveness
 - Establish an educational/vocational goal
2. As a speaker/listener, students will be able to:
 - Listen effectively in a variety of academic, personal and vocational situations
 - Produce consistently comprehensible spoken English for a variety of academic, personal and vocational purposes
3. As a reader, students will be able to:
 - Read independently for a variety of purposes
 - Engage in reading using a critical-thinking approach, emphasizing comprehension and study skills
 - Respond fluently to text in critical, creative and personal ways
 - Apply what is learned in readings to practical life skills

6. Articulate and disseminate appreciation of and for the San Francisco Bay-Delta Watershed its past, present, and future within the context other California environs.
7. Trace the origin and fate of the consumptive (e.g., food, fiber, water, mineral, and energy) natural resources that we use in California with specific attention on the San Francisco Bay-Delta region.
8. Differentiate between science and technology by recognizing that technology is not science, but the application of scientific knowledge and that science and technology interact promoting new developments in each other.

Fire Technology/Fire Academy

1. Be academically prepared to obtain an entry-level position as a Firefighter in the Fire Service.
2. Apply critical thinking to research, evaluate, analyze and synthesize Fire Service information.
3. Demonstrate through written and oral communication skills a broad knowledge of Fire History, Fire Chemistry and Behavior, Fire Prevention and Building Construction as it applies to Firefighting.
4. Appropriately apply the Fire Technology based information attained in this degree for success in the Fire Service.
5. Apply the skills and knowledge from this degree towards potential advancement in the Fire Service.

World Languages

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.

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

Program Completion/Learning Outcomes:

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

Students completing one of the three Liberal Arts options will:

1. Read critically and communicate effectively as a writer and speaker.
2. Understand the connections among disciplines and apply interdisciplinary approaches to problem solving.
3. Think critically and creatively.
4. Consider the ethical implications inherent in knowledge, decision-making and action.
5. Possess a worldview informed by diverse social, multicultural and global perspectives.

Management and Supervision

Program Completion/Learning Outcomes:

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

Program Completion/Learning Outcomes:

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

Program Completion/Learning Outcomes:

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

Program Completion/Learning Outcomes:

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.

Physical Science

There is no official Physical Science program, since Physical Science 5 is the only course offered.

The Course Student Learning Outcomes for it are:

1. Understand and give examples of a regularity pattern and a cause and effect for each of the physical sciences.
2. Understand and give examples of scientific laws and examples of scientific models in each of the four disciplines.
3. Define and illustrate, with examples, the fundamental forces in nature, the present model of the atom and nucleus and theories of fundamental particles.
4. Explain how the above concepts apply to stellar evolution.
5. Describe the stages in the life of a star.
6. Explain the concepts of matter, energy, heat and radiation.
7. Understand and apply the four stages of the scientific process to an issue in each of the physical sciences.
8. Research and write a paper or papers on scientific principles from the physical sciences and science and society issues.
9. Explain the nature of molecules, forms of chemical bonding, the periodicity of the periodic table and how it was discovered.
10. Explain the basic mechanisms of plate tectonics and the phenomena of geological change associated with it.
11. Discuss examples of alternate belief systems that exist now or did exist.
12. 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.
13. Discuss how science relates to society and to religion.

Process Technology

Program Completion/Learning Outcomes:

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

Program Completion/Learning Outcomes:

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)

Program Completion/Learning Outcomes:

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 be proficient in evaluating the implications of multi cultural diversity and global interdependence

Speech

Program Completion/Learning Outcomes:

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

Program Completion/Learning Outcomes:

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

Program Completion/Learning Outcomes:

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.

Course Offerings



Section 5

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 the class is taken to be transferable to UC. The list of UC transferable courses is 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.

Type of Teaching Method and Learning Activity		Expected Hours of Outside Preparation Per Class	Ratio of Units to In-Class Hours
Lecture or	Primarily dissemination of information by instructor.	2 hours	1 unit: 1 hour per week 18 hours per semester
English Composition or	Primarily dissemination of information by the instructor to a large or moderate-sized group of students.	2 hours	1 unit: 1 hour per week 18 hours per semester
Laboratory or	Hands-on experience by the students with some instruction and with close supervision by an instructor.	1 hour	1 unit: 3 hours per week 54 hours per semester
Independent study or	Contracted independent study with close supervision by an instructor.		1 unit: 3 hours per week 54 hours per semester
PE/Activity or	Highly structured physical activities directed and supervised by an instructor.	0	1 unit: 3 hours per week 54 hours per semester
Cooperative work experience Field work	Contract and/or paid work with instructor evaluation.	0	1 unit: 5 hours per week per semester

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-007 and 008

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 Manager at (925) 427-8238, 340 Marina Blvd., Pittsburg to register for the Academy. "Mandatory and optional material fees 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-005 and 008

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. "Mandatory and optional material fees 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-005 and 007

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. "Mandatory and optional material fees 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-090*

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-090*

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

Transfer: CSU

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-005 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-005 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

ADJUS-098 Independent Study in Administration of Justice

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 student and instructor stipulating goals of the independent study, content, method of approach, estimated time involved, and 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.*

ADJUS-120 Introduction to the Criminal Justice System
3 hours lecture 3 Units

Advisory: *Eligibility for ENGL-090*

(Formerly ADJUS-120L) This is an integrated, interdisciplinary study of the criminal justice system. Examination will be made of the American system (law enforcement, courts, and corrections) and the various sub-systems; roles and role expectations of criminal justice agencies and the interrelationships in society; crime causations, punishment and rehabilitation, ethics, education and training for professionalism in the social system. May not be repeated. SC

LMC: GE: Social Science; DA

Transfer: CSU

ADJUS-121 Criminal Law
3 hours lecture 3 Units

Prerequisite: ADJUS-120

Advisory: *Eligibility for ENGL-100*

This course is an in-depth study of the concepts, historical development, and philosophy of criminal law and the substantive criminal 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

LMC: DA

Transfer: CSU

ADJUS-122 Criminal Procedures
3 hours lecture 3 Units

Advisory: ADJUS-120; *eligibility for ENGL-090*

This course involves a comprehensive look at the origin, development, philosophy and legal basis of criminal procedure in California. Procedural statute law, case law, and constitutional law governing laws of arrest; use of force; motions; rules of discovery; applicable rules of evidence; California court system; California grand jury system; pretrial court procedures; adult trial procedures; juvenile trial procedures; sentencing; appellate process. May not be repeated. SC

LMC: DA

Transfer: CSU

ADJUS-130 Cultural Issues in Public Service
3 hours lecture 3 Units

Advisory: *Eligibility for ENGL-090*

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

LMC: DA

Transfer: CSU

ADJUS-150 Criminal Investigations
3 hours lecture 3 Units

Prerequisite: ADJUS-120

Advisory: *Eligibility for ENGL-090*

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 as to what occurred. The students will correctly demonstrate basic evidence gathering techniques and evidence chain-of-command. May not be repeated. SC

LMC: DA

Transfer: CSU

ADJUS-151 Basic Drug Laws and Investigation
3 hours lecture 3 Units

Advisory: ADJUS-120; *eligibility for ENGL-090*

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-090

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-170 Occupational Work Experience
Education in Administration of Justice**

60-600 total hours 1-8 Units

Prerequisite: Approved Application**Advisory:** Eligibility for ENGL-090

(Formerly ADJUS-099) This course is for students whose work is related to their major. Occupational Work Experience Education provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. To participate in cooperative work experience education, students must be employed or formally volunteer and undertake new or expanded responsibilities. Students, with faculty and employer approval, will develop and successfully complete one learning objective for each unit of credit in which they enroll. Additionally, students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and may repeat for a maximum of 16 units of occupational work experience during community college attendance which may be applied as electives toward graduation. SC

LMC: DA**Transfer:** CSU**ADJUS-170A Internship in Administration of Justice**

60-600 total hours 1-8 Units

Prerequisite: Approved Application and meet Program Guidelines**Advisory:** Eligibility for ENGL-090

(Formerly ADJUS-099) This course is for students who have declared a major, have taken classes in the major, are ready to on-the-job experience in a paid or unpaid position and meet program-level minimum qualifications. An internship involves working in a skilled or professional level assignment in the area of a student's vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen field.

Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and repeat for a maximum of 16 units of occupational work experience internship during community college attendance. Credit may be applied as electives toward graduation. 12 units are transferable to CSU. SC

LMC: DA**Transfer:** CSU**ADJUS-221 Introduction to Evidence**

3 hours of lecture 3 Units

Prerequisite: ADJUS-120**Advisory:** Eligibility for ENGL-090; 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**Transfer:** CSU**ADJUS-260 Patrol Procedures**

3 hours lecture 3 Units

Advisory: Eligibility for ENGL-090

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-900s Selected Topics in Administration
of Justice**

DA varies with course content.

Anthropology

ANTHR-005 General Anthropology

3 hours lecture

3 Units

Advisory: Eligibility for ENGL-090

(Formerly ANTHR-005LS) 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-090

(Formerly ANTHR-006LS) 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, life-style 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. 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-090

(Formerly ANTHR-007LS) 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-098 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-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-020, 035 or 036; eligibility for ENGL-090; concurrent or prior enrollment in ETEC-004 (Formerly EETEC-010)

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 parts 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-020, 035 or 036; eligibility for ENGL-090; concurrent or prior enrollment in ETEC-004 (Formerly EETEC-010)

This course is a continuation of APPLI-013 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-020, 035 or 036; eligibility for ENGL-090; concurrent or prior enrollment in ETEC-004 (Formerly EETEC-010)

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-020, 035 or 036; eligibility for ENGL-090; concurrent or prior enrollment in ETEC-004 (Formerly EETEC-010)

A continuation of APPLI-015 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-013, 014, 015 or 016

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-030, 035 or 036; eligibility for ENGL-090; concurrent or prior enrollment in ETEC-004 (Formerly EETEC-010)

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-030, 035 or 036; eligibility for ENGL-090; concurrent or prior enrollment in ETEC-004 (Formerly EETEC-010)

This course is a continuation of APPLI-023 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-030, 035 or 036; eligibility for ENGL-090; concurrent or prior enrollment in ETEC-004 (Formerly EETEC-010)

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-030, 035 or 036; eligibility for ENGL-090; concurrent or prior enrollment in ETEC-004 (Formerly EETEC-010)

A continuation of APPLI-025 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-023, 024, 025, or 026

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-020 and 030
Advisory: Eligibility for ENGL-090
 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-020 and 030
Advisory: Eligibility for ENGL-090
 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-015 or 016; eligibility for ENGL-090
 Covers principles of microwave ovens. Designed to teach students how to service microwave ovens. May be repeated twice. 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-170 Occupational Work Experience in Appliance Service Technology
 60-600 total hours 1-8 Units
Prerequisite: Approved Application
 (Formerly APPLI-099) This course is for students whose work is related to their major. Occupational Work Experience Education provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. To participate in cooperative work experience education, students must be employed or formally volunteer and undertake new or expanded responsibilities. Students, with faculty and employer approval, will develop and successfully complete one learning objective for each unit of credit in which they enroll. Additionally, students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and may repeat for a maximum of 16 units of occupational work experience during community college attendance which may be applied as electives toward graduation. SC
LMC: DA
Transfer: CSU

APPLI-170A Internship in Appliance Service Technology
 60-600 total hours 1-8 Units
Prerequisite: Approved Application and meet Program Guidelines
Advisory: Eligibility for ENGL-090
 (Formerly APPLI-099) This course is for students who have declared a major, have taken classes in the major, are ready to on-the-job experience in a paid or unpaid position and meet program-level minimum qualifications. An internship involves working in a skilled or professional level assignment in the area of a student's vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen field. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and repeat for a maximum of 16 units of occupational work experience internship during community college attendance. Credit may be applied as electives toward graduation. 12 units are transferable to CSU. SC
LMC: DA
Transfer: CSU

APPLI-900s Selected Topics in Appliance Service Technology
 DA varies with course content.

Art

ART-003 Open Studio

4 hours lab .5-1 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-005LS) 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-006LS) 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-006, 007, 008 or 009) May not be repeated. LR

LMC: GE: Creative Arts; DA

Transfer: UC, CSU Gen. Ed. Area C1, IGETC Area 3A

ART-007 Western Art History II: Art of the Developing World (350 to 1550)

3 hours lecture 3 Units

Advisory: Eligibility for ENGL-100

(Formerly ART-007LS) 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-006, 007, 008 or 009.) May not be repeated. LR

LMC: GE: Creative Arts; DA

Transfer: UC, CSU Gen. Ed. Area C1, IGETC Area 3A

ART-008 Western Art History III: Art of the Modern World (1550 A.D. to 1920)

3 hours lecture 3 Units

Advisory: Eligibility for ENGL-100

(Formerly ART-008LS) 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-006, 007, 008 or 009.) May not be repeated. LR

LMC: GE: Creative Arts; DA

Transfer: UC, CSU Gen. Ed. Area C1, IGETC Area 3A

ART-009 Western Art History IV - Art of the Contemporary World (1920-Present)

3 hours lecture 3 Units

Advisory: Eligibility for ENGL-100

(Formerly ART-009LS) 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-006, 007, 008 or 009. Meets LMC General Education requirement for Humanities. May not be repeated. LR

LMC: GE: Creative Arts; DA

Transfer: UC, CSU Gen. Ed. Area C1

ART-010 Introduction to Two-Dimensional Design

2 hours lecture, 4 hours lab 3 Units

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. "An optional material fee may be applied." May not be repeated. LR

LMC: DA

Transfer: UC, CSU

ART-011	Introduction to Three-Dimensional Design	3 Units
2 hours lecture, 4 hours lab		
An introduction to the visual elements in a three-dimensional design context, including line, mass, volume, color, texture and space. An introduction to the methods and materials of three-dimensional form, including construction in planar materials, both soft and rigid; forming frameworks with wire and other linear materials, modeling, carving, and casting using clay, and using found materials. This is a foundation course, presenting the fundamentals of art upon which all other courses are based, transferable to UC and CSU, and is required for all art majors. "An optional material fee may be applied." May be repeated three times. SC		
LMC: DA		
Transfer: UC, CSU		
ART-012	Design Drawing	3 Units
2 hours lecture, 4 hours lab		
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		
LMC: DA		
Transfer: UC, CSU		
ART-015	Graphic Design	3 Units
2 hours lecture, 4 hours lab		
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 informational into unified communication concepts. Course work will explore career areas within the graphic communications industry, and will include portfolio preparation, job search and professional practices in the business world. Course assignments progressively develop the skills necessary to develop, visualize and execute concepts as finished art. May be repeated three times. SC		
LMC: DA		
Transfer: UC, CSU		
ART-020	Introduction to Drawing	3 Units
2 hours lecture, 4 hours lab		
Advisory: ART-010		
Development of representational drawing skills and compositional arrangement. Line, shape, value, texture and spatial manipulation will be explored using various dry and wet drawing media. Emphasis will be on fundamental skills with which the student can 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. May not be repeated. SC		
LMC: DA		
Transfer: UC, CSU		

ART-021	Advanced Drawing	3 Units
2 hours lecture, 4 hours lab		
Prerequisite: ART-020		
Advisory: ART-030		
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-025	Advertising, Marketing and Publication Design	3 Units
2 hours lecture, 2.5 hours lab		
Advisory: Eligibility for ENGL-090		
Studies and practice in the techniques, tools, materials and methodology of layout, including magazines, newspapers, books, brochures and advertisements. Coursework includes the design, layout and publishing of advertising and promotional materials for printed media, with emphasis on the requirements of working with clients, art directors, illustrators, photographers and production artists. Special emphasis is placed on typography and its application, proofreading, and print specification. Instruction is computer-based using industry standard software. May be repeated three times. SC		
LMC: DA		
Transfer: CSU		
ART-026	Landscape Sketching on Location	.5 Unit
8 total hours lecture, 16 total hours lab		
Advisory: ART-012 or ART-020 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: CSU		

ART-027 Introduction to Cartooning

2 hours lecture, 3 hours lab 3 Units

Advisory: ART-012, 020; eligibility for ENGL-090

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:** CSU**ART-028 Intermediate Cartooning**

2 hours lecture, 3 hours lab 3 Units

Prerequisite: ART-027**Advisory:** ART-012, ART-020; eligibility for ENGL-090

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 once. SC

LMC: DA**Transfer:** CSU**ART-040 Introduction to Painting**

2 hours lecture, 4 hours lab 3 Units

Advisory: ART-010, 012 or 020, ENGL-090

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 a variety of subject matters and styles of painting, which may include still life, landscape, abstraction, fantasy, figure, and portrait studies, as well as the use of applied light and color theory, and composition. Lectures focus on painting from cultural, historical and contemporary perspectives. May be repeated three times. SC

LMC: DA**Transfer:** UC, CSU**ART-045 Advanced Painting**

2 hours lecture, 4 hours lab 3 Units

Prerequisite: ART-040

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 twice. SC

LMC: DA**Transfer:** UC, CSU**ART-046 Landscape Painting on Location**

8 total hours lecture, 40 total hours lab 1 Unit

Advisory: ART-026, ART-040 or equivalent

Studies and practice in painting 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 composition, value relationships and color mixing. In addition, students will learn techniques artists can use to paint skies, clouds, standing and running water, and trees, grasses and shrubbery. Students may use either oil or acrylic media. May be repeated three times. P/NP

LMC: DA**Transfer:** CSU**ART-047 Color Dynamics in Painting**

16 total hours lecture, 20 total hours lab 1 Unit

Advisory: ART-040 or equivalent

Studies and practice in color theory, with practical application for oil and acrylic media, using the interaction of color to create movement, depth, atmosphere and excitement in paintings. Coursework is structured to develop students' expression, perception of color, and sensitivity to color relationships. May be repeated three times. P/NP

LMC: DA**Transfer:** CSU**ART-050 Designing with Adobe InDesign**

2 hours lecture, 2.5 hours lab 3 units

Advisory: ENGL-090

This course is an exploration of concepts of publishing; with specific application of Adobe InDesign layout software on the Apple-Macintosh computer system. The course will review cover basic operating procedures and will introduce the advanced capabilities of the current version of InDesign. More than just learning about how to use the software, students will learn how to use it with a sense of design. Taught with an artistic rather than purely technical emphasis, this course provides visual training for non-artists and computer training for students already experienced in visual communications. May be repeated three times. SC

LMC: DA**Transfer:** CSU

ART-054 Adobe Photoshop

2 hours lecture, 3 hours lab 3 Units

Advisory: *Eligibility for ENGL-090*

An introduction to computer image processing. Studies and practice in the design and execution of photo manipulation, graphics, artwork and illustration using Adobe Photoshop. Students will complete successive and cumulative exercises and projects based on current industry standards and expectations. Students will concentrate on solving problems based on their understanding the principles of image processing. Taught with both artistic and technical emphases, this course addresses the needs of the current graphic communications industry and students who presently are employed or seek employment in it. May be repeated three times. SC

LMC: DA**Transfer:** CSU**ART-057 Designing with Adobe Illustrator**

2 hours lecture, 2.5 hours lab 3 Units

Advisory: *Eligible for ENGL-090*

Studies and practice in the design and execution of graphics, artwork and illustration using Adobe Illustrator on the Apple Macintosh computer. Students will complete projects based on current industry needs as well as be able to propose projects related to their own specific needs. Students will concentrate on solving problems and creating portfolio quality pieces. Taught with an artistic and technical emphasis, this course addresses the use of vector graphics in both traditional print and the World Wide Web. May be repeated three times. SC

LMC: DA**Transfer:** CSU**ART-060 Introduction to Sculpture**

2 hours lecture, 4 hours lab 3 Units

Advisory: *ART-011 or ART-066*

Introduction to sculpture methods and materials. Emphasis on principles of three dimensional design and the interrelationship of form, content and context. Sculpture methods to be covered include modeling, mold making, welding, assemblage, and construction with a variety of materials. May be repeated three times. SC

LMC: DA**Transfer:** UC, CSU**ART-063 Raku Workshop**

9 total hours lecture, 39 total hours lab 1 Unit

Raku' workshop, an Asian pottery technique, will be explored during this workshop. Students will produce and fire their own work, wheel thrown, or hand built. May be repeated three times. SC

LMC: DA**Transfer:** CSU**ART-066 Introduction to Ceramics**

2 hours lecture, 4 hours lab 3 Units

Advisory: *ART-011*

An introductory course that explores the use of clay as an expressive and utilitarian medium. Assignments will focus on hand-building and wheel-throwing techniques. The course will emphasize self-expression and the development of personal imagery, as well as technical aspects of clays and decorative processes. Lectures will highlight the use of this versatile medium from contemporary, historical and cultural perspectives. May be repeated once. "An optional material fee may be applied." SC

LMC: DA**Transfer:** UC, CSU**ART-067 Intermediate Ceramics**

2 hours lecture, 4 hours lab 3 Units

Prerequisite: *ART-066 or equivalent course***Advisory:** *Eligibility for ENGL-090*

Second semester course designed to give students in-depth practice in ceramics as an artistic product. Through a combination of structured and self-directed projects, students are encouraged to develop their manual skills, visual acuity and artistic vision. Course content includes under- and over-glazing techniques, Raku and pit-firing, and advanced wheel-throwing and hand-building techniques. May be repeated three times. "An optional material fee may be applied." SC

LMC: DA**Transfer:** UC, CSU**ART-068 Advanced Ceramics**

2 hours lecture, 4 hours lab 3 units

Prerequisite: *ART-066 or 067 or 069*

In this course, students will work with the following techniques to complete two to four assignments: modeling, using the potter's wheel to create multiple vessel forms, slab building, relief and in-the-round carving, and mold-making in plaster and bisque-ware. Based on this experience, students will then complete one to three self-designed assignments in order to create a group of projects that are unified visually, conceptually, or thematically. Students will develop their kiln loading, firing, glazing mixing, and glaze application skills in relation to their own projects and to maintain a functional studio setting. In an ongoing self-review process, students discover and develop common themes and concepts that unify their projects into a coherent body of work. May be repeated three times. "An optional material fee may be applied." SC

LMC: DA**Transfer:** CSU

ART-069 Figurative Ceramic Sculpture

2 hours lecture, 4 hours lab 3 Units

Advisory: ART-066

Beyond pottery, ceramic artists from a variety of world cultures have utilized clay to capture the expressive form of the human figure. In this course, hand-building techniques will be used to develop high-relief and in-the-round representational and narrative subjects in terra cotta and glazed ceramic sculpture. Human anatomy and its application to human expression will be presented through slides, demonstration and discussion. May be repeated three times. "An optional material fee may be applied." SC

LMC: DA**Transfer:** CSU**ART-072 Photo 1: Survey of Digital Photography**

2 hours lecture, 3 hours lab 3 Units

A non-laboratory photography course which presents a methodical approach to achieving quality photographs and an overview of the field of photography. The course explores the technical areas of F/ Stops, shutter speeds, film stock, exposure, and lighting. Additional attention is given to photographic styles and approaches, the use of color and design, and the impact of photography over the past 100 years. Required for all art majors. May not be repeated. SC

LMC: DA**Transfer:** UC, CSU**ART-073 Location Photography**

16 total hours lecture, 20 total hours lab 1 Unit

Advisory: ART-072 or equivalent

Studies and practice in photographing a variety of regional landscapes and cityscapes that incorporate scenic views of the hills and valleys of Black Diamond Mines Regional Park, Mt. Diablo, the San Joaquin River and the Delta, among others. Studies focus on the process of good picture making. Students will work on composition, lighting and creating a mood. Students must supply their own camera and film. May be repeated three times. P/NP

LMC: DA**Transfer:** CSU**ART-074 Photo II: Developing a Personal Vision**

2 hours lecture, 3 hours lab 3 Units

Prerequisite: ART-072**Advisory:** Eligibility for ENGL-090

This course presents a methodical approach to creating high-quality photographs through the advanced study and practice of photography. Coursework includes technical areas of lighting, exposure, and image processing using Photoshop. Additional attention is given developing photographic styles and approaches, and the effect of technology on photographic processes and photography as an artistic medium. 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**Transfer:** UC, CSU**ART-086 Animation and 3D Modeling**

2 hours lecture, 4 hours lab 3 Units

Studies and practice in three dimensional animations with emphasis on the definition, research, solution to animation and modeling problems. Using industry standard routines and analysis, this course develops students' understanding of motion and visual effects generated in 3D scenes to develop a demo reel by the end of the course. This course is not about learning "how to" use a specific program but learning the basic 3D modeling and animation concepts to emphasizes creativity. Special emphasis will be placed on stylized modeling and animation, production pipelines, and story development. May be repeated three times. SC

LMC: DA**Transfer:** CSU**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-170 Occupational Work Experience
Education in Art**

60-600 total hours 1-8 Units

Prerequisite: *Approved Application***Advisory:** *Eligibility for ENGL-090*

(Formerly ART-099) This course is for students whose work is related to their major. Occupational Work Experience Education provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. To participate in cooperative work experience education, students must be employed or formally volunteer and undertake new or expanded responsibilities. Students, with faculty and employer approval, will develop and successfully complete one learning objective for each unit of credit in which they enroll. Additionally, students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and may repeat for a maximum of 16 units of occupational work experience during community college attendance which may be applied as electives toward graduation. SC

LMC: DA**Transfer:** CSU**ART-170A Internship in Art**

60-600 total hours 1-8 Units

Prerequisite: *Approved Application and meet Program Guidelines***Advisory:** *Eligibility for ENGL-090*

(Formerly ART-099) This course is for students who have declared a major, have taken classes in the major, are ready to on-the-job experience in a paid or unpaid position and meet program-level minimum qualifications. An internship involves working in a skilled or professional level assignment in the area of a student's vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen field. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and repeat for a maximum of 16 units of occupational work experience internship during community college attendance. Credit may be applied as electives toward graduation. 12 units are transferable to CSU. 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 3 Units

Advisory: *Eligibility for ENGL-100*

(Formerly ASTRO-010LS) 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**ASTRO-011 Astronomy Laboratory**

3 hours lab 1 Unit

Prerequisite: *ASTRO-010 to be taken prior or concurrently*

(Formerly ASTRO-011S) This course provides laboratory experience in astronomical observation. It involves the study of fundamental concepts of astronomy, includes investigations of the moon, sun, planets and stars and offers practical experience in the use of telescopes and other tools. ASTRO-010 and 011, if both completed, meet the CSU lab science requirement. May not be repeated. LR

LMC: DA**Transfer:** UC, CSU Gen. Ed. Area B3, IGETC Area 5A**ASTRO-098 Independent Study in Astronomy**

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.***ASTRO-900s Selected Topics in Astronomy**

DA varies with course content.

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 twice. SC

LMC: DA

Transfer: CSU

ATH-053 Football Theory - Offensive

1 hour lecture, 3 hours activity 2 Units

Advisory: *Prior experience in playing football.*

Course designed to explore all theoretical areas of football offense. Provides the student with integrated knowledge of concepts, technical skills, and methods used in the offensive game of football. Prepares student athlete who participates to perform in a more knowledgeable manner. May be repeated twice. 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 twice. 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 twice. 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 twice. SC

LMC: DA

Transfer: UC, CSU

ATH-067 Introduction to Sports Medicine & Athletic Training

2 hours lecture, 3 hours lab 3 Units

Advisory: *BIOSC-030 or equivalent; eligibility for ENGL-090*

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

1.5-3 hours activity .5-1 Unit

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-076 Intercollegiate Volleyball

10 hours activity 3 Units

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 twice. LR

LMC: DA

Transfer: UC, CSU

ATH-077 Intercollegiate Football

10 hours activity 3 Units

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 twice. LR

LMC: DA**Transfer:** UC, CSU**ATH-079 Intercollegiate Basketball for Men**

10 hours activity 3 Units

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 twice. SC

LMC: DA**Transfer:** UC, CSU**ATH-081 Intercollegiate Baseball**

10 hours activity 3 Units

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 twice. SC

LMC: DA**Transfer:** UC, CSU**ATH-089 Intercollegiate Soccer**

10 hours activity 3 Units

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 twice. LR

LMC: DA**Transfer:** UC, CSU**ATH-090 Intercollegiate Basketball for Women**

10 hours activity 3 Units

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 twice. SC

LMC: DA**Transfer:** UC, CSU**ATH-092 Intercollegiate Softball**

10 hours activity 3 Units

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 twice. 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-170 Occupational Work Experience Education in Athletics**

60-600 total hours 1-8 Units

Prerequisite: *Approved Application***Advisory:** *Eligibility for ENGL-090*

(Formerly ATH-099) This course is for students whose work is related to their major. Occupational Work Experience Education provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. To participate in cooperative work experience education, students must be employed or formally volunteer and undertake new or expanded responsibilities. Students, with faculty and employer approval, will develop and successfully complete one learning objective for each unit of credit in which they enroll. Additionally, students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and may repeat for a maximum of 16 units of occupational work experience during community college attendance which may be applied as electives toward graduation. SC

LMC: DA**Transfer:** CSU

ATH-170A Internship in Athletics

60-600 total hours 1-8 Units

Prerequisite: *Approved Application and meet Program Guidelines***Advisory:** *Eligibility for ENGL-090*

(Formerly ATH-099) This course is for students who have declared a major, have taken classes in the major, are ready to on-the-job experience in a paid or unpaid position and meet program-level minimum qualifications. An internship involves working in a skilled or professional level assignment in the area of a student's vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen field. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and repeat for a maximum of 16 units of occupational work experience internship during community college attendance. Credit may be applied as electives toward graduation. 12 units are transferable to CSU. 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-090*

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-035*

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-040 and 041) 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-040 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-040 and 041) 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 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 re-

pair 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-040 and 041*

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-055; eligibility for ENGL-090

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-170 Occupational Work Experience Education in Automotive Technology

60-600 total hours 1-8 Units

Prerequisite: Approved Application**Advisory:** Eligibility for ENGL-090

(Formerly AUTO-099) This course is for students whose work is related to their major. Occupational Work Experience Education provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. To participate in cooperative work experience education, students must be employed or formally volunteer and undertake new or expanded responsibilities. Students, with faculty and employer approval, will develop and successfully complete one learning objective for each unit of credit in which they enroll. Additionally, students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and may repeat for a maximum of 16 units of occupational work experience during community college attendance which may be applied as electives toward graduation. SC

LMC: DA**Transfer:** CSU**AUTO-170A Internship in Automotive Technology**

60-600 total hours 1-8 Units

Prerequisite: Approved Application and meet Program Guidelines**Advisory:** Eligibility for ENGL-090

(Formerly AUTO-099) This course is for students who have declared a major, have taken classes in the major, are ready to on-the-job experience in a paid or unpaid position and meet program-level minimum qualifications. An internship involves working in a skilled or professional level assignment in the area of a student's vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen field. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and repeat for a maximum of 16 units of occupational work experience internship during community college attendance. Credit may be applied as electives toward graduation. 12 units are transferable to CSU. SC

LMC: DA**Transfer:** CSU**AUTO-900s Selected Topics in Automotive Technology**

DA varies with course content.

Biological Science**BIOSC-005 Health Biology**

3 hours lecture, 1 hour lab 3 Units

(Formerly BIOSC-005S) 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 Graduation Requirement for Health Education. 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-007LS) 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 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

Advisory: Eligibility for ENGL-090 or higher; MATH-015 or higher

(Formerly BIOSC-010LS) 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. 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-010, or 021

(Formerly BIOSC-020LS) 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 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-021 Principles of Biology: Organismic

3 hours lecture, 6 hours lab

5 Units

Prerequisite: Intermediate Algebra

Advisory: High School biology, chemistry, or BIOSC-010 or BIOSC-020

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. LR

LMC: DA

Transfer: UC, CSU Gen. Ed. Area B2, B3, IGETC Area 5B

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-030 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-040 and CHEM-007 (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-006, 007, 008, 020, 021 or 025, or equivalent.

(Formerly BIOSC-050LS) 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-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-018 Microsoft EXCEL for Windows**

3 hours lecture, 1 hour lab

3 Units

A hands-on computer spreadsheet course using MS EXCEL in the Windows environment for business applications including the creation and design of worksheets, graphs and business reports, financial statements, budgets, payroll, etc. This course will help students to be job ready for employment and satisfies the computer literacy requirement. May not be repeated. SC

LMC: GCR: Computer Literacy; DA**Transfer:** CSU**BUS-027 Small Business Management**

3 hours lecture

3 Units

Advisory: Eligibility for ENGL-090

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-010) or BUS-186 (Formerly BUS-014), BUS-185 (Formerly BUS-012), and BUS-018

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**

3 hours lecture, 1 hour 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 not be repeated. 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-075) 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 twice. SC

LMC: DA

Transfer: CSU

BUS-035B Microsoft Excel

18 total hours lecture, 27 total hours lab 1.5 Units

Advisory: Completion of COMSC-060, or prior microcomputer applications experience

(Formerly COMSC-070) A Specialized microcomputer applications course in electronic spread sheeting 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-076) 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 twice. SC

LMC: DA

Transfer: CSU

BUS-035D Microsoft ACCESS

18 total hours lecture, 27 total hours lab 1.5 Units

Advisory: Completion of COMSC-060, or prior microcomputer applications experience

(Formerly COMSC-065) A specialized microcomputers 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-051

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-090 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-058 or equivalent; eligibility for ENGL-090

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

BUS-065 Introduction to Word Processing

3 hours lecture, 1 hour lab 3 Units

Advisory: BUS-051 or knowledge of keyboard

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 "real world" 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 not be repeated. Satisfies Computer Literacy requirement. SC

LMC: GCR: Computer Literacy; DA

Transfer: CSU

BUS-067 Advanced Word Processing

2 hours lecture, 3 hours lab 3 Units

Advisory: BUS-065 or 066 and/or BUS-051 or knowledge of keyboard

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

LMC: GCR: Computer Literacy; DA

Transfer: CSU

BUS-071B eBay: Beyond the Basics

12 total hours lecture, 18 total hours lab 1 Unit

Advisory: Prior experience on eBay or completion of BUS-071A.

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 once. SC

LMC: DA

BUS-071C Starting an Online Business

12 total hours lecture, 18 total hours lab 1 Unit

Advisory: email account and ability to use the World Wide Web

Learn how to build and implement a business strategy for the Internet, including business specific considerations, online marketing and eCommerce strategies. May be repeated once. SC

LMC: DA

BUS-071D Legal Essentials for Your Online Business

12 total hours lecture, 18 total hours lab 1 Unit

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 once. SC

LMC: DA

BUS-080 Ten-Key / Data Entry Skills

12 total hours lecture, 18 total hours lab 1 Unit

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-081 and BUS-082. May be repeated three times. P/NP

LMC: DA

Transfer: CSU

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-018, BUS-080, BUS-181 (previously BUS-010), and BUS-003

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-018 & BUS-080, BUS-181 (previously BUS-010), and BUS-003*

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-058, 086, and word processing at 40 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 twice. 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 twice. 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-086 and 087**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 once. SC

LMC: DA

Transfer: CSU

BUS-095 Developing Customer Service Satisfaction

8 total hours lecture .5 Unit

Advisory: Eligibility for ENGL-090

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-090

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-109 Introduction to Business

3 hours lecture 3 Units

Advisory: *Eligibility for ENGL-090*

(Formerly BUS-020) 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-003 or MATH-015 and eligibility for ENGL-090*

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:** CSU**BUS-170 Occupational Work Experience
Education in Business**

60-600 total hours 1-8 Units

Prerequisite: *Approved Application***Advisory:** *Eligibility for ENGL-090*

(Formerly BUS-099) This course is for students whose work is related to their major. Occupational Work Experience Education provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. To participate in cooperative work experience education, students must be employed or formally volunteer and undertake new or expanded responsibilities. Students, with faculty and employer approval, will develop and successfully complete one learning objective for each unit of credit in which they enroll. Additionally, students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and may repeat for a maximum of 16 units of occupational work experience during community college attendance which may be applied as electives toward graduation. SC

LMC: DA**Transfer:** CSU**BUS-170A Internship in Business**

60-600 total hours 1-8 Units

Prerequisite: *Approved Application and meet Program Guidelines***Advisory:** *Eligibility for ENGL-090*

(Formerly BUS-099) This course is for students who have declared a major, have taken classes in the major, are ready to on-the-job experience in a paid or unpaid position and meet program-level minimum qualifications. An internship involves working in a skilled or professional level assignment in the area of a student's vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen field. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and repeat for a maximum of 16 units of occupational work experience internship during community college attendance. Credit may be applied as electives toward graduation. 12 units are transferable to CSU. SC

LMC: DA**Transfer:** CSU**BUS-181 Accounting: Applied Principles**

3 hours lecture, 1 hour lab 3 Units

Advisory: *BUS-003; eligibility for ENGL-090*

(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-018 and BUS-181 (previously BUS-010) or BUS-186*

(Formerly BUS-012) 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 Financial Accounting

4 hours lecture 4 Units

Advisory: BUS-181, MATH-012 or BUS-003 and eligibility for ENGL-090

(Formerly BUS-014) This course explores financial accounting, its importance and use by investors and creditors to make decisions. It covers the accounting information system and the recording and reporting of business transactions focusing on the accounting cycle, the application of generally accepted accounting principles, classified financial statements, and statement analysis. Issues related to asset, liability, and equity valuation, revenue and expense recognition, cash flow, internal control and ethics are included. May not be repeated. LR

LMC: DA**Transfer:** UC, CSU**BUS-187 Managerial Accounting**

4 hours lecture 4 Units

Prerequisite: BUS-186**Advisory:** MATH-012 or BUS-003; eligibility for ENGL-090

(Formerly BUS-015) This course continues the study of accounting theory with special emphasis on the types of accounting information used by managers, sources of information, and how managers use this information to make business decisions. Topics include cost systems, the analysis and use of cost information, cost-volume-profit analysis, contribution margin, profit planning, standard costs, capital budgeting, and statement analysis. May not be repeated. LR

LMC: DA**Transfer:** UC, CSU**BUS-285 Tax Accounting**

3 hours lecture 3 Units

Advisory: Eligibility for ENGL-090

(Formerly BUS-016) 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:** CSU**BUS-294 Business Law**

3 hours lecture 3 Units

Advisory: BUS-109 and eligibility for ENGL-100

(Formerly BUS-034) 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-025 or one year high school algebra

(Formerly CHEM-006S) 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-018 or 025; eligibility for MATH-030 or one year high school algebra.

A one-semester survey of principles of General Organic, and Biochemistry. Satisfies the chemistry prerequisite of health career 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:** CSU Gen. Ed. Area B1, B3**CHEM-008 Introductory Organic and Biochemistry**

3 hours lecture, 4 hours lab 4 Units

Prerequisite: CHEM-006 or the equivalent with a "C" or better.

(Formerly CHEM-008LS) An integrated study of chemical concepts and principles with laboratory methods and techniques. An interdisciplinary 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-006, and MATH-030.*

(Formerly CHEM-025LS) 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. 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-025 or equivalent*

A continuation of CHEM-025, including such topics as solutions, equilibria, 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. 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-026*

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. LR

LMC: DA**Transfer:** *UC, CSU***CHEM-028 Organic Chemistry**

3 hours lecture, 6 hours lab 5 Units

Prerequisite: *CHEM-026*

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-028*

A continuation of CHEM-028 or PHYSC-028 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-900s Selected Topics in Chemistry**

DA varies with course content.

Child Development

CHDEV-001 Introduction to the Study of Early Childhood Education

3 hours lecture 3 Units

Advisory: *Eligibility for ENGL-100*

Students will explore the various career possibilities in the field of Child Development and then study the various diverse philosophies and curriculum approaches used for educating young children. Components of quality early education programs such as environments, appropriate practices and family partnerships will be addresses. Students will also compare types and models of early childhood programs. Required for Child Development Majors. May not be repeated. SC

LMC: DA**Transfer:** *CSU*

CHDEV-010 Child Growth and Development

3 hours lecture 3 Units

Advisory: Eligibility for ENGL-100

This course examines the major physical, psychosocial, and cognitive/language developmental milestones for children, both typical and atypical, from conception through adolescence. There will be an emphasis on interactions between maturational processes and environmental factors while studying developmental theories and research methodologies. Students will observe children, evaluate individual differences and analyze characteristics of development at various stages. May not be repeated. SC

LMC: GE: Behavioral Sciences; DA

Transfer: UC, CSU Gen. Ed. Area D7, E, IGETC Area 4G

CHDEV-011 Observation and Assessment

3 hours lecture 3 Units

Prerequisite: CHDEV-010

Advisory: Eligibility for ENGL-100

This course focuses on the role of observation to support children's growth and development in early childhood programs. Various observation methods are used to complete assessments (including and individual child's DRDP-R and a classroom assessment), create individual children's learning plans, develop a classroom improvement plan and provide written family feedback. Appropriate use of assessments and rating systems, the value of portfolios and children's authentic work samples, successful observation strategies, observing learning through plan, working in partnership with families, supporting children with special needs, supporting a child's culture and home language, and confidentiality are values that underpin all discussions and class assignments. May not be repeated. SC

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 once. SC

LMC: DA

Transfer: CSU

CHDEV-015 Supervised Teaching of Young Children

2 hours lecture, 6 hours lab 4 Units

Prerequisite: CHDEV-001, 010, 011, 050, 062, and 083.

Advisory: Eligibility for ENGL-090

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: CSU

CHDEV-020 Child, Family and Community

3 hours lecture 3 Units

Advisory: Eligibility for ENGL-090

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-090

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-090

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-090*

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-090*

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**Transfer:** CSU**CHDEV-028 Learning Environments that Support Art
and the Creative Process**

2 hours lecture 2 Units

Advisory: *Eligibility for ENGL-090*

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-090*

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 be 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**

3 hours lecture 3 Units

Advisory: *Eligibility for ENGL-090*

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-090*

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-040 Caring for and Educating Infants
and Toddlers**

3 hours lecture 3 Units

Advisory: *Eligibility for ENGL-090*

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

3 hours lecture 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-045 Music and Movement for the Young Child

2 hours lecture 2 Units

Advisory: Eligibility for ENGL-090

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-050 Teaching in a Diverse Society

3 hours lecture 3 Units

Advisory: Eligibility for ENGL-100

Examination of the development of social identities in diverse societies including theoretical and practical implications of oppression and privilege as they apply to young children, families, programs, classrooms, and teaching. Various inclusive classroom strategies will be explored emphasizing culturally and linguistically appropriate anti-bias and multicultural approaches supporting all children in becoming competent members of a diverse society. Course includes self-examination and reflection on issues related to social identity, stereotypes and bias, social and educational access, media and schooling. May not be repeated. SC

LMC: GCR: Ethical Inquiry; 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-055 Caring for and Educating Children with Special Needs

3 hours lecture 3 Units

Advisory: Eligibility for ENGL-090

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-010

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-090

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-001 and CHDEV-010; and eligibility for ENGL-090

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-064 Outdoor Games, Environments, and Activities for Children Ages 3-12 Years**

18 total hours lecture 1 Unit

Advisory: Eligibility for ENGL-070

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-090

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**

8 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-012 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-081 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-090; CHDEV-001 or 010 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-090 Supervised Teaching in Local Child Development Programs**

2 hours lecture, 8 hours lab 4 Units

Prerequisite: CHDEV-001, 010, 011, 050, 062, and 083.**Co-requisite:** Prior or concurrent enrollment in CHDEV-020**Advisory:** *ENGL-090 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-090*

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-095 Administration of Early Childhood Programs**

3 hours lecture 3 Units

Prerequisite: CHDEV-010**Advisory:** *Eligibility for ENGL-090*

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-095 will instruct in the financial aspects of successful administration. CHDEV-096 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-010 and experience in early childhood education.**Advisory:** *Eligibility for ENGL-090*

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-095 will instruct in the financial aspects of successful administration; CHDEV-096 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**

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.*

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-170 Occupational Work Experience Education in Child Development**

60-600 total hours 1-8 Units

Prerequisite: *Approved Application***Advisory:** *Eligibility for ENGL-090*

(Formerly CHDEV-099) This course is for students whose work is related to their major. Occupational Work Experience Education provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. To participate in cooperative work experience education, students must be employed or formally volunteer and undertake new or expanded responsibilities. Students, with faculty and employer approval, will develop and successfully complete one learning objective for each unit of credit in which they enroll. Additionally, students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and may repeat for a maximum of 16 units of occupational work experience during community college attendance which may be applied as electives toward graduation. SC

LMC: DA**Transfer:** CSU**CHDEV-170A Internship in Child Development**

60-600 total hours 1-8 Units

Prerequisite: *Approved Application and meet Program Guidelines***Advisory:** *Eligibility for ENGL-090*

(Formerly CHDEV-099) This course is for students who have declared a major, have taken classes in the major, are ready to on-the-job experience in a paid or unpaid position and meet program-level minimum qualifications. An internship involves working in a skilled or professional level assignment in the area of a student's vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen field. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and repeat for a maximum of 16 units of occupational work experience internship during community college attendance. Credit may be applied as electives toward graduation. 12 units are transferable to CSU. SC

LMC: DA**Transfer:** CSU**CHDEV-900s Selected Topics in Child Development**

DA varies with course content.

Chinese

CHIN-030 Elementary Chinese I

5 hours lecture 5 Units

(Formerly CHIN-030S) This is the first of a two-semester sequence, emphasizing Mandarin Chinese sentence patterns and development of basic skills in speaking, reading and writing. Chinese characters as well as aspects of the Chinese culture are introduced. 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-030 or equivalent*

(Formerly CHIN-040S) This is the second of a two-semester sequence, emphasizing basic Mandarin Chinese sentence patterns and development of basic skills in speaking, reading and writing. Chinese characters as well as aspects of the Chinese culture are introduced. May not be repeated. SC

LMC: DA**Transfer:** UC, CSU GE Area C2, IGETC Area 6**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-900s Selected Topics in Chinese**

DA varies with course content.

Computer Science

COMSC-010 Introduction to Computer Networking

27 total hours lecture, 36 total hours lab 2 Units

(Formerly CNT-010) 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 twice. SC

LMC: GCR: Computer Literacy; DA

Transfer: CSU

COMSC-011 Introduction to Network Operating Systems

27 total hours lecture, 36 total hours lab 2 Units

Advisory: COMSC-040, COMSC-060

(Formerly CNT-011) 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 twice. 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-012) 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 twice. SC

LMC: DA

Transfer: CSU

COMSC-030 Web Site Development-Part I

27 total hours lecture 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

27 total hours lecture 1.5 Units

Advisory: COMSC-030 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 not be repeated. SC

LMC: DA

Transfer: CSU

COMSC-032 Web Site Development-Dreamweaver and Flash

3 hours lecture 3 Units

Advisory: COMSC-030 and 031, 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-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-040 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 once. SC

LMC: DA

Transfer: CSU

COMSC-037 Customer Technical Support Help Desk

18 total hours lecture, 27 total hours lab 1.5 Units

Advisory: *Completion of COMSC-040, eligibility for ENGL-090*

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

LMC: DA**Transfer:** CSU**COMSC-040 Introduction to Computers**

3 hours lecture, 2 hours lab 4 Units

Advisory: *Eligibility for ENGL-090*

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

LMC: GCR: Computer Literacy; DA**Transfer:** UC, CSU**COMSC-041 Programming with Visual Basic.NET (VB.NET)**

3 hours lecture 3 Units

Advisory: *COMSC-040, COMSC-060, or consent of the instructor*

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 not be repeated. SC

LMC: DA**Transfer:** UC, CSU**COMSC-044 Introduction to C++ Programming Part I**

3 hours lecture 3 Units

Advisory: *COMSC-040 or 041; eligibility for ENGL-090*

This course is designed to be an introduction to the C programming language. We use a C ++ text because C++ is a subset 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

LMC: DA**Transfer:** UC, CSU**COMSC-048 Introduction to C++ Programming Part II**

3 hours lecture 3 Units

Prerequisite: *COMSC-044 or equivalent*

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

LMC: DA**Transfer:** UC, CSU**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-044 or COMSC-041*

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-053 Advanced Visual Basic.NET**

2 hours lecture, 3 hours lab 3 Units

Prerequisite: *COMSC-041 or equivalent*

This course is designed for programmers already familiar with the Visual Basic.NET programming language. Students will learn Win32, API, and Dynamic Link Libraries to create ActiveX controls. In addition, students will learn fundamental Visual Basic.NET processes for developing web applications using ASP.NET, as well as creating web based database applications using ADO.NET. May not be repeated. SC

LMC: DA**Transfer:** CSU**COMSC-056 Programming Logic and Design**

3 hours lecture 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-040; eligibility for ENGL-090

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**

3 hours lecture

3 Units

Advisory: Completion of COMSC-060

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 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-040

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 they can 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-090 PC Repair - Hardware (A+ Certification)**

2 hours lecture, 2 hours lab

3 Units

Advisory: Working knowledge of PC systems and operating systems; eligibility for ENGL-090.

The first of three courses (COMSC-090, 091, and 092) 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 hardware components and through the use of A+ approved courseware and certified instructor, students will learn how to troubleshoot, upgrade, repair and perform preventative maintenance on Personal Computers (PC) 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 as well as for those who would just like to know more about their home PCs and how to upgrade and/or repair them. Meets the proficiency / Graduation requirement for Computer Literacy. May be repeated twice. SC

LMC: DA**Transfer:** CSU**COMSC-091 PC Repair - Software (A+ Certification)**

2 hours lecture, 2 hours lab

3 Units

Advisory: COMSC-090, or working knowledge of PC systems and operating systems; eligibility for ENGL-090

The second of three courses (COMSC-090, 091, and 092) 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 Personal 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 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 twice. SC

LMC: DA**Transfer:** CSU

COMSC-092 A+ Certification Exam Preparation

18 total hours lecture, 18 total hours lab 1.5 Units

Advisory: *COMSC-090 and 091, or working knowledge of PC systems and operating systems; eligibility for ENGL-090*

This half semester 1.5 Unit course is the last of three courses (COMSC-090, 091, and 092) 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 twice. 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-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-100 Introduction to UNIX**

18 total hours lecture, 27 total hours lab 1.5 Units

Advisory: *COMSC-040 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**

3 hours lecture, 1 hour lab 3 Units

Advisory: *Completion of COMSC-040; eligibility for ENGL-090*

An introduction to electronic game development with an emphasis on computer animation and programming. Computer animation will introduce the student to an overview of character modeling, rendering, animation illustrations, storyboarding, and game design. An overview of computer programming will introduce the student to gaming structures, animation techniques, design fundamentals and programming options. Both of these concepts are very important for students entering the Gaming industry. May not be repeated. SC

LMC: DA**Transfer:** UC, CSU**COMSC-120 Computer Forensics**

2 hours lecture, 4 hours lab 3 Units

Advisory: *Completion of COMSC-040; eligibility for ENGL-090*

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**Transfer:** CSU

COMSC-170 Occupational Work Experience Education in Computer Science

60-600 total hours

1-8 Units

Prerequisite: *Approved Application***Advisory:** *Eligibility for ENGL-090*

(Formerly COMSC-099) This course is for students whose work is related to their major. Occupational Work Experience Education provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. To participate in cooperative work experience education, students must be employed or formally volunteer and undertake new or expanded responsibilities. Students, with faculty and employer approval, will develop and successfully complete one learning objective for each unit of credit in which they enroll. Additionally, students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and may repeat for a maximum of 16 units of occupational work experience during community college attendance which may be applied as electives toward graduation. SC

LMC: DA**Transfer:** CSU**COMSC-170A Internship in Computer Science**

60-600 total hours

1-8 Units

Prerequisite: *Approved Application and meet Program Guidelines***Advisory:** *Eligibility for ENGL-090*

(Formerly COMSC-099) This course is for students who have declared a major, have taken classes in the major, are ready to on-the-job experience in a paid or unpaid position and meet program-level minimum qualifications. An internship involves working in a skilled or professional level assignment in the area of a student's vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen field. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and repeat for a maximum of 16 units of occupational work experience internship during community college attendance. Credit may be applied as electives toward graduation. 12 units are transferable to CSU. SC

LMC: DA**Transfer:** CSU**COMSC-900s Selected Topics in Computer Science**

DA varies with course content.

Cooperative Education

COOP-160 General Work Experience Education

60-450 total hours

1-6 units

Prerequisite: *Approved Application***Advisory:** *Eligibility for ENGL-090*

(Formerly WORK-099) This course is for students whose work is not related to their major. General Work Experience Education provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. To participate in cooperative work experience education, students must be employed or formally volunteer and undertake new or expanded responsibilities. Students, with faculty and employer approval, will develop and successfully complete one learning objective for each unit of credit in which they enroll. Additionally, students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may repeat for a maximum of six units of general work experience during community college attendance which may be applied as electives toward graduation. 12 units are transferable to CSU. SC

LMC: DA**Transfer:** CSU**COOP-170 Occupational Work Experience Education**

60-600 total hours

1-8 units

Prerequisite: *Approved Application***Advisory:** *Eligibility for ENGL-090*

(Formerly Cooperative Education-099) This course is for students whose work is related to their major. Occupational Work Experience Education provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. To participate in cooperative work experience education, students must be employed or formally volunteer and undertake new or expanded responsibilities. Students, with faculty and employer approval, will develop and successfully complete one learning objective for each unit of credit in which they enroll. Additionally, students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and may repeat for a maximum of 16 units of occupational work experience during community college attendance which may be applied as electives toward graduation. SC

LMC: DA**Transfer:** CSU

COOP-170A Occupational Work Experience Internship

60-600 total hours 1-8 Units

Prerequisite: *Approved Application and meet Program Guidelines***Advisory:** *Eligibility for ENGL-090*

(Formerly Cooperative Education-099) This course is for students who have declared a major, have taken classes in the major, are ready to on-the-job experience in a paid or unpaid position and meet program-level minimum qualifications. An internship involves working in a skilled or professional level assignment in the area of a student's vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen field. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and repeat for a maximum of 16 units of occupational work experience internship during community college attendance. Credit may be applied as electives toward graduation. 12 units are transferable to CSU. SC

LMC: DA**Transfer:** *CSU*

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-010, 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, 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 in combination with Cosmetology 10 resulting in the 1,600 hours required for State Certification. "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 training, 40 hours of conducting theory classes; 100 hours conducting practical classes in all required subjects, and 400 hours supervision 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 Licensed 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 covering all practices of a manicurist and pedicurist, pursuant to Section 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, removing hair by tweezing, depilatory or waxing, upper body massage, applying eyelashes, theory, reception desk work, modeling and miscellaneous studies. Presentation is lecture, workshop, 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 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.*

COSME-170 Occupational Work Experience Education in Cosmetology

60-600 total hours

1-8 Units

Prerequisite: *Approved Application***Advisory:** *Eligibility for ENGL-090*

(Formerly COSME-099) This course is for students whose work is related to their major. Occupational Work Experience Education provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. To participate in cooperative work experience education, students must be employed or formally volunteer and undertake new or expanded responsibilities. Students, with faculty and employer approval, will develop and successfully complete one learning objective for each unit of credit in which they enroll. Additionally, students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and may repeat for a maximum of 16 units of occupational work experience during community college attendance which may be applied as electives toward graduation. SC

LMC: DA**Transfer:** CSU**COSME-170A Internship in Cosmetology**

60-600 total hours

1-8 Units

Prerequisite: *Approved Application and meet Program Guidelines***Advisory:** *Eligibility for ENGL-090*

(Formerly COSME-099) This course is for students who have declared a major, have taken classes in the major, are ready to on-the-job experience in a paid or unpaid position and meet program-level minimum qualifications. An internship involves working in a skilled or professional level assignment in the area of a student's vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen field. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and repeat for a maximum of 16 units of occupational work experience internship during community college attendance. Credit may be applied as electives toward graduation. 12 units are transferable to CSU. 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 equivalent*

This course is an orientation to Los Medanos College's academic policies, resources, academic programs and services; introduction 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 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**COUNS-033 Transfer Planning**

18 total hours lecture

1 Unit

Advisory: *Eligibility for ENGL-090 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-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-015LS) 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-090*

(Formerly DRAMA-016LS) 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-020*

Continuation and elaboration of the content of DRAMA-020 with emphasis on analysis, interpretation, and creation of a believable character in either advanced imaginative or realistic style. May be repeated once. SC

LMC: DA

Transfer: *UC, CSU*

DRAMA-022 Principles of Voice and Dialects

2 hours lecture, 3 hours lab 3 Units

Advisory: *DRAMA-020 and 031*

(Formerly DRAMA-030). 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-030S) 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.*

DRAMA-031 Principles of Improvisation and Movement

2 hours lecture, 3 hours lab

3 Units

Advisory: DRAMA-020 or DRAMA-015

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-020 or DRAMA-015

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-090 or ENGL-100

(Formerly DRAMA-070LS) 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-071L) Through a combination of lectures, film screenings, readings and hands-on demonstrations, this course will introduce students to the Documentary Film Form and will instruct 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-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-005LS) 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-090

(Formerly ECON-010LS) 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. 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-010

(Formerly ECON-011LS) An examination of economic factors, primarily macroeconomic in nature, including unemployment, inflation, business cycles, fiscal policy and monetary policy. May not be repeated. 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-900s Selected Topics in Economics

DA varies with course content.

Education

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-010 AVID 1 (Advancement Via Individual Determination)

1 hour lecture, 2 hours lab

2 Units

Advisory: ENGL-090

This course assists students in developing a strong sense of a cademic purpose and identity with a focus on building leadership capacity through social justice. Students will construct education plans based on personality and interest inventories. There will be an emphasis on the development of academic writing, inquiry and collaboration focused on social justice dilemmas from various academic disciplines that engage students to improve their capacity to succeed at the highest academic levels. May be repeated three times. SC

LMC: DA

EDUC-015 AVID 2

3 hours lecture, 1 hour lab

3 Units

Prerequisite: EDUC-010

Building on the AVID core skills of critical reflection contained in the course prerequisite (EDUC-010), this course provides students with opportunities to examine their own values, beliefs, and attitudes in relationship to the question of how to build a better community and a better world. EDUC-015 helps students to see leadership in day to day interactions and to understand the value of leaders of empathy and of understand differing perspectives in improving their lives and their communities. It enables students to strengthen their academic identities through leadership. EDUC-015 allows students to explore leadership through social justice using periodicals, and other popular media, including film and literature. 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**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**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: 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.

EDUC-170 Occupational Work Experience Education in Education

60-600 total hours

1-8 Units

Prerequisite: Approved Application**Advisory:** Eligibility for ENGL-090

(Formerly EDUC-099) This course is for students whose work is related to their major. Occupational Work Experience Education provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. To participate in cooperative work experience education, students must be employed or formally volunteer and undertake new or expanded responsibilities. Students, with faculty and employer approval, will develop and successfully complete one learning objective for each unit of credit in which they enroll. Additionally, students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and may repeat for a maximum of 16 units of occupational work experience during community college attendance which may be applied as electives toward graduation. SC

LMC: DA**Transfer:** CSU**EDUC-170A Internship in Education**

60-600 total hours

1-8 Units

Prerequisite: Approved Application and meet Program Guidelines**Advisory:** Eligibility for ENGL-090

(Formerly EDUC-099) This course is for students who have declared a major, have taken classes in the major, are ready to on-the-job experience in a paid or unpaid position and meet program-level minimum qualifications. An internship involves working in a skilled or professional level assignment in the area of a student's vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen field. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and repeat for a maximum of 16 units of occupational work experience internship during community college attendance. Credit may be applied as electives toward graduation. 12 units are transferable to CSU. SC

LMC: DA**Transfer:** CSU**EDUC-900s Selected Topics in Education**

DA varies with course content.

Electrical / Instrumentation Technology

ETEC-004 Introduction to Electrical Technology

2 hours lecture, 3 hours lab 3 Units

Advisory: Eligibility for ENGL-100; MATH-012 or equivalent

(Formerly EETEC-010) 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

ETEC-006 Introduction to Electronics Technology

2 hours lecture, 3 hours lab 3 Units

Advisory: Eligibility for ENGL-100; Math-012 or equivalent

(Formerly EETEC-011) 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

ETEC-010 Direct Current Circuits

3 hours lecture, 3 hours lab 4 Units

Advisory: Eligibility for ENGL-100; MATH-012 or equivalent

(Formerly EETEC-020) 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 trouble shooting techniques. May be repeated three times. SC

LMC: DA

Transfer: CSU

ETEC-012 Alternating Current Circuits

3 hours lecture, 3 hours lab 4 Units

Advisory: Eligibility for ENGL-100; ETEC-010; MATH-012 or equivalent

(Formerly EETEC-021) 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

ETEC-020 Electric Motor Control

2 hours lecture, 4 hours lab 3 Units

Advisory: ETEC-010 & ETEC-012; eligibility for ENGL-100; MATH-012 or equivalent

(Formerly EETEC-035) 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

ETEC-022 Semiconductor Devices

3 hours lecture, 3 hours lab 2 Units

Advisory: ETEC-010, ETEC-012; eligibility for ENGL-100; MATH-012

(Formerly EETEC-040) 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 semiconductors circuits. May be repeated three times. SC

LMC: DA

Transfer: CSU

ETEC-024 Digital Devices

1 hour lecture, 3 hours lab 2 Units

Advisory: ETEC-010, ETEC-012; eligibility for ENGL-100; MATH-012

(Formerly EETEC-041) 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

EETEC-028 National Electric Code Changes

3 hours lecture 3 Units

Advisory: ETEC-010, ETEC-012; eligibility for ENGL-100; MATH-012 or equivalent

(Formerly EETEC-028) 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 journeymen or DAS registered trainees. This course is approved for journeyman certification or recertification or trainee registration. May not be repeated. SC

LMC: DA**Transfer:** CSU**EETEC-030 Programmable Logic Controllers**

3 hours lecture, 3 hours lab 4 Units

Advisory: ETEC-010, ETEC-012, ETEC-020, or an equivalent motor control courses or employment in the electrical or electronic industry; eligibility for ENGL-100; MATH-012

(Formerly EETEC-036) 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

LMC: DA**Transfer:** CSU**EETEC-032 Instrumentation - Process Measurement**

3 hours lecture 3 Units

Co-requisite: ETEC-034**Advisory:** ETEC-010, ETEC-012, ETEC-030, PHYS-015; eligibility for ENGL-100; MATH-012

(Formerly EETEC-050) 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

LMC: DA**Transfer:** CSU**EETEC-034 Instrument Calibration Lab**

3 hours lab 1 Unit

Co-requisite: ETEC-032**Advisory:** ETEC-010, ETEC-012, ETEC-032, PHYS-015; eligibility for ENGL-100; MATH-012

(Formerly EETEC-050) This is a lab course which provides hands on experience to enhance the fundamentals of instrumentation measurement of process control covered in ETEC-032. 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

LMC: DA**Transfer:** CSU**EETEC-040 National Electric Code**

3 hours lecture 3 Units

Co-requisite: ETEC-042**Advisory:** ETEC-010, ETEC-012; eligibility for ENGL-100; MATH-012 or equivalent

(Formerly EETEC-025) A study of electrical wiring methods as they apply to residential, commercial, and industrial wiring. This course stresses the application of the regulations of the National Electrical Code. Students learn the theory behind the design and safe installation of complex electrical systems. Students successfully completing this course will have covered the information necessary to pass the Department of Apprenticeship Standards Electrical Certification Exam for the State of California. May not be repeated. SC

LMC: DA**Transfer:** CSU**EETEC-042 Electrical Wiring Methods and Code Application**

3 hours lecture, 3 hours lab 1 Unit

Co-requisite: ETEC-040**Advisory:** ETEC-010, ETEC-012, MATH-012; eligibility for ENGL-100

(Formerly EETEC-025) 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

LMC: DA**Transfer:** CSU

ETEC-044 Transformers and Power Distribution

2 hours lecture, 3 hours lab 3 Units

Advisory: ETEC-010, ETEC-012, MATH-025 or equivalent; eligibility for ENGL-100

(Formerly EETEC-030) 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 transformers 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 type of transformer and poly phase circuit connection. May be repeated three times. SC

LMC: DA**Transfer:** CSU**ETEC-046 DC & AC Motors and Generators**

2 hours lecture, 4 hours lab 3 Units

Advisory: ETEC-010, ETEC-012; eligibility for ENGL-100; MATH-012

(Formerly EETEC-031) 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**ETEC-050 Instrumentation - Process Control**

3 hours lecture 3 Units

Co-requisite: ETEC-052**Advisory:** ETEC-010, ETEC-012, ETEC-032, ETEC-034; eligibility for ENGL-100; PHYS-015

(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 is designed and they will learn techniques to adjust the Process Controller's 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**ETEC-052 Applied Process Control Lab**

3 hours lab 1 Unit

Co-requisite: ETEC-050**Advisory:** ETEC-010, ETEC-012, ETEC-032, ETEC-034, ETEC-050, PHYS-012; eligibility for ENGL-100; MATH-012

(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 ETEC-050 and provide the practical experience necessary to understand the fundamentals of process measurement. May be repeated three times. SC

LMC: DA**Transfer:** CSU**ETEC-056 Codes for Instrument Application**

1 hour lecture 1 Unit

Advisory: ETEC-010, ETEC-012; eligibility for ENGL-100; MATH-012

(Formerly EETEC-056) 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**Transfer:** CSU**ETEC-058 Analytical Instrumentation**

1 hour lecture, 3 hours lab 2 Units

Prerequisite: CHEM-006 and PHYS-015**Advisory:** ETEC-010, ETEC-012, ETEC-032; eligibility for ENGL-100; MATH-012

(Formerly EETEC-058) 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**Transfer:** CSU

ETEC-059 System Integration and Troubleshooting

1 hours lecture, 3 hours lab 2 Units

Prerequisite: ETEC-020, ETEC-030, ETEC-032, ETEC-050**Advisory:** MATH-025; eligibility for ENGL-100

(Formerly EETEC-059) This course is designed to tie together all the information covered in all the other ETEC 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**Transfer:** CSU**ETEC-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.

**ETEC-170 Occupational Work Experience
Education in Electrical /
Instrumentation Technology**

60-600 total hours 1-8 Units

Prerequisite: Approved Application**Advisory:** Eligibility for ENGL-090

(Formerly ETEC-099) This course is for students whose work is related to their major. Occupational Work Experience Education provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. To participate in cooperative work experience education, students must be employed or formally volunteer and undertake new or expanded responsibilities. Students, with faculty and employer approval, will develop and successfully complete one learning objective for each unit of credit in which they enroll. Additionally, students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and may repeat for a maximum of 16 units of occupational work experience during community college attendance which may be applied as electives toward graduation. SC

LMC: DA**Transfer:** CSU**ETEC-170A Internship in Electrical /
Instrumentation Technology**

60-600 total hours 1-8 Units

Prerequisite: Approved Application and meet Program Guidelines**Advisory:** Eligibility for ENGL-090

(Formerly ETEC-099) This course is for students who have declared a major, have taken classes in the major, are ready to on-the-job experience in a paid or unpaid position and meet program-level minimum qualifications. An internship involves working in a skilled or professional level assignment in the area of a student's vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen field. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and repeat for a maximum of 16 units of occupational work experience internship during community college attendance. Credit may be applied as electives toward graduation. 12 units are transferable to CSU. SC

LMC: DA**Transfer:** CSU**ETEC-900s Selected Topics in Electrical /
Instrumentation**

DA varies with course content.

Emergency Medical Services**EMS-010 Emergency Medical Technician I**

3 hours lecture, 9 hours lab 6 Units

Co-requisite: EMS-170**Advisory:** Eligibility for ENGL-090

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 once. 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 and 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-090 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-170 Occupational Work Experience
Education in Emergency Medical Services**

60-600 total hours 1-8 Units

Prerequisite: Approved Application**Advisory:** Eligibility for ENGL-090

(Formerly EMS-099) This course is for students whose work is related to their major. Occupational Work Experience Education provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. To participate in cooperative work experience education, students must be employed or formally volunteer and undertake new or expanded responsibilities. Students, with faculty and employer approval, will develop and successfully complete one learning objective for each unit of credit in which they enroll. Additionally, students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and may repeat for a maximum of 16 units of occupational work experience during community college attendance which may be applied as electives toward graduation. SC

LMC: DA**Transfer:** CSU**EMS-170A Internship in Emergency Medical Services**

60-600 total hours 1-8 Units

Prerequisite: Approved Application and meet Program Guidelines**Advisory:** Eligibility for ENGL-090

(Formerly EMS-099) This course is for students who have declared a major, have taken classes in the major, are ready to on-the-job experience in a paid or unpaid position and meet program-level minimum qualifications. An internship involves working in a skilled or professional level assignment in the area of a student's vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen field. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and repeat for a maximum of 16 units of occupational work experience internship during community college attendance. Credit may be applied as electives toward graduation. 12 units are transferable to CSU. 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-025 or equivalent**Advisory:** Eligibility for ENGL-090

(Formerly ENGIN-010LS) 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 an 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-050

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-050

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-026 or the equivalent**Advisory:** ENGIN-010

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-025 and PHYS-040

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-040

An introduction to the application of physical concepts 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-025**Co-requisite:** ENGIN-030

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

ENGIN-045 Engineering Circuit Analysis

3 hours lecture, 1 hour lab 3 Units

Prerequisite: PHYS-041**Co-requisite:** MATH-080

An introduction to DC and AC Circuit Analysis: Natural and forced response, power, amplifier models, operational amplifiers, semiconductor devices, and digital building blocks. A problem solving perspective will be emphasized. May not be repeated. LR

LMC: DA**Transfer:** UC, CSU**ENGIN-046 Engineering Dynamics**

3 hours lecture 3 Units

Prerequisite: ENGIN-036, formerly ENGIN-044 (Statics)

Dynamics for engineering applications. Includes the kinematics and dynamics of particles, systems of particles, and rigid bodies in two and three dimensions. Also included are orbital motion, vibrations, Euler angles, and variable mass systems. May not be repeated. LR

LMC: DA**Transfer:** UC, CSU**ENGIN-098 Independent Study in Engineering**

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.

ENGIN-170 Occupational Work Experience Education in Engineering

60-600 total hours 1-8 Units

Prerequisite: Approved Application**Advisory:** Eligibility for ENGL-090

(Formerly ENGIN-099) This course is for students whose work is related to their major. Occupational Work Experience Education provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. To participate in cooperative work experience education, students must be employed or formally volunteer and undertake new or expanded responsibilities. Students, with faculty and employer approval, will develop and successfully complete one learning objective for each unit of credit in which they enroll. Additionally, students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and may repeat for a maximum of 16 units of occupational work experience during community college attendance which may be applied as electives toward graduation. SC

LMC: DA**Transfer:** CSU**ENGIN-170A Internship in Engineering**

60-600 total hours 1-8 Units

Prerequisite: Approved Application and meet Program Guidelines**Advisory:** Eligibility for ENGL-090

(Formerly ENGIN-099) This course is for students who have declared a major, have taken classes in the major, are ready to on-the-job experience in a paid or unpaid position and meet program-level minimum qualifications. An internship involves working in a skilled or professional level assignment in the area of a student's vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen field. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and repeat for a maximum of 16 units of occupational work experience internship during community college attendance. Credit may be applied as electives toward graduation. 12 units are transferable to CSU. SC

LMC: DA**Transfer:** CSU**ENGIN-900s Selected Topics in Engineering**

DA varies with course content.

English**ENGL-003 Investigating the Middle East**

3 hours lecture, 1 hour lab 3 Units

Prerequisite: Eligibility for or completion of ENGL-100

(Formerly ENGL-003LS) 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: GE: Humanities; GCR: Ethical Inquiry; DA**Transfer:** UC, CSU Gen. Ed. Area C2**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 one time. May be repeated once. SC

LMC: DA

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**Transfer:** UC, CSU**ENGL-050 Fundamentals of English for Non-Native Speakers**

1 hour lecture, 1 hour lab, 4 hours composition

5 Units

Advisory: LOEP placement exam

(Formerly ENGL-063) This course provides a bridge for students transitioning from ESL courses to English 070. 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-064) This course prepares students for ENGL-070. 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-062 is a "bridge" to the regular English curriculum.

ENGL-062 prepares students for ENGL-070. 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-070 is an integrated reading, writing, and critical thinking course which leads to English-090 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 learning 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-070 and 090 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-080) 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 once. 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-013) 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-070, 071 or 070B; 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 academic, thesis-driven essays. This course uses the whole language, metacognitive approach for improving reading, critical thinking and writing skills which students need to succeed in college. May not be repeated. SC

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-100 College Composition**

3 hours composition 3 Units

Prerequisite: Completion of ENGL-090 or 090A and 090B or ENGL-009 and ENGL-019; 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-010S) 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. LR

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-011) 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. SC

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. SC

LMC: DA**Transfer:** CSU**ENGL-115 Writing the Research Paper**

3 hours lecture

3 units

Advisory: Eligibility for ENGL-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. SC

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-090

(Formerly ENGL-027LS) 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. SC

LMC: GE: Humanities; GCR: Ethnic/Multicultural Studies; DA**Transfer:** UC, CSU Gen. Ed. Area C2, IGETC Area 3B Also 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-028LS) 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. SC

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-090 or ENGL-100 or eligibility for/or concurrent enrollment in ENGL-090*

(Formerly ENGL-029LS) 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 stories, poetry, drama and novels. This course meets the General Education Requirement for Ethnic / Multicultural Studies. May not be repeated. SC

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-032S) Selected listening and reading from the myths, tales, stories, and novels of the world to broaden familiarization 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

LMC: DA**Transfer:** UC, CSU Gen. Ed. Area C2, IGETC Area 3B**ENGL-133 Reflections: Representations of Race, Ethnicity and Gender in Hollywood Films and Popular Fiction**

3 hours lecture

3 Units

Advisory: *Eligibility for ENGL-090*

(Formerly ENGL-033LS) 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

LMC: GE: Humanities; GCR: Ethnic/Multicultural Studies; DA**Transfer:** UC, CSU Gen. Ed. Area C2, IGETC Area 3B. Also satisfies American Cultures Requirement at UCB**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

LMC: DA**Transfer:** UC, CSU Gen. Ed. Area C2, IGETC Area 3B**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 theme 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

LMC: DA**Transfer:** UC, CSU Gen. Ed. Area C2, IGETC Area 3B**ENGL-202 Introduction to Drama as Literature**

3 hours lecture

3 Units

Prerequisite: *Completion of ENGL-100*

(Formerly ENGL-034) 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

LMC: DA**Transfer:** UC, CSU Gen. Ed. Area C2, IGETC Area 3B

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

LMC: GE: Humanities, DA**Transfer:** UC, CSU Gen. Ed. Area C2, IGETC Area 3B**ENGL-220 Critical Inquiry and Analysis**

3 hours lecture 3 Units

Prerequisite: ENGL-100 or clearance of writing proficiency

(Formerly ENGL-020LS) 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

LMC: GE: Communication/Critical Thinking; DA**Transfer:** UC, CSU Gen. Ed. Area A3, IGETC Area 1B**ENGL-221 Advanced Composition and Critical Thinking**

3 hours composition 3 Units

Prerequisite: ENGL-100 with a "C" or better

(Formerly ENGL-021LS) This course is designed to provide advanced composition and critical thinking instruction beyond the 100 (1A) level. Instruction in critical thinking will include argument construction and evaluation, issue analysis, formal and informal fallacies, logical reasoning. Instruction in advanced composition will include advanced prose style, linear organization of essays, syntax analysis exploring the relations of language to meaning. Multicultural and global 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-030LS) 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. LR

LMC: GE: Humanities; DA**Transfer:** UC, CSU Gen. Ed. Area C2**ENGL-231 Mystery and Detective Literature**

3 hours lecture 3 Units

Advisory: Eligibility for ENGL-100

Mystery and Detective Literature course leads students in reading, discussing, and writing about mystery and detective stories and novels from a variety of historical periods, nations, and cultures. the history and development of the sub-genres will also be examined as well as the contributions of the mystery and detective novel to the evolution of literature in general. Since mystery and detective novels reward a close reading and celebrate the powers of observation, they offer an excellent opportunity to examine readings in depth while exercising the highest level of critical thinking. LR

LMC: GE: Humanities, DA**Transfer:** CSU Gen. Ed. Area C2**ENGL-900s Selected Topics in English**

DA varies with course content.

English As A Second Language (ESL)

ESL-010 Intensive English as a Second Language

3 hours lecture, 1 hour lab 3 Units

(Formerly ESL-052) 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-051) 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-053) 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-054) 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-050) 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 twice. SC
LMC: NDA

ESL-021 ESL Grammar II
 3 hours lecture, 1 hour lab 3 Units
Advisory: *ESL-020*
 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

ESL-022 Grammar III
 3 hours lecture, 1 hour lab 3 Units
Advisory: *ESL-021*
 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
LMC: NDA

ESL-030 ESL Conversation/Pronunciation I
 3 hours lecture, 1 hour lab 3 Units
Advisory: *One year of formal English.*
 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
LMC: NDA

ESL-031 ESL Conversation/Pronunciation II
 3 hours lecture, 1 hour lab 3 Units
Advisory: *ESL-030*
 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
LMC: NDA

ESL-098 Independent Study in English as a Second Language
 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.*

ESL-900s Selected Topics in English as a Second Language
 DA varies with course content.

Environmental Science

ENVSCI-001 Environmental Sciences Freshman Seminar

1 hour lecture, 3 hours lab

2 Units

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: DA

Transfer: CSU

ENVSCI-006 Bay-Delta Environmental Sciences Practicum

3 hours lecture, 3 hours lab

4 Units

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

4 Units

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

ENVSCI-098 Independent Study in Environmental 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.*

Filipino

FILIP-060 Elementary Filipino I

5 hours lecture

5 Units

Advisory: *Eligibility for ENGL-090*

(Formerly Taglg-060) A visual/oral/aural approach to understanding, speaking, reading, and writing 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 Gen. Ed. Area C2, IGETC Area 6A

FILIP-061 Elementary Filipino II

5 hours lecture

5 Units

Prerequisite: *FILIP-060 or two years of high school Filipino*

Advisory: *Eligibility for ENGL-090*

(Formerly Taglg-061) A visual/oral/aural approach to understanding, speaking, reading, and writing 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 Gen. Ed. Area C2

FILIP-098 Independent Study in Filipino

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 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-101 Fire Protection Organization

3 hours lecture 3 Units

Advisory: Eligibility for ENGL-090

Survey of career opportunities in California Fire and Emergency Management Services and related fields. This is the basic core class within the fire technology program. 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-090

Fundamentals and scientific principles of fire behavior, combustible materials, extinguishing agents, hazardous and toxin materials, forms of energy and fire prevention/suppression techniques 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-090

An overview of fire protection equipment and systems includes portable fire extinguishing equipment; protection systems; special 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; multicultural issues within Public Safety or equivalent

(Formerly FIRE-021) Fundamentals of building construction as it relates to fire protection; classification of occupancy and types of construction with emphasis on fire protection features including: 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-090

An overview of the history, organization and functions of fire prevention efforts includes inspection; fire investigation; recognizing 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 repeated twice. 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; current EMT certification

(Formerly FIRE-060) California State Board of Fire Services / Firefighter I approved. The Basic Academy Firefighter I prepares students for entry-level jobs in firefighting and for the California State Firefighter I 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 Service Association (IFSTA) and local fire agencies. This academy is approximately 18 weeks in length and uses an evening and weekend schedule. "Mandatory and optional material fees may be applied." May not be repeated. P/NP

LMC: DA

FIRE-130 Advanced Fire Academy

198 lecture, 442 lab 19 Units

Prerequisite: *Employment as a firefighter in a Contra Costa County Fire District or 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.*

The Advanced Firefighter I Academy prepares students for entry-level jobs in firefighting and for California State Firefighter I 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 Service Training Association (IFSTA) and local fire agencies. This academy is approximately 16 weeks in length and uses a Monday-Friday, 40 hour per week schedule. Accredited by the Office of the California State Fire Marshal. May not be repeated. P/NP

LMC: DA

FIRE-140 Fire Apparatus Driver/ Operator IA

16 total hours lecture, 24 total hours lab 1.5 Units

Prerequisite: *California Drivers License, Commercial Class B or Firefighter Restricted*

Advisory: *Completion of Firefighter I Academy*

This course is designed to provide the student with information on driver techniques for emergency vehicles 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 NPFA Standard 1002. May not be repeated. P/NP

LMC: DA

Transfer: CSU

FIRE-141 Fire Apparatus Driver/ Operator IB

16 total hours lecture, 24 total hours lab 1.5 Units

Prerequisite: *Completion of FIRE-120 (formerly FIRE-060) 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.*

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 hydraulics 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 Marshal'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 Marshal's Office. May be repeated nine times. P/NP

LMC: NDA

**FIRE-170 Occupational Work Experience
Education in Fire Technology**

60-600 total hours 1-8 Units

Prerequisite: *Approved Application*

Advisory: *Eligibility for ENGL-090*

(Formerly FIRE-099) This course is for students whose work is related to their major. Occupational Work Experience Education provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. To participate in cooperative work experience education, students must be employed or formally volunteer and undertake new or expanded responsibilities. Students, with faculty and employer approval, will develop and successfully complete one learning objective for each unit of credit in which they enroll. Additionally, students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and may repeat for a maximum of 16 units of occupational work experience during community college attendance which may be applied as electives toward graduation. SC

LMC: DA

Transfer: CSU

FIRE-170A Internship in Fire Technology

60-600 total hours 1-8 Units

Prerequisite: *Approved Application and meet Program Guidelines*

Advisory: *Eligibility for ENGL-090*

(Formerly FIRE-099) This course is for students who have declared a major, have taken classes in the major, are ready to on-the-job experience in a paid or unpaid position and meet program-level minimum qualifications. An internship involves working in a skilled or professional level assignment in the area of a student's vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen field. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and repeat for a maximum of 16 units of occupational work experience internship during community college attendance. Credit may be applied as electives toward graduation. 12 units are transferable to CSU. SC

LMC: DA

Transfer: CSU

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-051) 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 Marshal's Officer series includes certificates in Prevention, Instructor Skills, Investigation, and Public Education. These courses are certified through the California State Fire Marshal's Service. The course may vary with content presentation. Each course subtitle describes content. This series of courses meets the State Fire Marshal'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.

Food Services

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 twice. SC

LMC: NDA**FOOD-002 Fast Foods Operations**

162 total hours lab 3 Units

Prerequisite: *FOOD-001*

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 twice. 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-170 Occupational Work Experience Education in Food Services**

60-600 total hours

1-8 Units

Prerequisite: *Approved Application***Advisory:** *Eligibility for ENGL-090*

(Formerly FOOD-099) This course is for students whose work is related to their major. Occupational Work Experience Education provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. To participate in cooperative work experience education, students must be employed or formally volunteer and undertake new or expanded responsibilities. Students, with faculty and employer approval, will develop and successfully complete one learning objective for each unit of credit in which they enroll. Additionally, students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and may repeat for a maximum of 16 units of occupational work experience during community college attendance which may be applied as electives toward graduation. SC

LMC: DA**Transfer:** *CSU***FOOD-170A Internship in Food Services**

60-600 total hours

1-8 Units

Prerequisite: *Approved Application and meet Program Guidelines***Advisory:** *Eligibility for ENGL-090*

(Formerly FOOD-099) This course is for students who have declared a major, have taken classes in the major, are ready to on-the-job experience in a paid or unpaid position and meet program-level minimum qualifications. An internship involves working in a skilled or professional level assignment in the area of a student's vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen field. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and repeat for a maximum of 16 units of occupational work experience internship during community college attendance. Credit may be applied as electives toward graduation. 12 units are transferable to CSU. 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-090

(Formerly FRNCH-060S) 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-060

(Formerly FRNCH-061S) 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, IGETC Area 6

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-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.

Geology

GEOL-020 Physical Geology

3 hours lecture, 3 hours lab

4 Units

Advisory: Eligibility for ENGL-100

This is an introductory course in physical geology exposing students to connections between earth processes and human systems. Topics covered will include geologic time, movement in the earth's crust, the flow of mass and energy (e.g. water, heat, and rock), natural hazards like earthquakes and tsunamis, weathering, and climate change. Field trips will provide the opportunity to experience the geology of the San Francisco Bay Area first hand. May not be repeated. LR

LMC: GE: Physical Sciences, DA**Transfer:** CSU Gen. Ed. Area B1, B3, IGETC Area 5A

GEOL-098 Independent Study in Physical Geology

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.

History

HIST-031 California History

3 hours lecture

3 Units

Advisory: Eligibility for ENGL-100

(Formerly HIST-031S) 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 4F

HIST-034 Our Western Inheritance in Global Perspective: Ancient World History

3 hours lecture

3 Units

Advisory: Eligibility for ENGL-100

(Formerly HIST-034LS) 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-035LS) 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-036LS) 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-037LS) 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 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. 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

HIST-038 U. S. History Since World War II

3 hours lecture

3 Units

Advisory: *Eligibility for ENGL-100*

(Formerly HIST-038LS) Students will examine contemporary U.S. History from a socially inclusive, trans-cultural and trans-national perspective. Students will be asked to evaluate critically the historical implications involved in the broad acknowledgment that since World War II, the U.S.A. has achieved both cultural hegemony and imperial preeminence over other world nations and peoples. Granting this acknowledgment, the course will address problems as follows: With reference to our national past, to what extent is our current hegemony continuous or discontinuous with the "nationalism" of earlier generations? Since contemporary American ideology claims a special role for the "American System" in the building of a universal order of "liberal-capitalist democracy" to what extent is this claim compatible with or inimical to the real prospects for world democracy in the 21st century? "Culture Wars", "Global Warming", "Terrorist Rivalries" and Extreme Material Inequity are the signature issues of late-modernity. How and in what way are the cultural resources of us Americans sufficient/insufficient in the attempt to engage these issues? 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-046 History and Cultures of Native Americans in North America (from Pre-European Contact Through 1830)**

3 hours lecture

3 Units

Advisory: *Eligibility for ENGL-090*

(Formerly HIST-046LS) 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**HIST-047 Native Americans from American Revolution to Present**

3 hours lecture

3 Units

Advisory: *Eligibility for ENGL-100*

(Formerly HIST-047LS) 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, D6, IGETC Area 4G**HIST-052 Mexican American History 1900 to Present**

3 hours lecture

3 Units

Advisory: *Eligibility for ENGL-100*

(Formerly HIST-052LS) This course chronicles Mexican American history and life 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**HIST-098 Independent Study in History**

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.***HIST-900s Selected Topics in History**

DA varies with course content.

Human Services

HMSRV-030 Empowerment Skills for Family Workers

3 hours lecture

3 Units

Advisory: *Eligibility for ENGL-100*

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

LMC: DA**Transfer:** CSU

HMSRV-031 Supporting Family Success

3 hours lecture

3 Units

Advisory: *Eligibility for ENGL-100; HMSRV-030*

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

LMC: DA**Transfer:** CSU

HMSRV-045 Beginning Student Leadership and Governance

18 total hours lecture, 54 total hours lab

2 Units

Designed to help the student leader develop an understanding of the fundamentals of group interaction in a student governance setting. May be repeated once. SC

LMC: DA**Transfer:** CSU

HMSRV-046 Intermediate Student Leadership and Governance

1 hour lecture, 3 hours lab

2 Units

Advisory: *Designed for Student Senators*

Designed to help the student leader continue to develop an understanding of the fundamentals of group interaction, parliamentary procedure, and leadership techniques. May be repeated one time. SC

LMC: DA**Transfer:** CSU

HMSRV-047 Advanced Student Leadership and Governance

1 hour lecture, 3 hours lab

2 Units

Advisory: *Designed for Student Senators*

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 once. SC

LMC: DA**Transfer:** CSU

HMSRV-048 Leadership for Change

2 hours lecture

2 Units

Advisory: *Eligibility for ENGL-090*

This course is an introductory class to student leadership topics and strategies for social change. This course is designed to support students in their current and future leadership roles by increasing their ability to identify challenges and issues in their organizations and world, and to work in groups to develop strategies for change and improvement. Students will engage in multiple styles of learning (ie. lecture, discussion, activities) to develop an understanding of a variety of leadership models and skill. The course will culminate in the creation of student designed Social Change Projects. May not be repeated. SC

LMC: DA**Transfer:** CSU

HMSRV-057 Introduction to Tutoring

2 hours lecture

2 Units

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

LMC: DA**Transfer:** CSU

HMSRV-058 Advanced Studies in Tutoring

1 hour lecture

1 Unit

Advisory: *HMSRV-057*

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-100 Educational Services and Strategies

1 hour lecture, 2 hours lab 1.5 Units

This course is intended to assist the freshman student athlete to transition into college. It will address items facing today's student athlete in the educational setting. This course will introduce the student athlete to college support services, time management, study skills, requirements needed to participate athletically and to transfer to a four year institution. May be repeated once. SC

LMC: DA

Transfer: CSU

HMSRV-170 Occupational Work Experience Education in Human Services

60-600 total hours 1-8 Units

Prerequisite: Approved Application

Advisory: Eligibility for ENGL-090

(Formerly HMSRV-099) This course is for students whose work is related to their major. Occupational Work Experience Education provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. To participate in cooperative work experience education, students must be employed or formally volunteer and undertake new or expanded responsibilities. Students, with faculty and employer approval, will develop and successfully complete one learning objective for each unit of credit in which they enroll. Additionally, students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and may repeat for a maximum of 16 units of occupational work experience during community college attendance which may be applied as electives toward graduation. SC

LMC: DA

Transfer: CSU

HMSRV-170A Internship in Human Services

60-600 total hours 1-8 Units

Prerequisite: Approved Application and meet Program Guidelines

Advisory: Eligibility for ENGL-090

(Formerly HMSRV-099) This course is for students who have declared a major, have taken classes in the major, are ready to on-the-job experience in a paid or unpaid position and meet program-level minimum qualifications. An internship involves working in a skilled or professional level assignment in the area of a student's vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen field. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and repeat for a maximum of 16 units of occupational work experience internship during community college attendance. Credit may be applied as electives toward graduation. 12 units are transferable to CSU. SC

LMC: DA

Transfer: CSU

HMSRV-900s Selected Topics in Human Services

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 3 Units

Prerequisite: Eligibility for or completion of ENGL-100

(Formerly HUMAN-003LS) 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 Ancient Humanities

3 hours lecture 3 Units

Advisory: Eligibility for ENGL-100

(Formerly HUMAN-019LS) 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 Medieval and Renaissance Humanities

3 hours lecture

3 Units

Advisory: *Eligibility for ENGL-100*

(Formerly HUMAN-020LS) 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 Modern Humanities**

3 hours lecture

3 Units

Advisory: *Eligibility for ENGL-100*

(Formerly HUMAN-021LS) 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 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 through 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 Plantagenet 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, IGETC Area 3B**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 C1. May not be repeated. SC

LMC: GE: Humanities, DA**Transfer:** UC, CSU Gen. Ed. Area C1, IGETC Area 3A**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-900s Selected Topics in Humanities

DA varies with course content.

Italian

ITAL-060 Elementary Italian I

5 hours lecture 5 Units

Advisory: ENGL-090

(Formerly ITAL-060S) 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

5 hours lecture 5 Units

Prerequisite: ITAL-060 or two years of high school Italian

(Formerly ITAL-061S) 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, IGETC Area 6

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.

Journalism

JOURN-010 Writing for the Media

2 hours composition, 3 hours lab 3 Units

Advisory: Concurrent enrollment in ENGL-090 or 090A/B, or eligibility for or completion of ENGL-100

(Formerly JOURN-010L) 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-015A Media Writing Practicum I

1 hour composition 1 Unit

Advisory: Completion of JOURN-010

An applied course in which students practice and refine beginning newsgathering, reporting, persuasion and writing skills, by working as staff members on the college newspaper and other print and online student publications. The focus of study is on basic news, feature and opinion stories. May not be repeated. SC

LMC: DA

Transfer: CSU

JOURN-015B Media Writing Practicum II

1 hour composition 1 Unit

Prerequisite: JOURN-015A

Advisory: Completion of JOURN-010

An applied course in which students practice and refine intermediate newsgathering, reporting, persuasion and writing skills by working as staff members on the college newspaper and other print and online student publications. The facts of study is on specialized and in-depth news, feature and opinion stories. May not be repeated. SC

LMC: DA

Transfer: CSU

JOURN-015C Media Writing Practicum III

1 hour composition 1 Unit

Prerequisite: JOURN-015B

Advisory: Completion of JOURN-010

An applied course in which students practice and refine advanced newsgathering, reporting, persuasion and writing skills by working as staff members on the college newspaper and other print and online student publications. The focus on study is on investigative and enterprise news stories and series, and related opinion articles. May not be repeated. SC

LMC: DA

Transfer: CSU

JOURN-016A Visual Storytelling Practicum I

1 hour lecture 1 Unit

Advisory: Completion of JOURN-010

An applied course in which students practice and refine beginning visual storytelling skills by working as staff members on the college newspaper and other print and online student publications. The focus of study is on basic photojournalism, video storytelling and the visual display of information. May not be repeated. SC

LMC: DA

Transfer: CSU

JOURN-016B Visual Storytelling Practicum II

1 hour lecture 1 Unit

Prerequisite: JOURN-016A**Advisory:** Completion of JOURN-010

An applied course in which practice and refine intermediate visual storytelling skills by working as staff members on the college newspaper and other print and online student publications. The focus of study is on photo stories and essays, in-depth informational graphics and video news reports, and persuasive illustrations SC

LMC: DA**Transfer:** CSU**JOURN-016C Visual Storytelling Practicum III**

1 hour lecture 1 Unit

Prerequisite: JOURN-015B**Advisory:** Completion of JOURN-010

An applied course in which students practice and refine advanced visual storytelling skills by working as staff members on the college newspaper and other print and online student publications. The focus of study is on digital photo slide shows and photo illustrations, informational graphics integrated with full-page layouts, and enterprise video reports. May not be repeated. SC

LMC: DA**Transfer:** CSU**JOURN-020 Publication Production I**

1 hour lecture, 6 hours lab 3 Units

Advisory: JOURN-010

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**JOURN-030 Publication Production II**

1 hour lecture, 6 hours lab 3 Units

Advisory: JOURN-010 and 020, 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 ENGL-100

(Formerly JOURN-035LS) 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, and issues and ethics involved with the mass media and related industries. This course meets the General Education requirement for Humanities. May not be repeated. 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-170 Occupational Work Experience Education in Journalism

60-600 total hours 1-8 Units

Prerequisite: Approved Application**Advisory:** Eligibility for ENGL-090

(Formerly JOURN-099) This course is for students whose work is related to their major. Occupational Work Experience Education provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. To participate in cooperative work experience education, students must be employed or formally volunteer and undertake new or expanded responsibilities. Students, with faculty and employer approval, will develop and successfully complete one learning objective for each unit of credit in which they enroll. Additionally, students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and may repeat for a maximum of 16 units of occupational work experience during community college attendance which may be applied as electives toward graduation. SC

LMC: DA**Transfer:** CSU

JOURN-170A Internship in Journalism

60-600 total hours 1-8 Units

Prerequisite: *Approved Application and meet Program Guidelines***Advisory:** *Eligibility for ENGL-090*

(Formerly JOURN-099) This course is for students who have declared a major, have taken classes in the major, are ready to on-the-job experience in a paid or unpaid position and meet program-level minimum qualifications. An internship involves working in a skilled or professional level assignment in the area of a student's vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen field. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and repeat for a maximum of 16 units of occupational work experience internship during community college attendance. Credit may be applied as electives toward graduation. 12 units are transferable to CSU. SC

LMC: DA**Transfer:** CSU**JOURN-900s Selected Topics in Journalism**

DA varies with course content.

Learning Skills

LRNSK-050 Multimodal Strategies for Reading and Spelling

3 hours lecture, 1 hour lab 3 Units

(Formerly ENGL-050) This course is the first in a two-semester sequence of courses and is designed for students with learning disabilities and those who need to improve their study skills in basic skills in reading, spelling, writing sentences, paragraphs. The focus is on learning strategies to develop the fundamental skills of reading and spelling. Instruction is based on a multimodal approach. May not be repeated. SC

LMC: NDA**LRNSK-051 Applications: Reading, Spelling and Writing Strategies**

3 hours lecture, 1 hour lab 3 Units

Advisory: *Successful completion of LRNSK-050*

(Formerly ENGL-051) This is the second course in a two-semester sequence designed for students with learning disabilities and those who need to improve their basic skills in reading, spelling, writing paragraphs, and essays. This course focuses on the application of strategies to improve learning. 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 twice. 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-900s Selected Topics in Learning Skills**

DA varies with course content.

Library Studies

LIBST-014 Library Research and Information Literacy Skills

18 total hours lecture 1 Unit

Advisory: *Eligibility for ENGL-090*

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 not be repeated. SC

LMC: DA

Transfer: CSU

LIBST-017 Introduction to Internet Information Resources

13.5 total hours lecture, 13.5 total hours lab 1 Unit

Advisory: *Eligibility ENGL-090*

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 be repeated twice. SC

LMC: DA

Transfer: CSU

LIBST-018 Internet Information Resources - Advanced Search Techniques and Strategies

13.5 hours total lecture, 13.5 total hours lab .5 Unit

Advisory: *Eligibility for ENGL-090*

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

Transfer: CSU

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-170 Occupational Work Experience Education in Library Studies

60-600 total hours 1-8 Units

Prerequisite: *Approved Application*

Advisory: *Eligibility for ENGL-090*

(Formerly LIBST-099) This course is for students whose work is related to their major. Occupational Work Experience Education provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. To participate in cooperative work experience education, students must be employed or formally volunteer and undertake new or expanded responsibilities. Students, with faculty and employer approval, will develop and successfully complete one learning objective for each unit of credit in which they enroll. Additionally, students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and may repeat for a maximum of 16 units of occupational work experience during community college attendance which may be applied as electives toward graduation. SC

LMC: DA

Transfer: CSU

LIBST-170A Internship in Library Studies

60-600 total hours 1-8 Units

Prerequisite: *Approved Application and meet Program Guidelines*

Advisory: *Eligibility for ENGL-090*

(Formerly LIBST-099) This course is for students who have declared a major, have taken classes in the major, are ready to on-the-job experience in a paid or unpaid position and meet program-level minimum qualifications. An internship involves working in a skilled or professional level assignment in the area of a student's vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen field. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and repeat for a maximum of 16 units of occupational work experience internship during community college attendance. Credit may be applied as electives toward graduation. 12 units are transferable to CSU. 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-090*

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-090*

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-090*

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-090*

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-090*

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-090*

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-090*

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-090*

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-090*

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-090*

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-090*

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-090*

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-090*

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-090*

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

MANGT-070C Relating in Human Terms: Diversifying the Workplace

9 total hours lecture .5 Unit

Advisory: *Eligibility for ENGL-090*

This course is the third in a series on Human Relations in Supervision. 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

LMC: DA

Transfer: CSU

MANGT-070D Relating in Human Terms: Developing Leadership Skills in Yourself and Others

9 total hours lecture .5 Unit

Advisory: *Eligibility for ENGL-090*

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

LMC: DA

Transfer: CSU

MANGT-070E Relating in Human Terms: Understanding Etiquette in the Workplace

9 total hours lecture .5 Unit

Advisory: *Eligibility for ENGL-090*

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

LMC: DA

Transfer: CSU

MANGT-075A Managing Human Resources: Applying Federal and California Employment Laws

18 total hours lecture 1 Unit

Advisory: *Eligibility for ENGL-090*

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

LMC: DA**Transfer:** CSU**MANGT-075B Managing Human Resources: Recruiting and Interviewing Applicants**

18 total hours lecture 1 Unit

Advisory: *Eligibility for ENGL-090*

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

LMC: DA**Transfer:** CSU**MANGT-075C Managing Human Resources: Hiring and Dismissing Employees**

18 total hours lecture 1 Unit

Advisory: *Eligibility for ENGL-090*

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

LMC: DA**Transfer:** CSU**MANGT-098 Independent Study in Management and Supervision**

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.

MANGT-170 Occupational Work Experience Education in Management and Supervision

60-600 total hours 1-8 Units

Prerequisite: *Approved Application***Advisory:** *Eligibility for ENGL-090*

(Formerly MANGT-099) This course is for students whose work is related to their major. Occupational Work Experience Education provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. To participate in cooperative work experience education, students must be employed or formally volunteer and undertake new or expanded responsibilities. Students, with faculty and employer approval, will develop and successfully complete one learning objective for each unit of credit in which they enroll. Additionally, students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and may repeat for a maximum of 16 units of occupational work experience during community college attendance which may be applied as electives toward graduation. SC

LMC: DA**Transfer:** CSU**MANGT-170A Internship in Management and Supervision**

60-600 total hours 1-8 Units

Prerequisite: *Approved Application and meet Program Guidelines***Advisory:** *Eligibility for ENGL-090*

(Formerly MANGT-099) This course is for students who have declared a major, have taken classes in the major, are ready to on-the-job experience in a paid or unpaid position and meet program-level minimum qualifications. An internship involves working in a skilled or professional level assignment in the area of a student's vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen field. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and repeat for a maximum of 16 units of occupational work experience internship during community college attendance. Credit may be applied as electives toward graduation. 12 units are transferable to CSU. SC

LMC: DA**Transfer:** CSU**MANGT-900s Selected Topics in Management and Supervision**

DA varies with course content.

Mathematics

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

.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. May be repeated seven times. P/NP

LMC: NDA

MATH-009 Arithmetic Skills with Applications

4 hours lecture, 2 hours lab

4 Units

MATH-009 is a four-unit lecture / lab course designed to meet the math requirements for the LMC Certificate of Achievement. MATH-009 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-009 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-012 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-012 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-012 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

MATH-015 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-004, MATH-007 (at least 1.5 units of MATH-007), 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-018 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

MATH-025 Elementary Algebra

4 hours lecture, 3 hours lab

5 Units

Prerequisite: Completion of MATH-012, completion of coursework at another college that is comparable to MATH-012, 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-025 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-012, completion of coursework at another college that is comparable to MATH-012, 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-025AX 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-025AX or 025A or the equivalent

MATH-025BX is the second part of a two course introductory algebra sequence. MATH-025BX 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-025BX 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-025 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-025 (or MATH-025AX and BX, or MATH-025A and B), or successful completion of coursework at another college that is comparable to MATH-025, 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-030 (Intermediate Algebra) or equivalent

(Formerly MATH-031S) 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-030, MATH-909 or equivalent course

(Formerly MATH-034S) 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. 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-030 or equivalent course

(Formerly MATH-035S) 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. SC

LMC: GCR: Mathematics; DA**Transfer:** UC, CSU Gen. Ed. Area B4, IGETC Area 2**MATH-037 Applied Calculus**

4 hours lecture, 1 hour lab 4 Units

Prerequisite: MATH-030 or equivalent course

(Formerly MATH-037S) An introduction to the theory of calculus with applications to problems in business, economics, biology, 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; exponential and logarithmic functions; and an introduction to the concepts of integration. Use of a mathematical software package or graphing calculator required. May not be repeated. 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-026 and 030 or equivalent courses

(Formerly MATH-040S) 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. 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-040 or equivalent course

(Formerly MATH-050S) 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. 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-050 or equivalent course**Advisory:** Eligible for ENGL-090

(Formerly MATH-060S) 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. 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-060 or equivalent course

(Formerly MATH-070S) 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. 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-070

(Formerly MATH-075S) 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. SC

LMC: GCR: Mathematics; DA**Transfer:** UC, CSU Gen. Ed. Area B4, IGETC Area 2

MATH-080 Differential Equations

3 hours lecture, 2 hours lab 3 Units

Prerequisite: MATH-070 or equivalent course

(Formerly MATH-080S) 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. SC

LMC: GCR: 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-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 on 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 on 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 008, 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**

3 hours lab 1 Unit

Advisory: Arrangement with a private music instructor

The same preparatory work as MUSIC-005. In addition to the continuation of the content in MUSIC-005, 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-005, 006, 007 are required for music majors. May be repeated three times. LR

LMC: DA**Transfer:** UC, CSU**MUSIC-007 Recital Class: Advanced**

3 hours lab 1 Unit

Advisory: Arrangement with a private music instructor

Includes the continuation of the content in MUSIC-006, 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-005, 006, 007 are required for music majors. May be repeated three times. LR

LMC: DA**Transfer:** UC, CSU

MUSIC-008 Private Lessons Practicum

5 hours lab 1 Unit

Co-requisite: Concurrently enrolled in MUSIC-005, 006, or 007; enrolled in major performance medium; MUSIC-030, 031 or 032; music theory course at appropriate level (MUSIC-015, 016, 017, 018 or 081); and chamber ensembles (MUSIC-050 - 056). Pianists, vocalists, and guitarists may substitute alternative music courses to satisfy chamber ensemble requirement.

Advisory: *Eligible for ENGL-090*

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-030, 031 or 032, MUSIC-005, 006 or 007, a music theory course at the student's appropriate level, (MUSIC-015, 016, 017, 018 or 081), enrollment in a major performance group (e.g. Concert Band, College Chorus, Advanced Piano, Advanced Guitar), and chamber ensembles (any section between MUSIC-050 - 056). 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

3 hours lecture 3 Units

Advisory: *Eligibility for ENGL-100*

(Formerly MUSIC-010LS) 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, instrumentation, 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. LR

LMC: GE: Creative Arts; DA

Transfer: UC, CSU Gen. Ed. Area C1, IGETC Area 3A

MUSIC-012 Popular Musics in American Culture

3 hours lecture 3 Units

Advisory: *Eligibility for ENGL-090*

(Formerly MUSIC-012LS) 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. LR

LMC: GE: Creative Arts; DA

Transfer: UC, CSU Gen. Ed. Area C1. Also satisfies American Cultures Requirement at UCB

MUSIC-013 Musicianship I

1.5 hours lecture, 2 hours lab 2 Units

Advisory: *MUSIC-030, concurrent enrollment in MUSIC-016, previous or concurrent enrollment in MUSIC-031*

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-016. May be repeated one time. LR

LMC: DA

Transfer: UC, CSU

MUSIC-014 Musicianship II

1.5 hours lecture, 2 hours lab 2 Units

Advisory: *MUSIC-013; MUSIC-016 and 031, concurrent enrollment in MUSIC-017, previous or concurrent enrollment in MUSIC-032*

Continuation of the content of MUSIC-013. May be repeated one time. LR

LMC: DA

Transfer: UC, CSU

MUSIC-015 Basic Music

3 hours lecture 3 Units

Advisory: *Eligibility for ENGL-090; prior or concurrent enrollment in MUSIC-030*

(Formerly MUSIC-015LS) 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-013) CSU Gen. Ed. Area C1, IGETC Area 3A

MUSIC-016 Fundamentals of Music Theory

3 hours lecture 3 Units

Advisory: *MUSIC-015; prior or concurrent enrollment in MUSIC-031*

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-013. May not be repeated. LR

LMC: DA

Transfer: UC, CSU

MUSIC-017 Fundamentals of Music Harmony

3 hours lecture, 3 hours lab 4 Units

Advisory: *MUSIC-013, 016, and 031; prior or concurrent enrollment in MUSIC-032. Concurrent enrollment in MUSIC-014.*

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-014. May be repeated one time. This course is offered in the fall only. LR

LMC: DA**Transfer:** UC, CSU**MUSIC-018 Advanced Music Harmony**

3 hours lecture, 3 hours lab 4 Units

Advisory: *MUSIC-017*

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-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 once. 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**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-031 or equivalent skills*

This course is a continuation of MUSIC-031. 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-032 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-033A*

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 twice. 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-035 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-036. 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-020. It is advisable to talk to the instructor to determine proper course placement for your skill level. Eligibility for ENGL-090.

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: CSU

MUSIC-040 Concert Band I

6 hours lab 2 Units

Advisory: ENGL-090

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-040 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-090

Fundamental skill on band instrument is suggested. A continuation of basic material in MUSIC-041 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-090

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-090

Fundamental skill on a brass or percussion instrument is suggested. A continuation of basic material in MUSIC-044 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-090

Fundamental skill on a brass or percussion instrument is suggested. A continuation of basic material in MUSIC-045 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 1.5 Units

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 1.5 Units

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-050. 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 1.5 Units

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 1.5 Units

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-054. 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 1.5 Units

Fundamental skill on a woodwind instrument, piano, or in vocal techniques is highly suggested. A continuation of the basic material in MUSIC-054 and 055. 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-090*

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-090*

Similar to MUSIC-058, 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**MUSIC-060 College Chorus I**

6 hours lab 2 Units

Advisory: *Eligibility for ENGL-090*

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

LMC: DA**Transfer:** UC, CSU**MUSIC-061 College Chorus II**

6 hours lab 2 Units

Advisory: *Piano, Basic Music; eligibility for ENGL-090*

Continuation of basic group vocalizing and basic vocal techniques. Emphasis on sight reading techniques and classical literature; extensive practice and frequent public performance. May be repeated three times. LR

LMC: DA**Transfer:** UC, CSU**MUSIC-062 College Chorus III**

6 hours lab 2 Units

Advisory: *Eligibility for ENGL-090, Piano, Basic Music*

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

LMC: DA**Transfer:** UC, CSU**MUSIC-065 Class Voice**

3 hours lab 1 Unit

Advisory: *Choir, Piano, Basic Music*

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

LMC: DA**Transfer:** UC, CSU**MUSIC-066 Gospel Choir**

5 hours lab 1.5 Units

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

LMC: DA**Transfer:** UC, CSU**MUSIC-067 Jazz and Popular Vocal Techniques**

3 hour lab 1 Unit

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

LMC: DA**Transfer:** UC, CSU**MUSIC-068 Musical Theatre: Vocal I**

3 hours lab 1 Unit

Advisory: *College Chorus, ENGL-090*

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

LMC: DA**Transfer:** UC, CSU**MUSIC-069 Musical Theatre: Vocal II**

3 hours lab 1 Unit

Advisory: *Basic Voice, College Chorus, ENGL-090*

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 once. LR

LMC: DA**Transfer:** UC, CSU**MUSIC-070 Jazz Ensemble I**

6 hours lab 2 Units

Advisory: *Eligibility for ENGL-090*

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-090

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-074 Jazz Studio I

5 hours lab 1.5 Units

Advisory: Eligibility for ENGL-090

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 II

5 hours lab 1.5 Units

Advisory: Eligibility for ENGL-090

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-076 Jazz Studio III

5 hours lab 1.5 Units

Advisory: Eligibility for ENGL-090

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-077 Chamber Chorale I

6 hours lab 2 Units

Advisory: ENGL-090 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-078 Chamber Chorale II

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 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 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 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

1.5 Units

Advisory: It is advisable to talk to the instructor to determine proper course placement for your skill level; ENGL-090; 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

1.5 Units

Advisory: Fundamental skill on an instrument or voice, and prior or concurrent enrollment in MUSIC-081. It is advisable to talk to the instructor to determine proper course placement for your skill level; ENGL-090.

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

1.5 Units

Advisory: MUSIC-082 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

1.5 Units

Advisory: MUSIC-082 or 083 and audition by instructor; ENGL-090, MUSIC-015

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-090

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-015

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 three times. 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-015; concurrent enrollment in MUSIC-016 or MUSIC-028.

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-250 Night Jazz Band**

5 hours lab 1.5 Units

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 1.5 Units

Advisory: Advanced mastery of instruments(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 1.5 Units

Advisory: Advanced mastery of instruments(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 1.5 Units

Advisory: Advanced mastery of instruments(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-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-090

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.

298A/B — Marching Band Techniques /
 298C/D — Educators Band /
 298E/F — Contra Costa Chamber Orchestra /
 298G/H — Concert Band Sight-reading /
 298I/J — Jazz Band Sight-reading /
 298L — Choral Ensemble /
 298O — 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-090

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,
 SC

LMC: DA**Transfer:** CSU**MUSIC-900s Selected Topics in Music**

DA varies with course content.

Nursing - Allied Health

RNURS-004 Introduction to Standard First Aid/CPR

6 total hours lecture, 9 total hours lab .5 Unit

Advisory: ENGL-090, ENGL-100

Designed to provide useful information about common injuries and illnesses. Includes overview of basic first aid. Meets the American Heart Association standards for "Heartsaver" certification. May be repeated three times. P/NP

LMC: NDA**RNURS-008 First Aid of Infants and Children**

16 total hours lecture 1 Unit

Advisory: ENGL-090

(Formerly AHLTH-008) This course is in compliance with AB 243 Core Content for Child Care Health and Safety Training/Education and is designed to teach injury prevention and first aid measures, including CPR, to caregivers of infants and children. Includes information regarding accident predispositions; i.e., fatigue, complacency, negligence, child growth and development, recognition, management and prevention of child abuse, infectious diseases including immunizations, universal precautions, and staff health. Required for CHDEV majors. May not be repeated. P/NP

LMC: DA**RNURS-014 Healthcare Provider CPR**

8 total hours lecture .5 Unit

Basic skills and knowledge necessary to maintain oxygenation and blood circulation in a victim of cardiac arrest. Successful completion qualifies the student to be certified as a Healthcare Provider by the American Heart Association. May not be repeated. P/NP

LMC: NDA

Nursing - Registered

RNURS-001 Nursing Career Seminar

6 total hours lecture .3 Unit

Introduces students to the various roles and responsibilities of nursing practitioners, including knowledge of educational levels as well as behaviors and skills. Los Medanos College Nursing Programs are described, including admission requirements and procedures. Advised for students who are interested in the Registered Nursing program offered at LMC. Required for students who are interested in the Vocational Nursing program at LMC. May not be repeated. P/NP

LMC: NDA

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-023 and 024

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-022 and 024

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-022 and 023

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-022, 023 and 024 or equivalent satisfactorily.***Co-requisite:** Concurrent enrollment in RNURS-027 and 028.

This course expands upon the concepts presented in RNURS-022. 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 an 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-022, 023 and 024 or equivalent satisfactorily.***Co-requisite:** Concurrent enrollment in RNURS-026 and 028.

Instructor demonstration and student return demonstration of higher level nursing concepts related to Medical-Surgical, Peri-Operative, Maternity, and New Born 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-022, 023 and 024 or equivalent satisfactorily.***Co-requisite:** Concurrent enrollment in RNURS-026 and 027

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 depth. Drug dosage calculations including insulin administration algorithms continue to be a focus of this course. May not be repeated. LR

LMC: DA**Transfer:** CSU

RNURS-030 Leadership/Management and Professionalism in Nursing

1 hour lecture 1 Unit

Prerequisite: Must have been admitted to the Registered Nursing Program.**Co-requisite:** Concurrent enrollment in RNURS-036, 038 and 039.

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

LMC: DA**Transfer:** CSU**RNURS-031 Nursing in Health and Illness II**

4 hours lecture, 17.5 hours lab 9.5 Units

Prerequisite: Must have been admitted to the Registered Nursing Program and have completed RNURS-026, 027, and 028 or equivalent satisfactorily.**Co-requisite:** Concurrent enrollment in RNURS-033 and 034.

Expands upon the concepts presented in RNURS-022 and 026 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

LMC: DA**Transfer:** CSU**RNURS-033 Nursing Skills Simulation III**

3 hours lab 1 Unit

Prerequisite: Must have been admitted to the Registered Nursing Program and have completed RNURS-026, 027, and 028 or equivalent satisfactorily.**Co-requisite:** Concurrent enrollment in RNURS-031 and 034.

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 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

LMC: DA**Transfer:** CSU**RNURS-034 Pharmacology for RN Program III**

1 hour lecture 1 Unit

Prerequisite: Must have been admitted to the Registered Nursing Program and have completed RNURS-026, 027, and 028 or equivalent satisfactorily.**Co-requisite:** Concurrent enrollment in RNURS-031 and 033.

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

LMC: DA**Transfer:** CSU**RNURS-036 Nursing in Health and Illness III**

4 hours lecture, 17.5 hours lab 9.5 Units

Prerequisite: Must have been admitted to the RN program and have completed RNURS-031, 033, and 034 or equivalent satisfactorily.**Co-requisite:** Concurrent enrollment in RNURS-030, 038 and 039.

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

LMC: DA**Transfer:** CSU**RNURS-038 Nursing Skills Simulation IV**

3 hours lab 1 Unit

Prerequisite: Must have been admitted to the RN program and have completed RNURS-031, 033 and 034 or equivalent satisfactorily.**Co-requisite:** Concurrent enrollment in RNURS-036 and 039

Instructor demonstration and student return demonstration of higher level nursing concepts including but not limited to blood draws, central lines and ostomy 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-039 Pharmacology for RN Program IV**

1 hour lecture 1 Unit

Prerequisite: Must have been admitted to the RN program and have completed RNURS-031, 033 and 034 or equivalent satisfactorily.**Co-requisite:** Concurrent enrollment in RNURS-036 and 038.

This fourth semester of pharmacology expands upon the principles and drug administration techniques 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

LMC: DA**Transfer:** CSU

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-170 Occupational Work Experience Education in Registered Nursing

60-600 total hours 1-8 Units

Prerequisite: *Approved Application*

Advisory: *Eligibility for ENGL-090*

(Formerly RNURS-099) This course is for students whose work is related to their major. Occupational Work Experience Education provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. To participate in cooperative work experience education, students must be employed or formally volunteer and undertake new or expanded responsibilities. Students, with faculty and employer approval, will develop and successfully complete one learning objective for each unit of credit in which they enroll. Additionally, students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and may repeat for a maximum of 16 units of occupational work experience during community college attendance which may be applied as electives toward graduation. SC

LMC: DA

Transfer: CSU

RNURS-170A Internship in Registered Nursing

60-600 total hours 1-8 Units

Prerequisite: *Approved Application and meet Program Guidelines*

Advisory: *Eligibility for ENGL-090*

(Formerly RNURS-099) This course is for students who have declared a major, have taken classes in the major, are ready to on-the-job experience in a paid or unpaid position and meet program-level minimum qualifications. An internship involves working in a skilled or professional level assignment in the area of a student's vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen field. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and repeat for a maximum of 16 units of occupational work experience internship during community college attendance. Credit may be applied as electives toward graduation. 12 units are transferable to CSU. 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-005, 006, and 007

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-004, 006, and 007

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-004, 005, and 007

Supervised clinical instruction in the implementation of basic fundamental nursing skills introduced in VONUR-005. 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-004, 005, and 006

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-090

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-004, 005, 006, and 007 or equivalent.

Co-requisite: Concurrent enrollment in VONUR-011 and 012

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-004, 005, 006, and 007 or equivalent

Co-requisite: Concurrent enrollment in VONUR-010, 012

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

VONUR-012 Medical-Surgical Nursing Practice

19 hours lab 5.5 Units

Prerequisite: Completion of VONUR-004, 005, 006, and 007 or equivalent

Co-requisite: Concurrent enrollment in VONUR-010 and 011

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

LMC: DA

VONUR-015 Advanced Concepts to Clinical Pharmacology

18 total hours lecture 1 Unit

Prerequisite: Admission to Vocational Nursing Program. Completion of VONUR-004, 005, 006, 007, 010, 011, and 012 or equivalent.

Co-requisite: Concurrent enrollment in VONUR-016, 017, and 018

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

LMC: DA

VONUR-016 Family Centered Nursing

6 hours lecture 6 Units

Prerequisite: Completion of VONUR-004, 005, 006, 007, 010, 011, and 012 or equivalent

Co-requisite: Concurrent enrollment in VONUR-015, 017, and 018.

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

LMC: DA

VONUR-017 Family Centered Nursing Practice

19 hours lab 5.5 Units

Prerequisite: Completion of VONUR-004, 005, 006, 007, 010, 011, and 012 or equivalent

Co-requisite: Concurrent enrollment in VONUR-015, 016, and 018.

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

LMC: DA

VONUR-018 Professional Issues in Vocational Nursing

1 hour lecture 1 Unit

Prerequisite: Completion of VONUR-004, 005, 006, 007, 010, 011, and 012 or equivalent

Co-requisite: Concurrent enrollment in VONUR-015, 016, and 017.

Introduces the student to the role, responsibilities and the changes in society affecting nursing education and practice. May not be repeated. LR

LMC: DA

VONUR-020 Clinical Pharmacology and Skills for Medication Administration for Healthcare Occupations

3 hours lecture

3 Units

Advisory: ENGL-090

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

LMC: DA

VONUR-098 Independent Study in Vocational 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.

VONUR-170 Occupational Work Experience Education in Vocational Nursing

60-600 total hours

1-8 Units

Prerequisite: Approved Application**Advisory:** Eligibility for ENGL-090

(Formerly VONUR-099) This course is for students whose work is related to their major. Occupational Work Experience Education provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. To participate in cooperative work experience education, students must be employed or formally volunteer and undertake new or expanded responsibilities. Students, with faculty and employer approval, will develop and successfully complete one learning objective for each unit of credit in which they enroll. Additionally, students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and may repeat for a maximum of 16 units of occupational work experience during community college attendance which may be applied as electives toward graduation. SC

LMC: DA**Transfer:** CSU

VONUR-170A Internship in Vocational Nursing

60-600 total hours

1-8 Units

Prerequisite: Approved Application and meet Program Guidelines**Advisory:** Eligibility for ENGL-090

(Formerly VONUR-099) This course is for students who have declared a major, have taken classes in the major, are ready to on-the-job experience in a paid or unpaid position and meet program-level minimum qualifications. An internship involves working in a skilled or professional level assignment in the area of a student's vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen field. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and repeat for a maximum of 16 units of occupational work experience internship during community college attendance. Credit may be applied as electives toward graduation. 12 units are transferable to CSU. SC

LMC: DA**Transfer:** CSU

VONUR-900s Selected Topics in Vocational Nursing

DA varies with course content.

Nutrition

NUTRI-055 Introduction to Nutrition

3 hours lecture

3 Units

Advisory: ENGL-090

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.

Transfer: Independent Study courses may be DA or transferable depending on specific course. See your counselor.

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-002LS) 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-033LS) Same as POLSC-033. This course will examine the history and development of a 2,500 year old tradition of political thought; a tradition originating 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-040LS) This course introduces the student to philosophy in both the Western and non western traditions. Treatment of the Western tradition emphasizes 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-041LS) 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-042LS) 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-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-004 Pilates and More

54 hours activity 1 Unit

This class will teach basic mat pilates exercises developed by Joseph Pilates. There will be an emphasis placed on safety precautions, technique and methodology, and application to life long fitness. This class will also teach basis physical fitness principles and their application to total health and fitness. May be repeated three times. P/NP

LMC: DA

Transfer: 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

3 hours activity 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

1.5-3 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

PE-014 Volleyball

1.5-3 hours activity .5-1 Unit

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

LMC: DA

Transfer: UC, CSU

PE-016 Beginning Swimming

1.5-3 hours activity .5-1 Unit

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

LMC: DA

Transfer: UC, CSU

PE-017 Lap Swimming for Fitness

1.5-3 hours activity .5-1 Unit

Prerequisite: Pass swim test or complete PE-016 prior or concurrently with PE-017

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

LMC: DA

Transfer: UC, CSU

PE-018 Water Fitness

3 hours activity 1 Unit

This class will utilize the basic principles of buoyancy and resistance in water to improve overall fitness levels. Included will be strength, flexibility and cardiovascular exercises. This class will also teach basic physical fitness principles for life long fitness. May be repeated three times. P/NP

LMC: DA**Transfer:** CSU**PE-020 Exerjazz for Fitness**

1.5-3 hours activity .5-1 Unit

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 (rhythmical movement) to promote lifelong fitness. May be repeated three times. SC

LMC: DA**Transfer:** UC, CSU**PE-022 Bowling**

1.5-3 hours activity .5-1 Unit

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

LMC: DA**Transfer:** UC, CSU**PE-026 Soccer-Coed**

1.5-3 hours activity .5-1 Unit

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

LMC: DA**Transfer:** UC, CSU**PE-030 Tennis**

1.5-3 hours activity .5-1 Unit

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

LMC: DA**Transfer:** UC, CSU**PE-033 Cardio Kickboxing**

1.5-3 hours activity .5-1 Unit

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

LMC: DA**Transfer:** UC, CSU**PE-042 Golf**

1.5-3 hours activity .5-1 Unit

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

LMC: DA**Transfer:** UC, CSU**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**

1.5-3 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-053 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-054 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-055 Advanced Jazz Dance**

3 hours activity 1 Unit

Advisory: Prior beginning dance

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-056 Dance Production Workshop**

1.5-3 hours activity .5-1 Unit

Advisory: PE-053 or PE-054 or PE-055 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-057 Yoga for Health and Fitness**

1.5-3 hours activity .5-1 Unit

Introduces the student to basic yoga poses to enhance strength, flexibility, muscle control, mental concentration, alertness. Breathing and relaxation techniques will help student reduce stress and tension. 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-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-170 Occupational Work Experience Education in Physical Education

60-600 total hours 1-8 Units

Prerequisite: Approved Application**Advisory:** Eligibility for ENGL-090

(Formerly PE-099) This course is for students whose work is related to their major. Occupational Work Experience Education provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. To participate in cooperative work experience education, students must be employed or formally volunteer and undertake new or expanded responsibilities. Students, with faculty and employer approval, will develop and successfully complete one learning objective for each unit of credit in which they enroll. Additionally, students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and may repeat for a maximum of 16 units of occupational work experience during community college attendance which may be applied as electives toward graduation. SC

LMC: DA**Transfer:** CSU

PE-170A Internship in Physical Education

60-600 total hours

1-8 Units

Prerequisite: *Approved Application and meet Program Guidelines***Advisory:** *Eligibility for ENGL-090*

(Formerly PE-099) This course is for students who have declared a major, have taken classes in the major, are ready to on-the-job experience in a paid or unpaid position and meet program-level minimum qualifications. An internship involves working in a skilled or professional level assignment in the area of a student's vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen field. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and repeat for a maximum of 16 units of occupational work experience internship during community college attendance. Credit may be applied as electives toward graduation. 12 units are transferable to CSU. SC

LMC: DA**Transfer:** *CSU***PE-900s Selected Topics in Physical Education**

DA varies with course content.

Physical Science

PHYS-005 General Physical Science

3 hours lecture, 1 hour lab

3 Units

Advisory: *Eligibility for ENGL-090*

(Formerly PHYS-005LS) An introduction to the physical sciences. An interdisciplinary 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-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-015LS) 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-035LS) 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 long 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. 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-035 or equivalent*

A continuation of PHYS-035, 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. 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-060*

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. 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-040 and prior or concurrent enrollment in MATH-070*

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. 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-040 and prior or concurrent enrollment in MATH-070*

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. 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-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: *Eligibility for ENGL-100*

(Formerly POLSC-005LS) 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 eighteenth century will be emphasized. Special attention will be paid to the rights and obligations of citizenship and our heritage of social and ethnic diversity. The completion of Political Science POLSC-010 partially satisfies the American History and Institutions CSU transfer 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-006LS) 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. The completion of Political Science POLSC-020 partially satisfies the American History and Institutions CSU transfer requirement. 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-033LS) Same as PHIL-033. 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, 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: 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-010 and ENGL-100

(Formerly POLSC-043LS) 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-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-025 or equivalent course**Advisory:** Concurrent enrollment in PTEC-012; 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-010; 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-015, PTEC-010; 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**Transfer:** CSU**PTEC-025 Process Technology I - Equipment**

3 hours lecture

3 Units

Advisory: PHYSICS-015; eligibility for ENGL-100; MATH-030, PTEC-010, PTEC-012

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**Transfer:** CSU**PTEC-027 Applied Instrument Analysis**

.5 hour lecture, 1.5 hours lab

1 Unit

Prerequisite: CHEM-006 or CHEM-007**Advisory:** PTEC-010; 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-012, PTEC-025, PTEC-027; CHEM-006 or CHEM-007; and eligibility for ENGL-100

Building on the content learned in Process Technology I - Equipment (PTEC-025), 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**Transfer:** CSU**PTEC-044 Petrochemical Simulation Laboratory**

3 hours lab 1 Unit

Prerequisite: PTEC-035**Advisory:** PTEC-045, PTEC-048; eligibility for ENGL-100

(Formerly part of PTEC-048) This PTEC laboratory builds upon knowledge gained about equipment and systems in PTEC-025 and PTEC-035. 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-035**Advisory:** Eligibility for ENGL-100

Drawing on the knowledge and skills learned in Process Technology I (PTEC-025) and II (PTEC-035), 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**Transfer:** CSU**PTEC-048 Process Troubleshooting**

3 hours lecture 3 Units

Prerequisite: PTEC-035**Advisory:** PTEC-044, PTEC-045; 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**Transfer:** CSU**PTEC-098 Independent Study in Process 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.**PTEC-170 Occupational Work Experience Education in Process Technology**

60-600 total hours 1-8 Units

Prerequisite: Approved Application**Advisory:** Eligibility for ENGL-090

(Formerly PTEC-099) This course is for students whose work is related to their major. Occupational Work Experience Education provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. To participate in cooperative work experience education, students must be employed or formally volunteer and undertake new or expanded responsibilities. Students, with faculty and employer approval, will develop and successfully complete one learning objective for each unit of credit in which they enroll. Additionally, students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and may repeat for a maximum of 16 units of occupational work experience during community college attendance which may be applied as electives toward graduation. SC

LMC: DA**Transfer:** CSU**PTEC-170A Internship in Process Technology**

60-600 total hours 1-8 Units

Prerequisite: Approved Application and meet Program Guidelines**Advisory:** Eligibility for ENGL-090

(Formerly PTEC-099) This course is for students who have declared a major, have taken classes in the major, are ready to on-the-job experience in a paid or unpaid position and meet program-level minimum qualifications. An internship involves working in a skilled or professional level assignment in the area of a student's vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen field. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and repeat for a maximum of 16 units of occupational work experience internship during community college attendance. Credit may be applied as electives toward graduation. 12 units are transferable to CSU. SC

LMC: DA**Transfer:** CSU

Psychology

PSYCH-010 Individual and Social Processes

3 hours lecture

3 Units

Advisory: *Eligibility for ENGL-090*

(Formerly PSYCH-010LS) 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-090*

(Formerly PSYCH-011LS) 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 interrelated in the study of history and human evolution. May not be repeated. 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-090*

(Formerly PSYCH-012S) This class introduces the contention that family crisis may be a result of normal family development or of a 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-090*

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-170 Occupational Work Experience Education in Psychology

60-600 total hours

1-8 Units

Prerequisite: *Approved Application***Advisory:** *Eligibility for ENGL-090*

(Formerly PSYCH-099) This course is for students whose work is related to their major. Occupational Work Experience Education provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. To participate in cooperative work experience education, students must be employed or formally volunteer and undertake new or expanded responsibilities. Students, with faculty and employer approval, will develop and successfully complete one learning objective for each unit of credit in which they enroll. Additionally, students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and may repeat for a maximum of 16 units of occupational work experience during community college attendance which may be applied as electives toward graduation. SC

LMC: DA**Transfer:** CSU

PSYCH-170A Internship in Psychology

60-600 total hours

1-8 Units

Prerequisite: *Approved Application and meet Program Guidelines***Advisory:** *Eligibility for ENGL-090*

(Formerly PSYCH-099) This course is for students who have declared a major, have taken classes in the major, are ready to on-the-job experience in a paid or unpaid position and meet program-level minimum qualifications. An internship involves working in a skilled or professional level assignment in the area of a student's vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen field. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and repeat for a maximum of 16 units of occupational work experience internship during community college attendance. Credit may be applied as electives toward graduation. 12 units are transferable to CSU. SC

LMC: DA**Transfer:** CSU**PSYCH-900s Selected Topics in Psychology**

DA varies with course content.

Real Estate

REAL-005 Real Estate Principles

3 hours lecture

3 Units

Advisory: *Eligibility for ENGL-090*

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

LMC: DA**Transfer:** CSU**REAL-010 Legal Aspects of Real Estate**

3 hours lecture

3 Units

Advisory: *REAL-005 with a "C" or better; eligibility for ENGL-090*

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

LMC: DA**Transfer:** CSU**REAL-020 Real Estate Practice**

3 hours lecture

3 Units

Advisory: *Real Estate experience or REAL-005*

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

LMC: DA**Transfer:** CSU**REAL-025 Real Estate Finance**

3 hours lecture

3 Units

Advisory: *Real Estate experience; eligibility for ENGL-090*

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

LMC: DA**Transfer:** CSU**REAL-098 Independent Study in Real Estate**

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.

REAL-170 Occupational Work Experience Education in Real Estate

60-600 total hours

1-8 Units

Prerequisite: *Approved Application***Advisory:** *Eligibility for ENGL-090*

(Formerly REAL-099) This course is for students whose work is related to their major. Occupational Work Experience Education provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. To participate in cooperative work experience education, students must be employed or formally volunteer and undertake new or expanded responsibilities. Students, with faculty and employer approval, will develop and successfully complete one learning objective for each unit of credit in which they enroll. Additionally, students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and may repeat for a maximum of 16 units of occupational work experience during community college attendance which may be applied as electives toward graduation. SC

LMC: DA**Transfer:** CSU**REAL-170A Internship in Real Estate**

60-600 total hours

1-8 Units

Prerequisite: *Approved Application and meet Program Guidelines***Advisory:** *Eligibility for ENGL-090*

(Formerly REAL-099) This course is for students who have declared a major, have taken classes in the major, are ready to on-the-job experience in a paid or unpaid position and meet program-level minimum qualifications. An internship involves working in a skilled or professional level assignment in the area of a student's vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen field. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and repeat for a maximum of 16 units of occupational work experience internship during community college attendance. Credit may be applied as electives toward graduation. 12 units are transferable to CSU. SC

LMC: DA**Transfer:** CSU**REAL-900s Selected Topics in Real Estate**

DA varies with course content.

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 once. LR

LMC: DA**Transfer:** CSU**RA-012 Sound Reinforcement**

2 hours lecture, 3 hours lab

3 Units

Advisory: *Eligibility for ENGL-090*

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 once. LR

LMC: DA**Transfer:** CSU**RA-015 Music Fundamentals for Audio Professionals**

3 hours lecture

3 Units

Advisory: *ENGL-090*

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-020 Recording Arts II

2 hours lecture, 4 hours lab 3 Units

Prerequisite: RA-010

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 once. 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 twice. LR

LMC: DA**Transfer:** CSU**RA-025 Basic Tracking Sessions**

2 hours lecture, 3 hours lab 3 Units

Prerequisite: Prior or concurrent enrollment in RA-010.**Advisory:** ENGL-090

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 twice. SC

LMC: DA**Transfer:** CSU**RA-030 Recording Arts III**

2 hours lecture, 4 hours lab 3 Units

Prerequisite: RA-020**Advisory:** Eligibility for ENGL-090

Third semester course in the Recording Arts sequence. Course 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 once. LR

LMC: DA**Transfer:** CSU**RA-032 Recording Arts Workshop**

3 hours lab 1 Unit

Advisory: Eligibility for ENGL-090; completion of RA-010 and 020

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, mix-downs, 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 3 Units

Prerequisite: Prior or concurrent enrollment in RA-020

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 advanced 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 SR 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**

3 hours lecture 3 Units

Advisory: RA-010 and 020

Audio Production for radio, television and compact disc release utilizing the ProTools systems. Course meets the LMC Recording Arts Associate Degree requirements. May not be repeated. SC

LMC: DA**Transfer:** CSU

RA-040 Recording Arts IV

2 hours lecture, 4 hours lab

3 Units

Prerequisite: RA-030**Advisory:** Eligibility for ENGL-090

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 once. 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-170 Occupational Work Experience Education in Recording Arts

60-600 total hours

1-8 Units

Prerequisite: Approved Application**Advisory:** Eligibility for ENGL-090

(Formerly RA-099) This course is for students whose work is related to their major. Occupational Work Experience Education provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. To participate in cooperative work experience education, students must be employed or formally volunteer and undertake new or expanded responsibilities. Students, with faculty and employer approval, will develop and successfully complete one learning objective for each unit of credit in which they enroll. Additionally, students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and may repeat for a maximum of 16 units of occupational work experience during community college attendance which may be applied as electives toward graduation. SC

LMC: DA**Transfer:** CSU**RA-170A Internship in Recording Arts**

60-600 total hours

1-8 Units

Prerequisite: Approved Application and meet Program Guidelines**Advisory:** Eligibility for ENGL-090

(Formerly RA-099) This course is for students who have declared a major, have taken classes in the major, are ready to on-the-job experience in a paid or unpaid position and meet program-level minimum qualifications. An internship involves working in a skilled or professional level assignment in the area of a student's vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen field. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and repeat for a maximum of 16 units of occupational work experience internship during community college attendance. Credit may be applied as electives toward graduation. 12 units are transferable to CSU. SC

LMC: DA**Transfer:** CSU**RA-900s Selected Topics in Recording Arts**

DA varies with course content.

Refrigeration & Air Conditioning

ACREF-045 Central Heating and Cooling Troubleshooting

1 hour lecture, 3 hours lab

2 Units

Advisory: APPLI-025 or APPLI-026; eligibility for ENGL-090

(Formerly REFRG-045) 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 twice. SC

LMC: DA**Transfer:** CSU**ACREF-073 Basic Refrigeration R1A**

1 hour lecture, 3 hours lab

2 Units

Advisory: APPLI-025 or 026; eligibility for ENGL-090; ETEC-004 (Formerly EETEC-010) or equivalent

(Formerly REFRG-073) 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 twice. SC

LMC: DA**Transfer:** CSU

ACREF-074 Basic Refrigeration R1B Commercial Ice Machines

1 hour lecture, 3 hours lab 2 Units

Advisory: APPLI-025 or 026; eligibility for ENGL-090; ETEC-004 (Formerly EETEC-010) or equivalent

(Formerly REFRG-074) 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 twice. SC

LMC: DA**Transfer:** CSU**ACREF-075 HVAC Technician H1A Heating Technology**

1 hour lecture, 3 hours lab 2 Units

Advisory: APPLI-025 or 026; eligibility for ENGL-090; ETEC-004 (Formerly EETEC-010) or equivalent

(Formerly REFRG-075) 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 twice. SC

LMC: DA**Transfer:** CSU**ACREF-076 Basic HVAC Technician H1B Air Conditioning Repair**

1 hour lecture, 3 hours lab 2 Units

Advisory: APPLI-025 or 026; eligibility for ENGL-090; ETEC-004 (Formerly EETEC-010) or equivalent

(Formerly REFRG-076) 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 twice. 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-025 or 026; eligibility for ENGL-090; ETEC-004 (Formerly EETEC-010) or equivalent

(Formerly REFRG-077) 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 twice. 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-025 or 026; eligibility for ENGL-090; ETEC-004 (Formerly EETEC-010) or equivalent

(Formerly REFRG-078) 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 twice. SC

LMC: DA**Transfer:** CSU**ACREF-098 Independent Study in Refrigeration**

(Formerly REFRG-098) 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-170 Occupational Work Experience Education in Air Conditioning/Refrigeration

60-600 total hours 1-8 Units

Prerequisite: Approved Application**Advisory:** Eligibility for ENGL-090

(Formerly ACRE-099) This course is for students whose work is related to their major. Occupational Work Experience Education provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. To participate in cooperative work experience education, students must be employed or formally volunteer and undertake new or expanded responsibilities. Students, with faculty and employer approval, will develop and successfully complete one learning objective for each unit of credit in which they enroll. Additionally, students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and may repeat for a maximum of 16 units of occupational work experience during community college attendance which may be applied as electives toward graduation. SC

LMC: DA**Transfer:** CSU

**ACREF-170A Internship in Air Conditioning/
Refrigeration**

60-600 total hours 1-8 Units

Prerequisite: *Approved Application and meet Program Guidelines***Advisory:** *Eligibility for ENGL-090*

(Formerly ACRE-099) This course is for students who have declared a major, have taken classes in the major, are ready to on-the-job experience in a paid or unpaid position and meet program-level minimum qualifications. An internship involves working in a skilled or professional level assignment in the area of a student's vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen field. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and repeat for a maximum of 16 units of occupational work experience internship during community college attendance. Credit may be applied as electives toward graduation. 12 units are transferable to CSU. SC

LMC: DA**Transfer:** CSU**ACREF-900s Selected Topics in Refrigeration**

DA varies with course content.

Sign Language**SIGN-065 American Sign Language I**

3 hours lecture 3 Units

Advisory: *Prior or concurrent enrollment in ENGL-090 or 100*

An intensive course designed for persons wanting to learn communication skills in American Sign Language. Emphasis is on language and cultural behavior appropriate for use in the deaf community. Note: equivalent to two years of high school Sign Language. May not be repeated. SC

LMC: DA**Transfer:** UC, CSU Gen. Ed. Area C2, IGETC Area 6**SIGN-066 American Sign Language II**

3 hours lecture 3 Units

Prerequisite: *SIGN-065 or equivalent*

An intensive course designed for persons who want focused teaching and practice in expressive skills. American Sign Language II is a continuation of ASL I, with more emphasis on students' expressive skills. Cultural awareness through appropriate cultural context is the premise of classroom exercises. May not be repeated. SC

LMC: DA**Transfer:** UC, CSU Gen. Ed. Area C2, IGETC Area 6**SIGN-067 American Sign Language III**

3 hours lecture 3 Units

Advisory: *SIGN-066 or equivalent*

An intensive course designed for persons who want focused teaching and practice in expressive skills. American Sign Language III is

a continuation of American Sign Language II, with increased emphasis on students' expressive skills, idiomatic expression and nuance. Cultural awareness through appropriate cultural context is the premise of classroom exercises and fieldwork. May not be repeated. SC

LMC: DA**Transfer:** UC, CSU Gen. Ed. Area C2, IGETC Area 6**SIGN-068 American Sign Language IV**

3 hours lecture 3 Units

Prerequisite: *SIGN-067 or equivalent*

An intensive course designed for persons who want focused teaching and practice in expressive skills. ASL IV is a continuation of ASL III, with emphasis on grammatical accuracy, idiomatic expression, and literary interpretation and storytelling techniques. Cultural awareness through appropriate cultural contexts is the premise of classroom exercises and fieldwork. May not be repeated. SC

LMC: DA**Transfer:** CSU**SIGN-070 Fingerspelling I**

9 total hours lecture, 9 total hours lab .5 Unit

Advisory: *SIGN-065 or equivalent*

This course provides an introduction to the concentrated instruction in the expressive and receptive practice of beginning fingerspelling. This course is part of a certificate in American Sign Language Proficiency. May be repeated once. SC

LMC: DA**Transfer:** CSU**SIGN-071 Fingerspelling II**

9 total hours lecture, 9 total hours lab .5 Unit

Prerequisite: *SIGN-070 or equivalent*

This second-semester course is a continuation of the concentrated instruction in the expressive and receptive practice of advanced fingerspelling. This course is part of a certificate in American Sign Language Proficiency. May be repeated once. SC

LMC: DA**Transfer:** CSU**SIGN-072 Deaf Culture**

3 hours lecture 3 Units

Prerequisite: *SIGN-068 or equivalent*

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

LMC: DA**Transfer:** UC, CSU

SIGN-098 Independent Study in Sign Language

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.*

SIGN-900s Selected Topics in Sign Language

DA varies with course content.

Social Science

SOCSC-045 Issues Facing African Americans

3 hours lecture

3 Units

Advisory: *Eligibility for ENGL-100*

(Formerly SOCSC-045LS) This course will examine the experience of African Americans from a socially inclusive, transcultural & interdisciplinary perspective. Students will be asked to acknowledge, properly define, & 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

LMC: GE: Social Science; GCR Ethnic/Multicultural Studies; DA

Transfer: UC, CSU Gen. Ed. Area D3

SOCSC-077 Community Service and Social Responsibility

2 hours lecture, 3 hours lab

3 Units

Advisory: *Concurrent enrollment in ENGL-090 or 090A/B, or eligibility for or completion of ENGL-100*

Same as BUS-077. 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

LMC: DA

Transfer: CSU

SOCSC-098 Independent Study in Social 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.*

SOCSC-170 Occupational Work Experience Education in Social Science

60-600 total hours

1-8 Units

Prerequisite: *Approved Application*

Advisory: *Eligibility for ENGL-090*

(Formerly SOCSC-099) This course is for students whose work is related to their major. Occupational Work Experience Education provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. To participate in cooperative work experience education, students must be employed or formally volunteer and undertake new or expanded responsibilities. Students, with faculty and employer approval, will develop and successfully complete one learning objective for each unit of credit in which they enroll. Additionally, students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and may repeat for a maximum of 16 units of occupational work experience during community college attendance which may be applied as electives toward graduation. SC

LMC: DA

Transfer: CSU

SOCSC-170A Internship in Social Science

60-600 total hours

1-8 Units

Prerequisite: *Approved Application and meet Program Guidelines*

Advisory: *Eligibility for ENGL-090*

(Formerly SOCSC-099) This course is for students who have declared a major, have taken classes in the major, are ready to on-the-job experience in a paid or unpaid position and meet program-level minimum qualifications. An internship involves working in a skilled or professional level assignment in the area of a student's vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen field. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and repeat for a maximum of 16 units of occupational work experience internship during community college attendance. Credit may be applied as electives toward graduation. 12 units are transferable to CSU. SC

LMC: DA

Transfer: CSU

SOCSC-900s Selected Topics in Social Science

DA varies with course content.

Sociology

SOCIO-015 Introduction to Sociology

3 hours lecture

3 Units

Advisory: Eligibility for ENGL-090

(Formerly SOCIO-015LS) 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. 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-090

(Formerly SOCIO-016LS) 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-900s Selected Topics in Sociology

DA varies with course content.

Spanish

SPAN-044 Conversational Spanish I

3 hours lecture

3 Units

Advisory: Eligibility for ENGL-090

(Formerly SPAN-044S) 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

3 Units

Advisory: ENGL-090 and SPAN-044

(Formerly SPAN-045S) 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-044S) 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-047 Spanish for Health Services

27 total hours lecture

1.5 Units

Advisory: Eligibility for ENGL-090

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-049 Conversational Latino Cinema

3 hours lecture

3 Units

Advisory: Eligibility for ENGL-090, completion of SPAN-050 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-090*

(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. This course meets the UC Foreign Language Transfer Requirement. Note: equivalent to two years of high school Spanish. May not be repeated. SC

LMC: DA**Transfer:** UC, CSU Gen. Ed. Area C2, IGETC Area 6**SPAN-051 Elementary Spanish II**

5 hours lecture 5 Units

Prerequisite: *SPAN-050 or 2 years of high school Spanish; or WEB CAPE Placement test score of 281-345***Advisory:** *Eligibility for ENGL-090*

(Formerly SPAN-051S) 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, 6A**SPAN-052 Intermediate Spanish I**

5 hours lecture 5 Units

Prerequisite: *SPAN-051 or 3 years high school Spanish; or native fluency in reading and writing of Spanish; or WEB CAPE Placement Test score of 346-427*

(Formerly SPAN-052S) 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, 6A**SPAN-053 Intermediate Spanish II**

5 hours lecture 5 Units

Prerequisite: *SPAN-052 or 4 years high school Spanish or native fluency in reading and writing of Spanish; or WEB CAPE Placement Test score of 427 and above*

(Formerly SPAN-053S) 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, 6A**SPAN-057 Spanish for Spanish Speakers I**

3 hours lecture 3 Units

Prerequisite: *SPAN-053; or WEB CAPE placement test score of 403 and above; or attend first class for teacher assessment that demonstrates student's fluency in reading and writing Spanish.***Advisory:** *Eligibility for ENGL-090*

A communicative course designed for native speakers of Spanish who wish to improve their skills in reading and writing Spanish, but open to other linguistically qualified students. Writing will be the main focus of class, but grammar, spelling, speaking and a variety of Spanish reading selections will also be included; as well as exposure to local and international Mexican, Chicano, and Latino cultures as a meaning system common heritage of the U.S. May not be repeated. SC

LMC: DA**Transfer:** CSU**SPAN-060 Exploring Latino Cinema: A Critical Analysis**

3 hours lecture 3 Units

Prerequisite: *SPAN-052*

(Formerly SPAN-060S) 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**

27 total hours lecture 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 not be repeated. SC

LMC: DA**SPAN-081 Elementary Spanish Grammar II**

27 total hours lecture 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 not be repeated. SC

LMC: DA

SPAN-082 Elementary Spanish Grammar III

27 total hours lecture 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 not be repeated. 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-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-040

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-090

(Formerly SPCH-040LS) 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. 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-900s Selected Topics in Speech

DA varies with course content.

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-090

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-090

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-072

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-090

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-087 Mexico Destination Specialist**

27 total hours lecture 1.5 Units

Overview of geography, sightseeing options, activities, resort areas and accommodations for each major region of Mexico. Application of knowledge to traveler scenarios will be emphasized. Internet resources for more in-depth information will also be explored. May not be repeated. SC

LMC: DA**Transfer:** CSU**TRAVL-095 Advanced Travel Concepts**

3 hours lecture 3 Units

Advisory: TRAVEL-072 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-090

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-101 Home-Based Travel: Is It for You?**

9 total hours lecture .5 Unit

This course will offer an insight into what it takes to run a successful home-based travel business. It will provide information about the various types of home-based business set-ups and typed of travel agencies that will host a home-based business. May not be repeated. SC

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-072; 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-170 Occupational Work Experience Education in Travel

60-600 total hours 1-8 Units

Prerequisite: Approved Application**Advisory:** Eligibility for ENGL-090

(Formerly TRAVL-099) This course is for students whose work is related to their major. Occupational Work Experience Education provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. To participate in cooperative work experience education, students must be employed or formally volunteer and undertake new or expanded responsibilities. Students, with faculty and employer approval, will develop and successfully complete one learning objective for each unit of credit in which they enroll. Additionally, students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and may repeat for a maximum of 16 units of occupational work experience during community college attendance which may be applied as electives toward graduation. SC

LMC: DA

Transfer: CSU

TRAVL-170A Internship in Travel

60-600 total hours

1-8 Units

Prerequisite: *Approved Application and meet Program Guidelines***Advisory:** *Eligibility for ENGL-090*

(Formerly TRAVL-099) This course is for students who have declared a major, have taken classes in the major, are ready to on-the-job experience in a paid or unpaid position and meet program-level minimum qualifications. An internship involves working in a skilled or professional level assignment in the area of a student's vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen field. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and repeat for a maximum of 16 units of occupational work experience internship during community college attendance. Credit may be applied as electives toward graduation. 12 units are transferable to CSU. SC

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-010*

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 once. LR

LMC: DA**Transfer:** CSU**WELD-016 Advanced Oxyacetylene Welding**

3 hours lab

1 Unit

Advisory: *WELD-015 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 welding 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 twice. LR

LMC: DA**Transfer:** CSU

WELD-021 Advanced Arc Welding Practice

1.5-9 hours lab .5-3 Units

Advisory: WELD-010 and WELD-011 with a grade of "C" or better; concurrent enrollment in WELD-040

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-011 or WELD-021 with a grade of "C" or better; concurrent enrollment in WELD-040

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-010 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-011, 021 and 031

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-170 Occupational Work Experience
Education in Welding**

60-600 total hours

1-8 Units

Prerequisite: *Approved Application***Advisory:** *Eligibility for ENGL-090*

(Formerly WELD-099) This course is for students whose work is related to their major. Occupational Work Experience Education provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. To participate in cooperative work experience education, students must be employed or formally volunteer and undertake new or expanded responsibilities. Students, with faculty and employer approval, will develop and successfully complete one learning objective for each unit of credit in which they enroll. Additionally, students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and may repeat for a maximum of 16 units of occupational work experience during community college attendance which may be applied as electives toward graduation. SC

LMC: DA**Transfer:** *CSU***WELD-170A Internship in Welding**

60-600 total hours

1-8 Units

Prerequisite: *Approved Application and meet Program Guidelines***Advisory:** *Eligibility for ENGL-090*

(Formerly WELD-099) This course is for students who have declared a major, have taken classes in the major, are ready to on-the-job experience in a paid or unpaid position and meet program-level minimum qualifications. An internship involves working in a skilled or professional level assignment in the area of a student's vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen field. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and repeat for a maximum of 16 units of occupational work experience internship during community college attendance. Credit may be applied as electives toward graduation. 12 units are transferable to CSU. SC

LMC: DA**Transfer:** *CSU***WELD-900s Selected Topics in Welding Technology**

DA varies with course content.

Appendices



Section 6

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
 Custodio, Vince. Dean of Behavioral Science
 Donatelli, A. Don Director of Learning Resources
 Henry, Daniel. Vice President
 Johnson, Thayer Director of Admissions & Records

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
 Skeen, Esther. Police Services Lieutenant
 Torres, Felipe. Director of Special Programs
 Williams, Carlton Dean of Social and Economic Studies

Los Medanos Faculty Emeriti

Boisvert, Kate Astronomy
 Bolds, Edwin H Librarian
 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
 Davis, Jerry W. Biological Science
 DeAnda, Natividad Counseling
 Duggan, Curtis J. Business
 Frates, Jeffrey Computer Science
 Gallup, Terry Nursing
 Garfield, Leo Administration of Justice
 Glennon, James Administration of Justice
 Goldstein, Barry. Business
 Gonzales, Pablo. English
 Hagelin, Christine Biology
 Hansen, Paul Biology
 Harmon, Lorne Administration of Justice
 Hunnicutt, 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

Lynch, Barbara. Computer Science
 Malone, Susanne Nursing
 Maltester, John Music
 Marino, Ofelia Psychology/Counseling
 Marshall, Robert H. Economics
 Maxey, Charles Appliance Service Technology
 McCluskey, William F. Business
 McDaniel, Nancy. Nursing
 Miller, Michael J. Automotive & Engine Technology
 Moore, Harold Management
 Murray, Eva Nursing
 Nakaji, Dave Physics
 Nuxoll, Mary Jo. Nursing
 Olsen, Janet Business
 Potter, Wayne Welding
 Rodriguez, Carmen Social Science
 Shaffer, Harriet K. Child Development
 Siino, Hope J. Business
 Simpson, Linda Librarian
 Smith, Gerry Music
 Smith, Stanley E. Music
 Starsiak, Mary Jo Health Science
 Stewart, Janhari. Nursing
 Strain, Tom Physical Education
 Sysum, Robert L. Welding
 Thomas, Gary (Skip) Physical Education
 Trapp, G. Louis Drafting
 Tsuji, Muriel Nursing
 Yeoman, Eric B. Natural Science
 Zipkin, Naomi Child Development

Los Medanos Full-Time Faculty / Administrators / Supervisors

Adkins, Theodora	Business
B.A., Cal State Univ, East Bay	
Alexander, Kenneth	Art
B.A., M.A., Cal State Univ, Sacramento	
Aliotti, Robin	Business
A.A., Los Medanos College; B.A., Univ Cal, Davis; M.B.A., Cal State Univ, East Bay	
Arenivar, Olga G.	Speech
A.A., Diablo Valley College; B.A., M.A., Cal State Univ, San Francisco	
Armendariz, Rosa	Academic/Student Services Manager
B.A., Stanford Univ	
Armour, Robin	Director of Admissions and Records
B.A., M.S., National Univ	
Austin, Barbara	English
B.A., Loyola Marymount Univ; M.A., Cal State Univ, San Francisco	
Bachmann, Nancy	Music
B.A., M.A., Cal State Univ, San Francisco	
Bank, Judith	English
B.A., Albany State Univ; M.A. Suffolk Univ	
Baskin, Shirley	Counseling
A.A., Reedley College; B.A., M.A., Cal State Univ, East Bay	
Beal, Tawny	Senior Academic/Student Services Manager
B.S., Univ Cal, Berkeley; M.S., Univ Oxford; Ed.D., St. Mary's College	
Belman, David	Student Life Coordinator
B.A., M.A., Univ of the Pacific	
Bent, Joanne	Nursing
B.F.A., Univ of New Mexico; M.S.N. Cal State Univ, San Francisco	
Biles, Lorraine Leith	Physical Education
B.A., Cal State Univ, Sonoma; M.A., Goddard College	
Boehme, Gabriella	ESL/English
B.A., M.A., Cal State Univ, San Francisco	
Bonner, Jeanne	Physics
B.S., Univ Cal, Davis	
Boschetti, Van	Physical Education
B.A., Cal State Univ, San Francisco; M.A., St. Mary's College	
Brown, Brendan	Mathematics
B.S., Univ Cal, Davis; M.A., Cal State Univ, San Jose	
Cabral, Scott	Astronomy
B.A., Univ Cal, Berkeley; M.S., San Francisco State Univ	
Caldwell, Tselane	English
B.A., M.A., Univ Cal, Berkeley	
Canto-Williams, Loretta	Director of Financial Aid
B.A., Cal State Univ, East Bay	
Castillo, Sandra	Nursing
B.S.N., Cal State Univ, L.A.; M.A., Holy Names College; Ed.D., NOVA Southeastern Univ	
Cea, Jorge	Academic/Student Services Manager
B.A., Cal State Univ, San Francisco	
Cella, Barbara	Director of Marketing & Media Design
B.S., Univ of Minnesota; M.A. John F. Kennedy Univ	
Chuah, Cheong	Music
B.A., Berklee College of Music, Boston; M.A., Ph.D., Univ of Miami	
Clarke, Milton	Political Science
B.A., State Univ of New York at Stony Brook; M.A., Cal State Univ, San Francisco	
Cohen, James	Mathematics
B.A., Univ Cal, Berkeley; M.A., Washington Univ	
Collins, Linda	Philosophy
B.A., Univ of Colorado; M.A., Univ Cal, Berkeley	
Corlew, Curtis	Art/Journalism
A.A., Diablo Valley College; B.A., Cal State Univ, San Francisco	
Crowder, Kurt	Physics
B.S., Massachusetts Institute of Technology (MIT); M.S., Ph.D, Univ Cal, San Diego	
Davi, Estelle, R.	Psychology
B.A., M.A., Cal State Univ, San Francisco	

Faculty and Staff

Dearman, Jason	Automotive
A.S., Los Medanos College	
Debro, Karl	AVID
B.S., Cal State Univ, San Francisco; M.S., Cal State Univ, East Bay	
DeStefano, Jill	Mathematics
B.S., M.S., Cal Poly State Univ, San Luis Obispo	
Domenichelli, Derek	Physical Education
B.S., Cal State Univ, East Bay; M.S.S., United States Sports Academy	
Doob, Peter	Mathematics
B.A, Knox College; M.S., Northwestern Univ	
Dorritie, Frank	Recording Arts
B.A., Manhattan College	
Estrada, Robert	Bookstore Manager
B.A., Univ Cal, Berkeley	
Fisher, Dorrie	Physical Disabilities Specialist/Counselor
B.A., M.S., Cal State Univ, East Bay	
Fithian, Christine	Senior Executive Assistant
A.A., College of the Redwoods; B.A., Cal State Univ, Humboldt	
Fracisco, William	Counselor
A.A., Contra Costa College; B.A., M.S.W., Cal State Univ, San Francisco	
Garcia, Peter	President
B.A., St. Albert's College; B.A., Cal State Univ, Chico; M.Div., Dominican School of Philosophy & Theology	
Godinez, Marco	Counselor/Puente
A.A., Los Medanos College; B.A., Cal State Univ, East Bay; M.A., John F. Kennedy Univ	
Goff, Christina	Librarian, Instructional
B.A., Cal State Univ, Sonoma; M.S., Simmons College	
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	
Gutierrez, Ana	English
B.A., Univ Cal, Berkeley; M.S., National University	
Henderson, Silvester	Music
B.A., M.A., Cal State Univ, San Francisco	
Hiltbrand, Joellen	English
B.A. Univ of Colorado; M.A., Univ Cal, Berkeley	
Hobbs, Joann	English
A.A., Los Medanos College; B.A., Cal State Univ, Chico; M.A., Cal State Univ, 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 Univ, Sacramento; M.S., Cal State Univ, East Bay; M.A., Cal State Univ, 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., Stanford Univ; M.A., Cal State Univ, San Francisco	
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 Univ, East Bay	
Kishi, Thais	Brentwood Center Coordinator
B.A., Univ of the Pacific; M.A., Cal State Univ, San Jose; Ph.D., Univ of Texas at Austin	
Landers, Mara	Mathematics
B.A., Swarthmore College; M.A., Ph.D., Univ Cal, Berkeley	
Lewis, Mark	Biology/Physiology
B.A., Ph.D., Univ 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	
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 Univ, 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	
Mitchell, Jeffrey L.	English
B.A., M.A., Cal State Univ, San Francisco	
Moore, A'kilah	Mathematics
B.S., Spellman College, Georgia; M.S., Howard Univ, Washington, D.C.	
Moriel, Daniel	Philosophy
A.A., Southwestern College; B.A., Cal State Univ, San Diego; M.A., Ph.D., Univ Cal, San Diego	
Moy, Frances	High Technology Center Specialist
B.A., M.A., Cal State Univ, San Francisco	
Nash, Bradford	Business
B.A., Cal State Univ, Fresno; M.S., Cal State Univ, Chico	
Newman, Gail	Director of Admissions and Records
A.A., Fullerton College; B.A., Cal State Univ, Long Beach; M.P.A. Cal State Univ, East Bay	
Nielsen, Kathryn	Director of Early Childhood Lab School
B.A., Cal State Univ, 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 Univ, San Francisco	
Orante, Newin	Academic/Student Services Manager (EOPS)
B.A., Cal State Univ, San Francisco; M.A., Cal State Univ, East Bay	
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 Univ, East Bay; M.S., Univ of Oregon	
Perry, Josephine	English/Drama
B.A., Univ of Massachusetts; M.A., Cal State Univ, 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 Univ, San Francisco	
Ralston, Coleen	Physical Education
B.S., Cal State Univ, San Francisco; M.S., Cal State Univ, East Bay	
Richards, Virginia	Learning Disabilities Specialist
B.A. Univ Cal Irvine; M.A., Chapman Univ	
Rickman, Jancy	Biology
B.S., Emerson College; M.A., Cal State Univ, San Francisco	
Rodriguez, Gil	Dean, Liberal Arts and Sciences
B.A., Univ Cal, Berkeley; M.S., Cal State Univ, East Bay	
Rust, Tue	Mathematics
B.A., Univ Cal, Berkeley; M.S., Cal State Univ, San Jose	
Saito, Jennifer	Mathematics
B.A., M.A., Univ Cal, Berkeley	
Sample III, Alexander	Sociology
B.A., Ohio State Univ; M.A., Cal State Univ, San Francisco	
Sansen, Oliver	Administration of Justice
B.A., Univ of San Francisco	

Faculty and Staff

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	
Smith, Clayton	Computer Science
B.A., Univ Cal, Berkeley	
Smith, Erma	Articulation Officer/Psychology
B.A., Cal State Univ, San Jose; M.A., Cal State Univ, 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 Univ, San Jose; M.A., Univ of Santa Clara	
Sterling, Alex	English
B.A., M.A., Purdue Univ; M.A., Cal State Univ, East Bay	
Subia, Laura	Counselor/EOP&S
B.A., Univ Cal, Berkeley; M.S., Cal State Univ, San Francisco	
Taylor, Jim	Buildings and Grounds Manager
Townsend, Janice	Child Development
B.A., M.A., Univ Cal, Santa Barbara	
Truesdell, Sean	Nursing
B.S.N., San Francisco Univ; M.S., Cal State Univ, Dominguez Hills	
Tuttle, Maria	English/Puente
B.F.A. Art Academy of Cincinnati; M.A., Univ 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 Univ , East Bay	
Villegas, Richard	Physical Education
B.S., Cal State Univ, San Bernardino	
Von Bergen, Julie	Mathematics
B.A., Univ Cal San Diego	
Wagener, J. Pat.	Mathematics
B.S., St. Edward's Univ; M.S., Univ of Wisconsin-Superior	
Wentworth, Kimberly	Librarian, Electronic/Technical Services
B.S., Clemson University; M.L.I.S., Cal State Univ, San Jose	
Wethington, Katalina	English
B.A., Univ of San Diego; M.F.A., St. Mary's College	
Whitman, Nancy	Spanish
B.A., Cal State Univ, Chico; M.A., Cal State Univ, Sacramento; Ed.D., Univ So Cal	
Willett, Kathleen	Biology
B.S., Cal State Univ, East Bay	
Wilson, Glenn	Custodial Manager
Yamakoshi, Lois	Mathematics
B.S., Pepperdine Univ; M.A., Cal State Northridge	
Ybarra, Nancy	English
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

Acevedo, Claudia	Scholarship Program Coordinator
B.A., Cal State Univ, San Francisco	
Ahlborn, Diane	Sr. Admissions/Records Assistant
A.A., Los Medanos College	
Alves, Stephanie	Lead Admissions/Records Assistant
A.A., Los Medanos College	
Amaral, Gilbert	Lead Grounds Worker/Gardener

Amare, Daniel	Science Laboratory Technician II
B.A. Cal State Univ, Sacramento; M.S., Cal State Univ, East Bay	
Asher, Don.	Laboratory Equipment 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; A.A.S, Nassau Community College	
Betz, Carole.	Counselor Assistant
Biles, Jeffrey	Grounds Worker/ Gardener II
Brainerd, Amanda	Media Design Specialist
B.F.A., Carnegie Mellon Univ; M.F.A., Göteborgs Univ, Sweden	
Bridges, John	Custodian II
Butler, Lorie	Senior Library Assistant
Butler, Steven	Custodian II
Carr, Kendra	Student Services & Instructional Support Coordinator
B.S., Santa Clara University	
Chapman, Eloine	Senior Web Administrator
A.A., Los Medanos College	
Chen, San Mei.	Custodian II
Connell, Carmen	Financial Aid Assistant II
Cullar, Katherine	Administrative Assistant
Cullison, Linda	Instructional Assistant
B.A., Univ Cal, Berkeley; M. Div., Pacific School of Religion/Instructional	
Davies, Daniel	Custodian II
A.S., Los Medanos College	
DeKelaita, Ronald	Custodian II
Elejalde, Tatianna	Financial Aid Assistant I
A.A., Diablo Valley College	
Ellsworth, Ellen	Customer Services Clerk
Ericson, Greg.	Grounds Worker/ Gardener II
Espino, Jon	Lab Equipment Technician II
Fantuzzi, Angela	Family Life Education Specialist
B.A., Pontifical Catholic Univ of Chile	
Fay, Jenifer	Science Laboratory Technician II
B.A., Cal State Univ, Sonoma	
Flores Zelaya, Reynaldo	Custodian II
Fonseca, Catherine	Student Services & Instructional Support Coordinator
B.A., Cal State Univ, San Jose	
Garcia, Jennifer	Instructional Assistant
A.A., Los Medanos College	
Garlitos-Holder, 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
B.A., Cal State Univ, East Bay	
Greene, Letta	Student Services and Instructional Support Coordinator–CalWorks
B.A., Univ Cal, Riverside	
Griffin, Kathleen	College Human Resources Assistant
A.S., Alameda College	
Hall, Rikki.	Admissions/Records Assistant I
Hampton, Janelle	Equipment Maintenance Worker
Herrera, Rhodora	Customer Services Clerk
A.A. Diablo Valley College	
Hertstein, Margaret.	Administrative Assistant
A.A., Los Medanos College	
Holiday, Melissa.	Custodian II
Hong, Joseph	Science Laboratory Technician II
B.S., State Univ of New York	
Hotton, Michael	Senior Parking Services Officer

Faculty and Staff

Jackson, Melissa	Student Services & Instructional Support Coordinator
A.S., Cerro Coso Community College; B.A., Pacific Oaks College	
Jamil, Ahmad	Computer & Network Technician
B.A., Baruch College	
Knowles, Denise	Web Application Specialist
B.S., Univ Cal, Riverside	
Kohler, Linda	Senior Accountant
A.A., Diablo Valley College	
Kolthoff, James	Alternative Media Specialist
A.A., A.S., Los Medanos College; B.A., Cal State Univ, East Bay	
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 Univ, East Bay	
Leung, Chunni	Financial Aid Assistant II
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 Univ, East Bay	
Macias, Antonio	Building Maintenance Worker
Maniscalco, Linda	Admissions/Records Assistant I
Marquez, Natalia	Custodian II
Martin, Analicia	Athletic Trainer
B.S., 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.	Satellite Business Services Coordinator - Brentwood
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 Univ, East Bay	
Monteverde, Eva	Financial Aid Specialist
Nelson, George	Maintenance Mechanic
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; M.S.W., Univ of Illinois	
Oleson, Mary.	Sr. Administrative Secretary
A.A., Los Medanos College	
Olgin, Anthony	Custodian II
Ornelas, Janine	Police Services Assistant/Dispatcher
A.S., Los Medanos College	
Ortiz, Elaine.	Computer and Network Specialist
A.S., Heald College, School of Technology	
Pacheco, Carmen	Sr. Administrative Secretary
B.A. Univ of San Francisco	
Palizzolo, Paul	Custodian II
A.A., Diablo Valley College	
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	Transcript Audit Specialist
A.A., Los Medanos College; B.A., Cal State Univ, San Francisco	
Quezon, Roberto.	Inventory & Receiving Clerk
A.S., Heald College	

Raumer, Rodney A.A., A.S., Contra Costa College	Computer and Network Specialist
Robertson, Leetha B.S., Grambling State Univ	Admissions/Records Assistant I
Rodrigues, Leticia	Sr. Administrative Secretary
Rock, Mary A.A., Solano Community College; B.S., Univ Cal, Davis	Science Laboratory Coordinator
Rush, Robert A.A., Diablo Valley College	Athletic Equipment Manager II
Sale, Humberto B.A., M.A., Cal State Univ, San Francisco	College Research Coordinator
Sanchez, Salvador	Grounds Worker/Gardener II
Scheier, Robin	PBX Operator-Receptionist
Schmidt, Sandra	Senior Administrative Assistant
Simmons, Yvette	Grounds Worker/Gardener II
Snelling, Jr., John	Custodian II
Sobolik, Glenn	Lead Maintenance Mechanic
Soto, Annica B.A., Cal State Univ, San Jose	Admissions/Records Assistant I
Spagnol, James A.A., Los Medanos College	Computer Center Technician II
Stanton, Karen B.S., M.S., Univ of Phoenix	Computer Center Technician II
Stanton, Kenneth A.A., Diablo Valley College; B.A., Cal State Univ, Sonoma	Media Services Specialist II
Starkie, Ann	Lead Account Clerk
Stewart, Jamila	PBX Operator-Receptionist
Terstegge, Ted	Police Services Officer
Tiscareno, Spring	Lead Custodian
Tolleson, Constance A.S., Honolulu Community College, B.S., Cal State Poly Univ	Administrative Assistant
Turner, Reginald A.A. Wilkes Community College	Employment Development Services Specialist
Valdez, Michael B.S., Univ of San Francisco; M.S., Univ Cal, Irvine	Math Laboratory Coordinator
Valencia, Steven	Custodian II
Vawter, Glenda	Locker Room Attendant
Villegas, Grace	Scheduling Specialist
Vu, Johnny	Custodian II
Wagner, Gilbert	Custodian II
Warthen, Margit A.A., A.S., Los Medanos College	Customer Services Clerk
Weikum, Sherry A.A., A.S., Los Medanos College	Library Assistant II
West, Michael	Reprographics Production Coordinator
White, Andre	Grounds Worker/Gardener II
Wille, Linda K. A.A., Citrus College; B.A., Cal Poly State Univ, Pomona	Foundation Director
Xavier, Gilberta	Custodian II

Catalog Acknowledgement:

Produced 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

LMC (925) 439-2181

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	PE 1006
AV/Media Services	3454	L2
Bookstore	3143 or 439-2056	CC3 810
Brentwood Center	513-1625	
C.A.R.E. Program	3138/3114	CC3 435
Career Center	3252	CC3 524
Child Study Center	3197/3198	CS2
Cosmetology	VM 3210	CO4 400
Counseling Appointments	3334	CC3 414
Disabled Students High-Tech Center	3279	CC3 625
Disabled Support Services • Learning/Physical	3133/3353	CC3 441
(TDD)	439-5709	CC3 441
Employment Center • Work Experience/Coop Education/On Campus Job Placement	3330/3331	CC3 435
EOP&S Extended Opportunity Programs & Services	3138/3117/3114	CC3 431
Financial Aid	3139/3902/3291/3292	CC3 431
Fire/EMS	Fire 3274 EMS 3352	CO4 400
Foundation Office	3215	CC3 440
Information Center	3422	CC3 400
Instructional Dean's Offices	3105	CO4 400
Library Services/Learning Resource Center/General Computer Use	3320/3275	L1
Lost and Found	3228	CC1 132
Marketing/Public Relations	3242	CO 417
Matriculation Services—College Orientations	3317	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	CO4 411
Scholarship Information	3130	CC3 402
Student Government/Activities	3266/3199	CC3 800A
Student Outreach	3383	CC3 419
Teaching and Learning Center	3176	CC2 255
Transfer Center	3124	CC3 434
Veterans Benefits	3129	CC3 401

Instructional Labs

Appliance	3341	CC3 506
Art	3384	CC2 256
Biology	3410	SC 103
Business	3202	CC2 232/235
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	CO4 403
Occupational Education	3285	CO4 405

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 meet 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.

Index

A

About the College 2
Academic Renewal 11
Administration of Justice 43
Advanced Placement (AP) 10
Anthropology 43
Appliance Service Technology 44
Art 45
Art Lab 21
Assessment Center 17
Associate Degree and Certificate Requirements 36
Athletics 95
Attendance 7
Automotive Technology 46

B

Basic Skills/Competency Requirements 36
Biological Science 47
Bookstore 19
Board of Governor's Grant Fee Waiver (BOGG) 15
Business 47
Business Services Office 17

C

Career Center 17
CCCCD Programs 41
Certificate of Achievement Requirements 36
Chemistry 51
Child Care Services 18
Child Development 51
Clubs 20
College Phone Directory 208
College Terms 209
Computer Lab 21
Computer Literacy Competency Requirement 37
Computer Science 53
Cooperative Education Services 21
Cosmetology 54
Counseling Services 18
Course Offerings 80
Credit Accepted 9
Credit by Examination 9
CSU General Education Requirements 33

D

Degrees and Certificates in Major Programs 40
Disabled Students Program 18
Discipline and Suspension 25
Drama 123

E

Eligibility Requirements 3
Emergency Medical Services 56
Employment Center 18
Enrollment Fee 12
Engineering 56
Environmental Sciences 57
Electrical/Instrumentation Technology 55
English as a Second Language 137
EOPS 14

F

Fee Refund Policy 12
Final Grades 7
Financial Aid 14
Financial Aid Appeals Process 16
Fire Technology 57
Food Service 19
Freedom of Association 24

G

Gay and Lesbian Resource Center 19
Grading 7
Graduation, Preparing for 36
Grievance Process 25

H

High School Credit 11
Honors Program 22

I

IGETC: Intersegmental General Education Transfer Curriculum 34
Instructional Services 21
International Students 4

J

Journalism 58

L

Learning Resource Center 22
Liberal Arts 58
Library 22
LMC Associate Degree Requirements 39
Locally Approved Certificates 40

M

Major Program Requirements 43
Management And Supervision 60
Mathematics 61
Mathematics Competency Requirement 36
Math Lab 23
Matriculation and Course Enrollment 4
Matriculation Rights and Responsibilities 26
Mission Statement 2
Music 61

N

Nursing 63

P

Parking 20
Parking Enforcement 20
Parking Fees 13
Pathways to an Associate Degree 38
Police Services 20
Prerequisites/Advisories 4
Process Technnology 65
Probation 15
Probation and Dismissal 9
Program Student Learning Outcomes 70
Psychology 65
Puente Project 23

R

Reading and Writing Center 23
Reading and Writing Competency Requirements 37
Real Estate 66
Recording Arts 66
Refund Policy 20
Repeating a Course 11

S

Satisfactory Academic Progress (SAP) 15
Science Audio - Tutorial Center 23
Sign Language 67
Sociology 67
Spanish 67
Standards of Scholarship 7
Student Activities 20
Student Discipline & Suspension 25
Student Government 20
Student Learning Outcomes 70
Student Record Privacy Law 27
Student Rights and Responsibilities 24
Student Services 17
Suspension 15

T

Transcript Requests 11
Transfer Center 21
Transfer Information 29
Travel Marketing 67
Tutoring Services 23

U

Units of Credits, Guidelines on 82
Understanding Course Descriptions 81

V

Veterans' Benefits 13

W

Welding Technology 69