

— 2012-2013 —

CATALOG

Degrees of Success

LOS MEDANOS
COLLEGE

Los Medanos College Catalog 2012-2013

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

www.losmedanos.edu



2012-2013 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

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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.

Contra Costa Community College District



Governing Board

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|--------------------|----------------|
| Tomi Van de Brooke | President |
| Sheila A. Grilli | Vice President |
| John E. Márquez | Secretary |
| Robert Calone | Member |
| John T. Nejedly | Member |

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Dr. Helen Benjamin, Chancellor

Campuses

Los Medanos College, Contra Costa College, Diablo Valley College

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| | |
|---|------------------------|
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| Vice President | TBA |
| Computer & Network Services Supervisor | Mike Becker |
| Senior Dean, Instruction | Richard Livingston |
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| Senior Director, Foundation | Ruth Goodin |
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| Custodial Manager | Barry Edwards |
| Lieutenant, College Police and Safety | Ryan Huddleston |

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College Calendar

Summer Intersession

| | |
|---|--------|
| Instruction Begins | May 29 |
| Last day to apply for summer graduation | July 1 |
| Independence Day—Legal Holiday | July 4 |
| End of Summer Intersession | Aug 16 |

Fall Semester 2012

| | |
|--|------------------------------|
| Begin accepting applications for Fall Semester | March 1 |
| Course Enrollment | See Fall Schedule of Courses |
| Instruction Begins | Aug 17 |
| Last day to add and drop full term classes with eligibility for fee refund or credit . | Aug 30 |
| Last day to file drop for semester-length courses to avoid "W" on transcript . . . | Aug 31 |
| Labor Day—Legal Holiday | Sept 3 |
| Last day to petition for pass/no pass option (SC) for semester-length courses . . | Sept 14 |
| Native American Day—Holiday | Sept 28 |
| Last day to apply for the fall graduation | Oct 1 |
| Veteran's Day—Legal Holiday | Nov 12 |
| Last day to file drop for semester-length courses | Nov 16 |
| Thanksgiving—Legal and Board Holidays | Nov 22 – Nov 25 |
| Last day of instruction and final exams | Dec 17 |

Spring Semester 2013

| | |
|--|--------------------------------|
| Begin accepting applications for Spring Semester | Oct 1 |
| Course Enrollment | See Spring Schedule of Courses |
| Instruction Begins | Jan 12 |
| Martin Luther King Jr.'s Birthday—Board Holiday | Jan 21 |
| Last day to add and drop full term classes with eligibility for fee refund or credit . | Jan 25 |
| Last day to file drop for semester-length courses to avoid "W" on transcript | Feb 1 |
| Last day to petition for pass/no pass option (SC) for semester-length courses . . . | Feb 8 |
| Lincoln's Birthday—Legal Holiday | Feb 15 |
| Washington's Birthday—Legal Holiday | Feb 18 |
| Last day to apply for spring graduation | March 1 |
| Spring Recess | March 18-24 |
| Last day to file drop for semester-length courses | April 26 |
| Last day of instruction—Graduation | May 24 |
| Memorial Day—Legal Holiday | May 27 |

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 more than 1,000,000 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 center 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. In 1998, the college opened the Brentwood Center in partnership with the Liberty Union High School District Adult Education Center. The Center moved to its current location on Sand Creek Road in Brentwood in 2001.

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 Pittsburg and Antioch, including the current site of the college. Translated into English, the name of the college refers to inland 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 and major coursework leading to associate of arts or science degrees and courses leading to certificates of achievement. The college is also the leading force in the economic development of eastern Contra Costa County. Short-term courses are 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 provides 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 lifelong engagement with academic and societal challenges. We value the importance of critical thinking, effective communication, ethical behavior and diversity. We engage in ongoing 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 who 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

www.losmedanos.edu/foundation

925-439-2181 ext 3215

Since its formation in 1997, Los Medanos College Foundation has been committed to helping build a pathway for Los Medanos College and its students by raising and allocating critical financial support for educational and career technical programs, teaching facilities, and student scholarships. The Foundation builds futures and changes students' lives by creating relationships with businesses, corporations, foundations and individual donors who invest in educational programs that benefit the economy and community at-large. The Foundation has provided funding for: classroom upgrades, books for the library, grants for academic programs such as nursing, PTEC and ETEC, scholarships, support of many student activities, athletics, and emergency loans for veterans and other students.

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.

Accreditation Review

Los Medanos College is accredited by the Accrediting Commission for Community and Junior Colleges, Western Association of Schools and Colleges.

Information on LMC's accreditation, licenses and other approvals is available 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 seven units in fall and spring terms and five units during summer session. Students wishing to appeal the unit limit must complete an online orientation and a Unit Limit Waiver Form and request approval from a dean or manager.
- Special admit students 14-15 years of age must complete an online orientation and an Age Waiver Form and request approval from a dean or manager.
- Special admit 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 admit 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.

New and returning students – applications for admissions may be submitted online by visiting the college website at www.losmedanos.edu. After the application is uploaded, students will receive an email with their student ID, WebAdvisor User ID, registration date and password and student email instructions

Special admit students – New and returning students may submit a college application online. This application can be submitted prior to the in-person registration date. Continuing high school students need not resubmit a college application.

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. Evidence may include at least two of the following: payment of California State income taxes, registering and voting in California elections, obtaining a California driver's license, owning and registering a car in California and more. The burden of proof to establish residency is on the student. Additional information may be found at the college website, www.losmedanos.edu.

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. Applications and information packets are available in the LMC Admissions & Records 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 54 on the IB(Internet Based).
- 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 enrollment fees.

No housing facilities or dormitories are available to students on campus.

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 & Records Office. Applications for the Summer and Fall semesters 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 or in the Admissions & Records 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

All registration takes place online, on WebAdvisor. Detailed instructions for the use of this system can be found on the college web site at www.losmedanos.edu or in the Schedule of Classes.

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 and for special admit high school students.

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. Registration is based on a priority system which is described on at the college website at www.losmedanos.edu.

Prerequisites/Advisories

In the Schedule of Classes, on the college website 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" requires a grade of "P" or "C" or better. Courses in progress outside the district will not be accepted as prerequisites. Advisories are recommendations only and need not be verified. Prerequisites may be challenged through the fifth day of the term 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

Full-time status during fall and spring terms is 12 units; 6 units is considered full-time for summer session. 19 units is the maximum load in fall and spring terms; 9 is the maximum load for summer session. Students must request overload approval from the Director of Admissions & Records. Students should discuss the question of 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 of Subchapter 1 of Chapter 6 of Division 6 of Title 5 of the California Administrative Code, commencing with Section 55000.

Remedial Coursework Limitation

By state law, students are only allowed a maximum of 30 units of "remedial" course work. Remedial courses refers to precollegiate 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. Online 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 Office of Financial Aid and/or the LMC Foundation.

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 Library;
- 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 rela-

tionship 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 supervisory 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 925-439-2181, ext 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 Dean of Student Development, Los Medanos College, 2700 East Leland Rd., Pittsburg, CA 94565, (925) 439-2181, ext. 3317, 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 aspectos 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. 3317, 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 are required to have a final examination or skill evaluation 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 Office of Student Life, (925) 439-2181 Ext. 3199.

Final Grades

Final grades can be accessed at the end of instruction, immediately following instructor grade entry online. Students can learn about their final grades by logging into WebAdvisor at the college website.

Honors Status

Full-time students who achieve a term grade point average of 3.5 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.

Students who achieve an overall grade point average of 3.5 or better at the time of graduation are recognized with honors status. Notation of this academic achievement is printed on the student's permanent record, on the diploma and in the graduation program. Students who achieve an overall grade point average of 4.0 are acknowledged at the graduation ceremony.

Alpha Gamma Sigma (AGS) is the academic honor society and service organization of the California Community Colleges. Initial membership is attained by completing 12 units with a cumulative grade point average of 3.0.

All life members of the California Scholastic Federation and those who graduated high school with a 3.5 GPA are also eligible for temporary membership during their first semester at LMC.

Permanent AGS status is achieved by maintaining active involvement in our chapter and a high GPA. Permanent membership is noted on the student's official college transcript.

For further information, contact the AGS 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. Students should discuss this choice with a counselor.

In order to exercise this option, a petition must be filed with the Admissions & Records Office at the time of registration or no later than the end of the fourth week of the semester for a full-semester class. Petitions for summer session and short-term courses must be filed within the first 30 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 the course to be eligible for an incomplete; students 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 & 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 drop during the first two weeks of instruction (or prior to 20 percent of instruction in summer intercession and short-term classes) will not printed on the student's official academic record.

A drop between the end of the 20% point of instruction and the 75% of instruction for all 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 to the Director of Admissions & Records 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 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.

If you are on academic or progress dismissal, you must see a counselor prior to registering.

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 Dean of Student Development 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

Los Medanos College accepts credit from institutions accredited by one of the six regional accrediting associations or follows the recommendation of the American Association of Collegiate Registrars and Admissions Officers.

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 may 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 5, Sections 55002, 55023 and 55050, 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).

Eligibility:

- 1) The student must be currently registered at LMC.
- 2) The student must be in good standing (a minimum 2.0 GPA for continuing students) at LMC and not on probation or dismissal.
- 3) The student must not have previously received a D, F, W, or NC/NP in the same course.
- 4) The student may make only one attempt of Credit by Examination, per course.
- 5) The student may earn no more than 12 units of Credit by Examination toward an Associate Degree and 6 units toward a Certificate of Achievement.
- 6) Credit by Examination may not be attempted for a course lower in a sequence of courses than what has already been completed by the student.
- 7) The student must complete the Credit by Exam process prior to the end of the 12th week of instruction (fall and spring only)
- 8) The student must pay the fees equal to the cost of the course (BOGFW does not cover this fee)
- 9) Credit by Examination cannot be counted as part of the student's load for VA benefits, athletics, residency or financial aid.
- 10) The grade the student earns on the exam will be the grade given on the student's transcript.

NOTE: Credit by Examination is NOT a prerequisite challenge exam. It should not be confused with the challenge process for a course prerequisite within a department or discipline.

Procedures:

- 1) Student submits petition for Credit by Exam to the Admissions & Records Office.
- 2) The Credit by Exam fee is payable at the Admissions & Records Office, upon determination of eligibility. The fee is the same as if the student were enrolling in the course.
- 3) The Dean and/or Department Chair will arrange for testing and once completed, return the application to the Admissions & Records Office for processing.
- 4) Examination results will be entered on the student's academic transcript.
- 5) The grade of Pass/No Pass will only be assigned if the student requested P/NP during the appropriate time period.

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 & Records Office. Credit may not be earned at Los Medanos College for courses which duplicate credit already allowed for examinations as listed under course equivalents.

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 NC/NP.

Effective Summer 2012 students will be limited to enrolling in credit classes a maximum of three times. This includes students earning substandard grades or dropping with a "W." Students will be notified upon registration if they are enrolling for a second time. Students enrolling for a third time will be blocked from registration and required to submit a Petition for Course Repetition. Students are urged to manage course load and be aware of the number of enrollments for a specific course. Carefully consider dropping courses and understand all deadlines. Take advantage of tutoring and other support services to achieve successful completion of all courses.

When a course is repeated to alleviate a substandard grade, the previous grade will be disregarded 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

- Students who have documented extenuating circumstances such as accidents, illness or other circumstances beyond the control of the student, may apply for a withdrawal after the 75 percent of the term.
- A 'W' shall not be assigned if the student withdraws due to the impact of fire, flood or other extraordinary conditions (petition required).
- In the case of discriminatory treatment or retaliation for discriminatory treatment a 'W' shall not be assigned.
- Active or reserve military students who receive orders compelling a withdrawal from courses will receive a military withdrawal which shall not be counted in the limit of withdrawals or progress probation.

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 Petition for Course Repetition 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.

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 Admissions & Records office must receive written authorization in order to release official LMC student records. Students may request their official transcripts online by logging into WebAdvisor. Transcripts ordered online will be processed quicker than those requested by fax or in person. More information can be found at the college website.

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. | 3,4,5 | ENGL 100 - 3 units | Reading-Writing | 3 units Area A2 | 6 | 1A | 5.3 |
| English: Literature & Comp. | 3,4,5 | 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 | | |
| 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 | 4 units Area B1&B3 | 4*** | 5A with lab | 2.7*** |
| Psychology | 3,4,5 | PSYCH 11 - 3 units | Behavioral Science | 3 units 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.

College Level Examination Program

| CLEP 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 |
|-------------------------------|-------|--|--|--|--|------------------------------------|---|
| American Government | 50 | No equivalent – N/A | N/A | 3 units Area D8 | 3 | N/A | N/A |
| American Literature | 50 | Elective credit – 3 units | Humanities | 3 units Area C2 | 3 | N/A | N/A |
| An. & Interpreting Literature | 50 | Elective credit – 3 units | Humanities | 3 units Area C2 | 3 | N/A | N/A |
| Biology | 50 | No equivalent – N/A | N/A | 3 units Area B2 | 3 | N/A | N/A |
| Calculus | 50 | No equivalent – N/A | N/A | 3 units Area B4 | 3 | N/A | N/A |
| Chemistry | 50 | CHEM 6 - 4 units | Science | 3 units Area B1 | 3 | N/A | N/A |
| College Algebra | 50 | No equivalent – N/A | N/A | 3 units Area B4 | 3 | N/A | N/A |
| College Algebra-Trigonometry | 50 | No equivalent – N/A | N/A | 3 units Area B4 | 3 | N/A | N/A |
| College Mathematics | 50 | No equivalent – N/A | N/A | 0 units N/A | 0 | N/A | N/A |
| English Composition -no essay | 50 | No equivalent – N/A | N/A | 0 units N/A | 0 | N/A | N/A |
| English Composition - essay | 50 | Eligible for ENGL 100 | N/A | 0 units N/A | 0 | N/A | N/A |
| English Literature | 50 | Elective – 3 units | Humanities | 3 units Area C2 | 3 | N/A | N/A |
| Financial Accounting | 50 | No Equivalent – N/A | N/A | 0 units N/A | 3 | N/A | N/A |
| French Level I | 50 | FRENCH 60 – 5 units | N/A | 0 units N/A | 6 | N/A | N/A |
| French Level II | 59 | FRENCH 61 – 5 units | N/A | 3 units Area C2 | 12 | N/A | N/A |
| Freshman College Composition | 50 | Eligible for ENGL 100 | N/A | 0 units N/A | 0 | N/A | N/A |
| German Level I | 50 | Elective credit – 5 units | N/A | 0 units N/A | 6 | N/A | N/A |
| German Level II | 60 | Elective credit – 5 units | N/A | 3 units Area C2 | 12 | N/A | N/A |
| History, U.S. I | 50 | HIST 29 – 3 units | Social Science | 3 units Area D6& US1 | 3 | N/A | N/A |
| History, U.S. II | 50 | HIST 30 – 3 units | Social Science | 3 units Area D6& US1 | 3 | N/A | N/A |
| Human Growth & Developmt | 50 | No equivalent – N/A | N/A | 3units Area E | 3 | N/A | N/A |
| Humanities | 50 | Elective credit – 3 units | Humanities | 3 units Area C2 | 3 | N/A | N/A |
| Info Sys & Comp Applications | 50 | COMSC 40 – 4 units | Computer Literacy | 0 units N/A | 3 | N/A | N/A |
| Intro Educational Psychology | 50 | No equivalent – N/A | N/A | 0 units N/A | 3 | N/A | N/A |
| Introductory Business Law | 50 | No equivalent – N/A | N/A | 0 units N/A | 3 | N/A | N/A |
| Introductory Psychology | 50 | PSYCH 10 – 3 units | Behavioral Science | 3 units Area D9 | 3 | N/A | N/A |
| Introductory Sociology | 50 | SOCIOL 15 – 3 units | Behavioral Science | 3 units Area D10 | 3 | N/A | N/A |
| Natural Sciences | 50 | No equivalent – N/A | N/A | 3 units Area B1 or B2 | 3 | N/A | N/A |
| Pre-Calculus | 50 | No equivalent – N/A | N/A | 3 units Area B4 | 3 | N/A | N/A |
| Principles of Accounting | 50 | No equivalent – N/A | N/A | 0 units N/A | 3 | N/A | N/A |
| Principles of Macroeconomics | 50 | ECON 11 – 3 units | Social Science | 3 units Area D2 | 3 | N/A | N/A |
| Principles of Management | 50 | No equivalent – N/A | N/A | 0 units N/A | 3 | N/A | N/A |
| Principles of Marketing | 50 | No equivalent – N/A | N/A | 0 units N/A | 3 | N/A | N/A |
| Principles of Microeconomics | 50 | ECON 10 – 3 units | Social Science | 3 units Area D2 | 3 | N/A | N/A |
| Social Sciences & History | 50 | No Equivalent – N/A | N/A | 0 units N/A | 0 | N/A | N/A |
| Spanish Level I | 50 | SPAN 50 – 5 units | N/A | 0 units N/A | 6 | N/A | N/A |
| Spanish Level II | 63 | SPAN 51 – 5 units | N/A | 3 units Area C2 | 12 | N/A | N/A |
| Trigonometry | 50 | No equivalent – N/A | N/A | 3 units Area B4 | 3 | N/A | N/A |
| Western Civilization I | 50 | HIST 34 – 3 units | Social Science | 3 units Area C2 or D6 | 3 | N/A | N/A |
| Western Civilization II | 50 | HIST 35 – 3 units | Social Science | 3 units – Area D6 | 3 | N/A | N/A |

International Baccalaureate Examination

| INTERNATIONAL BACCALAUREATE EXAMINATION (IB) | 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 |
|--|------------------------------|--|---|---|---------------------------------|---------------------------|--------------------------------|
| Biology HL | 5,6,7 | No equivalent – N/A | N/A | 3 units Area B2 | 6 | 5B no lab | 5.3 |
| Chemistry HL | 5,6,7 | CHEM 25 – 5 units | Science | 3 units Area B1 | 6 | 5A no lab | 5.3 |
| Economics HL | 5,6,7 | ECON 10 + 11 – 6 units | Social Science | 3 units Area D2 | 6 | 4B | 5.3 |
| Geography HL | 5,6,7 | No equivalent – N/A | N/A | 3 units Area D5 | 6 | 4E | 5.3 |
| History (any region) HL | 5,6,7 | No equivalent – N/A | N/A | 3 units Area C2 or D6 | 6 | 3B or 4F | 5.3 |
| Language A1(Any Language) HL Language A1(French) HL Language A1(Spanish) HL | 4 5,6,7 5,6,7 5,6,7 | Elective credit – 6 units Elective credit – 6 units FRENCH 60 – 5 units SPAN 50 – 5 units | N/A N/A N/A N/A | 3 units Area C2 3 units Area C2 | 6 6 | N/A 3B & 6A | N/A 5.3 |
| Language A2 (Any) HL Language A2(French) HL Language A2(Spanish) HL | 4 5,6,7 5,6,7 5,6,7 | Elective credit – 6 units Elective credit – 6 units FRENCH 60 – 5 units SPAN 50 – 5 units | N/A N/A N/A N/A | 3 units Area C2 3 units Area C2 | 6 6 | N/A 3B & 6A | N/A 5.3 |
| Language B (Any) HL Language B(French) HL Language B(Spanish) HL | 4 5,6,7 5,6,7 5,6,7 | Elective credit – 6 units Elective credit – 6 units FRENCH 60 – 5 units SPAN 50 – 5 units | N/A N/A N/A N/A | 0 units N/A 0 units N/A | 6 6 | N/A 6A | N/A 5.3 |
| Mathematics HL | 4 5,6,7 | No equivalent – N/A No equivalent – N/A | N/A N/A | 3 units Area B4 3 units Area B4 | 6 6 | N/A 2A | N/A 5.3 |
| Physics HL | 5,6,7 | PHYS 15 – 4 units | Science | 3 units Area B1 | 6 | 5A no lab | 5.3 |
| Psychology HL | 5,6,7 | PSYCH 11 – 3 units | Behavioral Science | 3 units Area D9 | 3 | 4I | 5.3 |
| Theatre HL | 4 5,6,7 | DRAMA 15 – 3 units DRAMA 16 – 3 units | Creative Arts Creative Arts | 3 units Area C1 3 units Area C1 | 6 6 | N/A 3A | N/A 5.3 |

Students may receive their first two official transcripts within the Contra Costa Community College District free of charge. A \$5.00 fee will apply to each official transcript after the two free. Rush service is available at an additional fee. Unofficial transcripts are available for \$1.00 from the Admissions & Records Office or the Brentwood Center or may be printed at no charge through WebAdvisor.

Separate transcripts are maintained for each college within the district. Transcript requests processed through the college will only contain academic history for coursework 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, www.mystudentcenter.org. 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 \$46 (beginning Summer 2012) 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 \$201 per unit, in addition to the enrollment fee of \$46 per unit. The non-resident fee for non-U.S. citizens is \$201 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.

Student Union Fee Information

Based on a student vote in a campus election, a student union fee is required of all students (except BOG-A Fee Waiver recipients, with Cal WORKS, TANF, general assistance, and SSI). The fee is \$1.00 per unit, to a maximum of \$10.00 per academic year. The student union fee must be paid at the time of registration. The fee will contribute funding toward the eventual construction and maintenance of a student center in upcoming years.

Student Activity Fee

The Student Activity Fee allows the Los Medanos College Associated Students (student government) to provide scholarships, leadership opportunities, cultural programs and other co-curricular programs for the college. It also funds programs such as the textbook on reserve program that allows students to check out course textbooks for use in the library. Request form before the refund deadline: www.losmedanos.edu/admissions/ActivityFeeRefundForm.pdf.

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 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.

Effective with the start of each term, official transcripts will not be processed for students who have an outstanding debt for the current term.

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 Office. 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 & Records Office. If the student paid by credit card on WebAdvisor, the refund will be processed as a credit to the credit card.

***If you have a new address, please change your address in WebAdvisor prior to dropping classes.**

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.

Parking Fees

Students may purchase a parking permit, valid for one semester. The cost is \$40.00 for automobiles and \$25.00 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. 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 \$3.00. 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 placed on hold.

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 may 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 student veteran's educational plan will be certified for payment of benefits. If the educational objective has changed, the student must request 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 UCs and CSUs colleges only. Students may earn multiple degrees or certificates. Veterans are cautioned that some courses are less than a semester in length and benefits are paid according to time and load. Benefits are paid based on chapter and unit load.

Student veterans must report any change in academic program to the Admissions & 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 whose GPA falls below the required minimum average will be placed on academic probation for a maximum of two semesters/terms. If the veteran 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 & Records Office or from the Veterans Administration Regional office, San Francisco, 1-800-827-1000.

Extended Opportunity Programs & Services (EOPS)

www.losmedanos.edu/eops
925-439-2181 ext 3138, 3131

EXTENDED OPPORTUNITY PROGRAMS & SERVICES (EOPS) is state-funded program that exists to increase the enrollment, retention, persistence, and success rates of low-income students from educationally disadvantage backgrounds. To qualify for EOPS, you must be it a California resident enrolled full-time at LMC who qualifies for a Board of Governor fee waiver (BOG A or B), having earned less than 70 degree-applicable units. By partnering with EOPS, students benefit the academic and financial support services that are above, beyond, and in addition to services available to all LMC students, such as--priority registration, transportation assistance, academic and personal counseling, calculator loans, and book vouchers.

COPERATIVE AGENCIES REOURCES FOR EDUCATION (CARE) is state-funded program that exists to increase the enrollment, retention, persistence, and success of EOPS students who are single head-of-household that personally receive TANF/CalWORKs or are the parent of a child under 14 that is receiving TANF/CalWORKs services. By partnering with CARE, EOPS students benefit from an additional layer of academic and financial support services such as—automotive assistance, grants, personal life development workshops, meal tickets for the LMC cafeteria and childcare provided through LMC Child Study Center.

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; 925-754-7700.

Financial Aid

www.losmedanos.edu/financialaid
925-439-2181 ext 3139

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 (FAFSA).
- Be a U.S. citizen or eligible noncitizen.
- Be enrolled in an eligible program working toward a degree or certificate (an AA degree or transfer program to a 4-year school or a certificate program that meets requirements).
- Have a high school diploma, a GED Certificate, or a home school certificate.
- 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 should be completed beginning January 1 and no later than March 2 to meet priority filing date. Students must reapply each year to continue receiving funding.

- 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 Governors Waiver (BOGW) which waives or refunds your enrollment fees (assuming

you are a California resident). You do not have to file a separate BOGW application.

- 4) If you want only your fees paid or refunded, you can complete the shorter Board of Governors Grant (BOGW) form on-line using CCCApply, www.losmedanos.edu/student-services/finaid/default.asp. Next, click on "BOGW Application."

BOG Fee Waiver Program

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

Students who complete the FAFSA will automatically be considered for the Board of Governors Fee Waiver.

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.

BOGW – B:

You must meet the following income criteria for the 2012-2013 academic year:

| Family Size | 2011 Income |
|--|-------------|
| 1 | \$16,335 |
| 2 | \$22,065 |
| 3 | \$27,795 |
| 4 | \$33,525 |
| 5 | \$39,255 |
| 6 | \$44,985 |
| 7 | \$49,905 |
| 8 | \$56,445 |
| Each Additional Family Member: \$5,610 | |
| All amounts subject to change. | |

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.

BOGW – F:

You must have certification from the California Department of Veteran Affairs

Other Federal and State financial aid programs available at Los Medanos College:

Federal Supplemental Educational Opportunity Grant

Federal Work-Study

Federal Direct 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 will 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 Governors Fee 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.

Warning

If the above conditions are not met during a given semester the student will be placed on Financial Aid Warning for the following semester of attendance. The student will be allowed to receive financial aid during the warning semester. However, if the student fails to meet the satisfactory academic progress standards during the warning 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 and supporting documentation outlining the circumstances to the Office of Financial Aid. 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 there are 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 supporting 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 are the 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 kind of 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 methods, scheduling payment with Department of Education, not Los Medanos College.
- 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 at www.fafsa.ed.gov. 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 required documentation, verification, corrections or new information to the appropriate office.
- Notify the college and lender promptly of changes in your name, permanent mailing address, telephone number or enrollment status.
- Know and comply with the deadlines for applications or reapplications for aid, and understand the school's refund policies.
- Repay your student loans, even if you don't complete your education, can't get a job or aren't happy with your education.
- File for a deferment or forbearance, or change repayment plans if you are at risk of default.
- Complete entrance counseling before you receive your first loan disbursement and exit counseling before you leave school.
- Report in writing to your college financial aid office all additional financial aid resources you receive.

Student Services

Note: Most student services are moving before Fall 2012. Consult appropriate web page or call to confirm a particular service's location.

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

- We encourage student awareness and their full use of student services to help define and achieve their goals.
- We foster student engagement, respect, socially responsible behavior and self-advocacy in a supportive learning environment.
- As Student Services leaders we collaborate with campus and community partners to ensure consistent and quality services.
- As educators and advocates we are committed to understanding and addressing the needs and goals of our students.

Objectives

- Sponsor activities that complement academic programs, enhance personal development, provide opportunities for leadership development, reflect cultural diversity and contribute to the general enrichment of the student and the college community.
- Assist students in exploring career options and defining an educational plan to achieve career and transfer 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.

Admissions & Records

www.losmedanos.edu/admissions

925-439-2181 ext 7500

Admissions & Records assists students with admission and registration-related activities, processes incoming and outgoing transcripts, evaluates coursework for degrees and certificates, and processes faculty rosters. The international student program, military veterans services, and nursing program applications are also handled through this office.

Assessment Center

www.losmedanos.edu/assessment

925-439-2181 ext 3252

The Assessment Center offers an English and math assessment process, required for all students who plan to earn an associate degree or certificate, to transfer to a four-year college, or

to enroll in certain English and math courses. The assessment process is taken on a computer and is available by appointment during scheduled testing hours. The Assessment Center also offers ability to benefit exams for non-high school graduates applying for federal financial aid.

Bookstore at LMC

www.lmcbookstore.net

925-439-2181 ext 3143

925-439-2056

The LMC Bookstore is a self-supporting, institutionally owned enterprise. A percentage of gross sales are distributed to the Associated Students (LMCAS) for events and activities and bookstore profits are to be used for the general benefit of the student body. Thank you for supporting your bookstore!

The LMC Bookstore is your place for official Los Medanos College textbooks, gear and supplies. Buy, sell and rent used and new textbooks, find official LMC clothing, and purchase supplies and gifts. The bookstore is located next to the Cafeteria on level 3 of the College Complex. To view textbook information related to specific classes, order books and other materials online, visit our website.

Textbook Rental Program – over 100 book titles and over 1000 books are available for rent. A valid picture ID, student ID #, e-mail address and Visa or MasterCard are required to rent books.

Payment for Purchases

Purchases may be paid for with cash, MasterCard or Visa. Personal checks are not accepted. An ATM is located in the bookstore for your convenience.

Buy-Back Policy

During the last week of each semester a textbook buy back will be held. The days and hours will be posted online and in the store.

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 book is a one-time use item such as a workbook or loose leaf.
- 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.

Refund Policy

During the first week of each semester 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.
 - No refunds/exchanges on reference books, supplies, food/drink & study aids.
 - Always save your receipt. Refunds/exchanges can only be processed with original cash register receipt.
 - SUMMER SESSION: Refunds/exchanges are issued only during the first 4 days of summer session.
 - SHORT-TERM SESSIONS: Refunds/exchanges are only issued when textbooks are returned within the first 24 hours of the first day of class.
- 5) Refunds/exchanges can only be performed at the main campus Bookstore in Pittsburg, regardless if the original purchase was made at the Brentwood Center or online.

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 8-10 copies of their postings directly to the Office of Student Life (GA-1) or campus mailbox 28 for approval and posting.

Business Services

Paychecks for all student employees are distributed after 12:30 p.m. on the tenth of each month at the Cashier's Office. If the tenth of the month should fall on a Saturday or Sunday, the paychecks will be distributed the Friday before. After 5 business days, paychecks will be mailed to the address of record. Direct deposit stubs are mailed the first day after payday.

Paychecks are only available at the Payroll Window in Business Services Monday-Friday from 10:00 am – 4:30 pm for 5 business days.

Career Center

www.losmedanos.edu/career
925-439-2181 ext 3252

Career development and exploration services are available through LMC's Career Center by appointment and drop in. Students receive personalized assistance that includes career assessments in the areas of interests, personality, skills, and values, resume writing and critique, mock interviewing practice, as well as major and career exploration on the Internet. The Career Center is also a resource to investigate the many occupational programs on campus.

Child Care Services

www.losmedanos.edu/childcare
925-439-2181 ext 3197/3198

LMC provides a wide variety of childcare through the Child Study Center. Programs include:

- Full-day and half-day child care for toddler, preschool, pre-kindergarten and kindergarten children. Children aged 2 to 5 years 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 up-to-date information on schedules and cost, see the college web site under current student resources/child care services.

Counseling Services

www.losmedanos.edu/counseling
925-439-2181 ext 3334
925-513-1625 (Brentwood Center)

The LMC Counseling Department is committed to providing the highest quality counseling services to every student in need of information, guidance and support to achieve her/his educational goal. It is a partner in the educational process that strives to integrate the intellectual, psychological, cultural and social development of students in the context of LMC vision, mission and core values. The department is committed to minimizing educational barriers, enhancing learning activities, and assisting students in exploring and identifying goals in order to achieve success.

Addressing the diverse needs of all students, the Counseling Department offers comprehensive services that promote the development process and foster intercultural competence. The mission of the department is to teach strategies that facilitate student learning so that individuals are better able to solve problems, make decisions, accept responsibility and modify behavior. This program facilitates the students' use of both college and community resources in achieving their goals.

Services Provided:

- 1) Exploration of solutions to personal and educational problems
- 2) Exploration of vocational and career choices
- 3) Exploration of vocational majors offered at LMC
- 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
- 10) Orientation & college success courses such as Career Development and Transfer Planning

Disabled Students Program and Services

www.losmedanos.edu/dsps

925-439-2181 ext 3133

The Disabled Students Program and Services (DSP&S) provides reasonable academic accommodations and auxiliary aids and specialized instruction 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 that adversely affect equal educational opportunity.

Services include specialized instruction, adaptive equipment, assistive technology, sign language interpreting and captioning services, note takers, scribes, textbooks in audio and alternate format, instructional material in alternate format, testing accommodations (including alternate format), educational counseling and planning, and priority registration. All services are elective and must be requested by the student. Some accommodations require advance appointments.

Note: The DSP&S Testing Center will be moving before fall 2012. Please consult our web page or call us to confirm the location of the DSP&S Testing Center.

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.

Food Service

925-439-2181 ext 3311

The LMC Cafe provides food service and is operated by Fresh & Natural. Service is available to the entire college population, as well as to college's student clubs, organizations, and for college-related activities and special events. For information regarding planning special events, please call the number listed above.

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 near the vocational technology area and in the vestibule next to the cafe. Snacks, soft drinks, as well as hot chocolate, tea and coffee are available. Refund requests can be obtained at the switchboard.

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 LMC Counseling Center at 925-439-2181 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 Office of Student Life.

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

InSite and InSite Mail (Student Email)

www.4cd.edu/insite

InSite is the college's customized student portal to campus news, events and reminders, the LMC website, WebAdvisor, and even real-time local weather. Students can access their class schedule, financial aid information, grades, and holds. This is also where students can check for schedule changes, notification of eligibility to register from the waitlist, reminders of class start dates, and online payment receipts. Important alerts will be posted here, such as emergencies and closures.

InSite is the portal to access InSite Mail, the college's official email system to students. Students are responsible for reading and responding to official communications sent to their InSite mail account.

If a student wishes to have email forwarded to another email address, the student may do so, but at his or her own risk. The college district is not responsible for the handling of email by outside vendors. Having email forwarded does not change the individual's responsibility for reading and responding to official communications sent to their InSite mail account.

Matriculation Services

(See Admission and Course Enrollment Section)

Parking

www.losmedanos.edu/parking

All vehicles parked on the campus, whether in a parking lot, gravel lot, or on any perimeter road 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. Session-long permits can be purchased online through the InSite/WebAdvisor link, www.4cd.edu/webadvisor. Daily permits can be purchased at kiosks in the parking lots. Limited parking meters are provided.

Students who park in faculty/staff spaces will be ticketed. Students can park in staff lots after 5 p.m. except in Lot B. These defined areas are indicated on the campus map, which may be picked up at the information desk or in the Police Services Office, on the bottom level of the College 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 a.m. Monday through 5:00 p.m. 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

www.4cd.edu/911

925-439-2181 ext 3228

College Complex, CC1-132

The police staff is available to assist in problems involving unsafe conditions, lost property, personal injury, theft, civil disturbance, etc.

Q Spot: LMC's GLBTQ* Center

www.losmedanos.edu/GandLcenter

925-439-2181 ext 3259

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 checkout.

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

Student Life

Student Life Building, GA-1

www.losmedanos.edu/studentlife

925-439-2181 ext 3266

LMC offers a range of extracurricular activities for students. These 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:

Student Government (LMCAS)

www.losmedanos.edu/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 Senate holds open public meetings every week

and members of the student government are regularly available for consultation in the Office of Student Life.

Student Ambassadors

www.losmedanos.edu/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 college events, providing information and directions during the beginning of each semester, leading campus tours, and holding information sessions for students throughout the year.

Clubs & Organizations

www.losmedanos.edu/clubs

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

www.losmedanos.edu/leadershipprograms

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 discussions, and more. All LMC students are encouraged to participate in the many opportunities provided by the office.

Transfer Center

www.losmedanos.edu/transfer

925-439-2181 ext 3124

The LMC Transfer Center provides a variety of services and information for students planning to transfer to 4-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 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 application essays and scholarships, and financial aid resources. The Transfer Center also coordinates campus visits to selected Bay Area baccalaureate institutions.

The LMC Transfer Center has an extensive library of information regarding UC, CSU, out-of-state and private institutions, historically black colleges and universities, and other reference materials. On-line access to transfer college information is also available. LMC participates in many collaborative programs designed to facilitate the transfer process. Some examples are Transfer Admission Guarantees (TAG's), Concurrent Enrollment programs, the LMC Transfer Academy, and "On-the-Spot" Admissions.

Instructional Services

Athletics

www.losmedanos.edu/athletics

925-439-2181 ext 3121

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.

Biology Learning Center

Science Building, SC-103

www.losmedanos.edu/BLC

925-439-2181 ext 3411

The Biology Learning Center is an integral part of several courses in the biological science curriculum at Los Medanos College. Biology instructors assign learning materials that are found here to students as a regular part of classes. With a plethora of specimens and equipment, reference materials, several dozen student computer workstations, and live help from instructors and other staff, the Biology Learning Center helps students connect with the biological world and succeed in biology courses.

Center for Academic Support

Core Building, CO-300

www.losmedanos.edu/cas

925-439-2181 ext 3176

The Center for Academic Support provides quality academic support to all LMC students as they pursue their particular educational goals in a comfortable intimidation-free environment.

Reading and Writing Consultants

Our Reading and Writing Consultants offer individualized support with reading and writing assignments for all disciplines. Consultants will provide assistance during any phase of the reading and writing process such as reading comprehension, assignment clarification, prewriting, thesis development, organization and more.

Tutoring Services

The mission of LMC's tutoring services is to assist students in becoming critical thinkers as well as independent, self-reflective, lifelong learners. Successful LMC students who are trained as peer tutors provide tutoring. Subject-specific tutoring is available in various labs on campus, including the Center for Academic Support, the Math Lab, the Music Lab, and at the Brentwood Center.

The Professor Is In!

Students who are stumped by class concepts or need advice on tackling a difficult assignment can come see select professors who hold office hours in the Center for Academic Support.

Cooperative Work Experience Education

Core Building, CO 400

www.losmedanos.edu/cwee

925-439-2181 ext 3214

Cooperative Work Experience Education (CWEE) 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.

Drop-In Computer Lab

Core Building, CO 200

www.losmedanos.edu/computerlab

925-439-2181 ext 3307

The Drop-In Computer Lab provides computers and networking resources for students, faculty and staff. Students have the opportunity to sharpen their skills in the operation of microcomputers, apply theory and complete class assignments in any discipline. The lab is staffed by paraprofessionals, student instructional aides, instructors and peer tutors. Lab equipment is constantly updated to reflect the ongoing changes in technology.

Honors Program

www.losmedanos.edu/honors

925-439-2181 ext 3369

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

- Honors courses that 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 that allow students to create and complete independent research projects, in addition to regular course work.
- Transfer agreements with prestigious California universities that 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 received 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.

Visit www.losmedanos.edu/honors for an application for the Honors Program.

Information Technology & Services

Library Building, L2

www.losmedanos.edu/its

925-439-2181 ext 3767

The Information Technology & Services (IT&S) department is located on the upper level of the Library Building. The IT&S Help Desk (near the Media Services sign) provides the following services to current LMC students:

- Student ID cards (one per semester, photo ID and current class schedule are required)
- Check in for the 38 open-access student computers in rooms L-200 and L-214
- The Help Desk is staffed during all hours that the Library is open
- Access to microfilm copies of back issues of newspapers and magazines

The IT&S Help Desk provides the following services for faculty:

- Access to the Scantron reader for grading of Scantron-based tests and quizzes
- Check out of equipment (laptops, camcorders, projectors) for use during LMC instruction or events (a minimum of 24 hours of advanced notice is required)

Library

Library Building, 1st floor

www.losmedanos.edu/library

General Information: 925-439-2181 ext 3320

Reference Desk: 925-439-2181 ext 3275

The Los Medanos College Library aims to serve the college's students, faculty and staff, as well as East Contra Costa County residents by providing its users access to a variety of services, resources and instruction that support and strengthen the instructional programs of the college and the informational and intellectual needs of the community.

Highlights of the Library building include:

- 100 computer stations
- Drop in computer lab for LMC students
- 5 group study rooms
- Seating for 200
- Wireless coverage, including printing from laptops
- 1 full-color and 2 black & white printers with pay-to-print card system
- 2 self-checkout stations
- 2 copy machines

The LMC Library has an in-house book collection of nearly 25,000 volumes, augmented by an additional collection of approximately 35,000 electronic book titles. The library shares its online library catalog with the other two district libraries, Diablo Valley College and Contra Costa College. These two libraries have book collections of 90,000 and 48,000 respectively. Through an interlibrary loan service, LMC students and faculty can readily access these valuable book resources by utilizing a simple request link in the online catalog. The library's media collection includes access to a collection of nearly 500 library owned DVDs and a CD collection of almost 500 titles along with the equipment needed to utilize these resources.

The library also subscribes to popular magazines and local newspapers for users to read in-house, while the library's major avenue for providing students with access to scholarly journals and materials comes from the library's electronic database collection. The Library website provides access to 35 subscription based electronic resources which contain full-text articles from over 5,000 newspapers, magazines, journals and reference materials. LMC students, faculty, and staff can access the electronic resources collection 24 hours a day online. Community members may access these collections from computers on the library's first floor.

A reserve textbook collection is available at the Circulation Desk for limited check out and use in the Library during normal operating hours. This reserve system is designed to meet the needs of students who cannot otherwise afford to purchase required books for general education. The textbooks in the collection come from titles requested by faculty, students and the library staff who make note of textbooks students frequently inquire about.

Librarians are available at the Reference Desk to assist library users needing instruction or assistance researching topics, locating library materials and accessing information from the electronic resources and on the Internet. Librarians provide a variety of instructional services including one-on-one research consultations, library orientations for classes and for-credit information literacy courses.

Math Lab

Math Building, MA-102

www.losmedanos.edu/mathlab

925-439-2181 ext 3326 (ext 6218 Brentwood)

The Math Tutoring and Computer Math Labs are staffed by professors, tutors, and Math Lab Coordinators and are the place for students to get help on lab assignments, course concepts, computer software, and other assignments. The main campus' Math Tutoring Lab offers a study area along with two small rooms for study groups. Each computer in the Computer Math Lab is installed with software used in the most current math courses. A separate quiet study lab offers a noise-free space for students to work (no tutoring occurs in here as a courtesy to other students). There is also a Math Tutoring Lab at the Brentwood Center. This service is limited to LMC students enrolled in the college's math classes.

MESA Program

www.losmedanos.edu/mesa

925-439-2181 ext 3437

The mission of the MESA (Math, Engineering, Science Achievement) Program is to increase the number of educationally disadvantaged students that enroll and graduate in a four-year college or university with a math-based degree in areas such as engineering, the sciences, computer science, and mathematics. The MESA program supports students through mentoring, tutoring, and workshops and by providing them with scholarship and numerous internship opportunities. There are MESA programs throughout the state of California at high schools, community colleges, and four-year colleges and universities. MESA is sponsored by the University of California Office of the President.

Puente Program

www.losmedanos.edu/puente

The mission of the Puente Program 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.

Student Newspaper—The Experience

www.losmedanos.edu/Groups/Journalism

925-439-2181 ext 3357

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.

Umoja Scholars

www.losmedanos.edu/umoja

925-439-2181 ext 3432

The Umoja Scholars Program is committed to enriching, fostering, and nurturing the educational experience of all students, especially African-American and first-generation college students, ultimately preparing them for academic, personal, and professional success beyond Los Medanos College. This program addresses student needs through academic support services and a curriculum that focuses on African-American literature and history as well as contemporary issues facing the African-American community.

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(also CCCCD Governing Board Policy 4002), 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 Complaint Process

The Student Complaint 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). Complaint 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 Complaint Procedures are available in the following locations:

- Office of Student Life, extension 3266
- Office of Instruction, extensions 3105 or 3272
- Information Center, extension 3422
- Counseling Center, extension 3334

Information about the process and related forms are also available online at www.losmedanos.edu.

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 (Ed. 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.

For a complete copy of the Student Code of Conduct, which includes additional information, call 925-439-2181, ext. 3364, or visit the college website at: www.losmedanos.edu/navservices.asp

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 at 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 college buildings, the quad, offices, cafeteria, interior hallways or in those walkways which are not 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. **At LMC, 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, or Math.
- 4) **Attendance/completion of classes.** All 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 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).)

Textbooks

Information on textbooks is located under "Bookstore" on page 19.

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 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 President.
2. The 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 name
 2. Student participation in officially recognized activities and sports, including weight, height, and high school of graduation of athletic team members.
 3. 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 & Records 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 & Records Office of changes of address. Address and phone number changes should be submitted by going into WebAdvisor on the college website, www.losmedanos.edu. Students who are also working as employees of the college should submit address, phone and/or e-mail changes by the same procedure.

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 2007, a cohort of all certificate-, degree-, and transfer-seeking first-time, full-time students with a declared program of study 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, 21.17 percent attained a certificate or degree or became 'transfer prepared' during a three-year period, from Fall 2007 to Spring 2010. Students who are 'transfer-prepared' have completed 60 transferable units with a GPA of 2.0 or better.

Based on the cohort defined above, 12.05 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 2008 to Spring 2010.

College Transfer Requirements



Section 2

Transfer Information

Many students will transfer to a four-year college or university after completing their freshmen 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 an 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 an 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, call 925-439-2181 ext 3124, or visit www.losmedanos.edu/transfer.

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 an 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 or if they are accepting 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/transfer.

The University of California 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 Agreements/Guarantee

Some universities offer a program that guarantees students admission to a specific major as a junior if they complete the specified requirements. Participating universities include many University of California campuses and a variety of private universities.

To learn about current universities offering transfer guarantees, their specific requirements, and the timeline for completing an agreement, visit the Transfer Center or check online at www.losmedanos.edu/transfer.

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.

Associate Degree for Transfer

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

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

Current and prospective community college students are encouraged to meet with a counselor to review their options for transfer and to develop an educational plan that best meets their goals and needs.

Honors Transfer Admission Agreements

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

The honors transfer partners include UCLA, CSU East Bay, San Francisco State University, Mills College, Saint Mary's College and other public and private universities around the state. For details and a complete list, visit the Honors Program website at www.losmedanos.edu/honors. Or contact Honors Director Jennifer Saito at jsaito@losmedanos.edu or (925)-439-2181 ext 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 2012 – 2013

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-110, 120 | |
| A2 | Written Communication | (3 units) |
| | ENGL-100 | |
| A3 | Critical Thinking | (3 units) |
| | PHIL-041, ENGL-220, ENGL-221, SPCH-120 | |

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-010 | |
| | CHEM-006, 007, 008, 025, 026, 028, 029 | |
| | ENVSCI-010 | |
| | GEOG-015 | |
| | GEOL-020 | |
| | PHYS-015, 035, 036, 040, 041, 042 | |
| | PHYSC-005 | |
| B2 | Life Science | (3-6 units) |
| | BIOSC-007, 010, 020, 021, 040, 045, 050 | |
| B3 | Laboratory Activity | |
| | ASTRO-010 and 011 | |
| | BIOSC-007, 010, 020, 021, 040, 045, 050 | |
| | CHEM-006, 007, 008, 025, 026, 028, 029 | |
| | ENVSCI-010 | |
| | GEOG-015 | |
| | GEOL-020 | |
| | PHYS-015, 035, 036, 040, 041, 042 | |
| B4 | Mathematics/Quantitative Reasoning | (3-4 units) |
| | Satisfactory completion qualifies for exemption from the ELM examination requirements. | |
| | MATH-032, 034, 035, 037, 038, 040, 050, 060, 070, 075, 080 | |

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-005, 006, 007, 008, 009 | |
| | DRAMA-015, 016, 070 | |
| | HUMAN-040 | |
| | MUSIC-010, 012, 015 | |
| | SPAN-060 | |
| C2 | Humanities | (3-6 units) |
| | CHIN-030, 040 | |
| | DRAMA-030 | |
| | ENGL-127, 128, 129, 132, 133, 205, 230, 231 | |
| | FILIP-060, 061, | |
| | FRNCH-060, 061, 062 | |
| | HUMAN-003, 019, 020, 021, 022, 024, 030 | |
| | ITAL-060, 061, 062 | |
| | PHIL-002, 033, 040, 042 | |
| | POLSC-033 | |
| | SPAN-049, 050, 051, 052, 053 | |
| | SIGN-065, 066, 067, 068 | |

AREA D Social, Political, and Economic Institution 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-005, 006, 007 |
| D2 | Economics ECON-010, 011 |
| D3 | Ethnic Studies HIST-046, 047, 049, 052 SOCSC-045, SPCH-150 |
| D4 | Gender Studies PSYCH-014 |
| D6 | History ECON-005, HIST-029, 030, 031, 033, 034, 035, 038, 039, 040, 047 |
| D7 | Interdisciplinary Social or Behavioral Science JOURN-035, CHDEV-010, 020, SPCH-130, 150 |
| D8 | Political Science, Government & Legal Institutions ENGL-003, PHIL-033, POLSC-010, 020, 033, 043 |
| D9 | Psychology PSYCH-010, 011, 014, 017 |
| D10 | Sociology and Criminology SOCIO-015, 016, 017 |

AREA E Lifelong Understanding and Self-Development

Minimum of one course, 3 units.

ANTHR-007, BIOSC-005, CHDEV-010, EDUC-010, PSYCH-012, 014

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-010, POLSC-020 **Group B:** ECON-005, HIST-029, HIST-030

IGETC: Intersegmental General Education Transfer Curriculum 2012 – 2013

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-110, 120

AREA 2 Mathematical Concepts and Quantitative Reasoning

One course required (3 semester units minimum).

MATH-034, 035, 037, 038, 040, 050, 060, 070, 075, 080

Math 037 and 050 combined: credit for one course only.

Math 034 and 038 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-005, 006, 007, 008, 009

DRAMA-015, 016, 070, HUMAN-040, MUSIC-010, 015

3B **Humanities:** CHIN-040, DRAMA-030, ENGL-127, 128, 129, 132, 133, 200, 201, 202, 205, 231, FILIP-061, FRNCH-061, 062, HUMAN-019, 020, 021, 022, 024, 030, 040, ITAL-061, MUSIC-012, PHIL-002, 033, 040, 042, POLSC-033, SIGN-066, 067, 068, SPAN-051, 052, 053

ENGL-127, ENGL-133, MUSIC-012 satisfies American Cultures Requirement, UC Berkeley.

Please check with the Counseling Department for up-to-date information.

The current list of all CSU and UC transferable courses may be found at 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-005, 006, 007

4B **Economics:** ECON-010, 011

4C **Ethnic Studies:** HIST-046, SOCSC-045, SPCH-150

4D **Gender Studies:** PSYCH-014

4F **History:** ECON-005, HIST-029, 030, 031, 033, 034, 035, 038, 039, 040, 049

4G **Interdisciplinary, Social and Behavioral Sciences:** CHDEV-010, HIST-047, 052, JOURN-035, POLSC-043, SPCH-130

4H **Political Science, Government and Legal Institutions:** ENGL-003, PHIL-033, POLSC-010, 020, 033

4I **Psychology:** PSYCH-010, 011, 014, 017, SOCIO-017

4J **Sociology and Criminology:** SOCIO-015, 016

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-010, 011, CHEM-006, 008, 025, 026, 028, 029, ENVSCI-010, GEOG-015, GEOL-020, PHYS-015, 035, 036, 040, 041, 042, PHYSC-005

5B **Biological Science:** BIOSC-007, 010, 020, 021, 040, 045, 050

All science courses listed above include lab activity, except for: PHYSC-005 and ASTRO-010. ASTRO-011 may be completed along with ASTRO-010 for lab activity credit.

No credit for BIOSC-010 if taken after BIOSC-020.

No credit for CHEM-006 if taken after CHEM-025.

No credit for PHYS-015 if taken after PHYS-035.

No credit for PHYSC-005 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-030, 040; FILIP-060; FRNCH-060, 061, 062; ITAL-060, 061; SIGN-065, 066, 067, 068; SPAN-050, 051, 52, 53

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-010, 020

Group B: ECON-005, HIST-029, HIST-030

Graduation Requirements



Section 3

Associate Degree and Certificate Requirements

Preparing for Graduation

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: Summer-July 1, Fall-Oct. 1, and Spring-March 1. Petitions are available in the Admissions & Records Office or 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 can be submitted once requirements are completed.

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 six weeks after the end of the term in which requirements are completed.

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.

Requirements for the Associate Degrees for Transfer

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

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

To view the most current list of Los Medanos College Associate Degrees for Transfer and to find out which CSU campuses accept each degree, please go to www.sb1440.org.

Current and prospective community college students are encouraged to meet with a counselor to review their options for transfer and to develop an educational plan that best meets their goals and needs.

Associate Degree 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 career technical programs. The Associate in Arts Degree is awarded for all other majors. Students may earn multiple degrees.

American Institutions and Ideals

The American Institutions and Ideals requirement for some associate degrees may be cleared by earning a passing grade in POLSC 10 or POLSC 20.

Ethnic/Multicultural Studies

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. Students may earn multiple certificates.

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, Automotive Technology, Business, Child Development, Computer Science, Emergency Medical Services, English, Fire Technology, Foreign Language, Management and Supervision, Real Estate and Travel Marketing. 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 ensure 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, 30 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 10, 40, 49, 60, 90 or 91; or
- 2) "C" grade or better in BUS 18, 35, 65, 83, 87; 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 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). *

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

OR

- 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.

Associate Degrees for Transfer

- Students complete sixty transferrable units that include the IGETC or CSU GE Breadth pattern and 18 units in a major or area of emphasis.

As of this catalog printing, LMC has four Associate Degrees for Transfer:

Communication Studies
Early Childhood Education
Psychology
Sociology

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

2012 - 13

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, JOURN-010, SPCH-038, SPCH-040, 120, 130, 150

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-005, 007, 010

or

Physical: ASTRO-010, ENGIN-010, ENVSCI-010,
GEOG-015, GEOL-020, PHYS-015, PHYSC-005

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-005, 006, 007, 008, 009
DRAMA-015, 016, 070, MUSIC-010, 012, 015

Humanities: PHIL-002*, 033, 040, 042, HUMAN-019, 020,
021, 022, 024, 030, 040, JOURN-035,
ENGL 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-005, 006, 007, CHDEV-010-050, PSYCH-010, 011, SOCIO-015,
016

Social Science/American Institutions & Ideals 6 Units

COMPLETE TWO COURSES: (ONE FROM GROUP A AND ONE FROM GROUP B)

Group A: POLSC-010, 020

Group B: ADJUS-120, ECON-005, 010, 011,
HIST-029, 030, 031, 033, 034, 035, 038, 039, 040,
POLSC-033, 043, SOCSC-045

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

Graduation & Competency Requirements

Computer Literacy 1.5-4 Units

PASS PROFICIENCY EXAM

or

COMPLETE ONE OF:

BUS-018, 035, 065, COMSC-040, 049, 060, 090, 091

Ethical Inquiry 3 Units

COMPLETE ONE OF:

PHIL-002*

*or completion of Registered Nursing Program

Ethnic/Multicultural Studies 3 Units

COMPLETE ONE OF:

CHDEV-050, DRAMA-015, 030, ENGL-127, 128, 129, 133,
HIST-046, 047, 052, SOCSC-045, SPCH-150

Health Education 3 Units

COMPLETE:

BIOSC-005

or

Registered Nursing, Vocational Nursing

Mathematics 3-4 Units

PASS PROFICIENCY EXAM

or

COMPLETE:

MATH-026, MATH-030 or higher

Physical Education 2 Units

COMPLETE TWO UNITS OF

Activity courses in Administration of Justice, Athletics, Fire or
Physical Education

(Does not include lecture/theory courses)

Reading – Writing 3 Units

This course will also satisfy 3 units of the CSU requirement in Area A

COMPLETE:

ENGL-100

LMC Programs of Study

| PROGRAMS OF STUDY | College Skills Certificate | Certificate of Achievement | Associate Degree | PROGRAMS OF STUDY | College Skills Certificate | Certificate of Achievement | Associate Degree |
|---|----------------------------|----------------------------|------------------|--|----------------------------|----------------------------|------------------|
| Administration of Justice | • | | AS | Computer Science | | | AS |
| Anthropology | | | AS | Computer Support Specialist | | | AS |
| Appliance Service Technology | | • | AS | Computer Support Specialist (Advanced) | | • | |
| Heating, Ventilation & Air Conditioning | • | | | Computer Support Specialist (Basic) | | • | |
| Electrical Appliance Technician | • | | | Core Competencies | • | | |
| Refrigeration Technician | • | | | Foundation | • | | |
| Art | | | | Game Design | • | | |
| Fine Arts | | | AA | Microcomputer Systems Specialist | | • | |
| Graphic Communications | | • | AA | Networking and Security | | | AS |
| Automotive Technology | | • | AS | Networking and Security (Advanced) | | • | |
| Air Conditioning Specialist | • | | | Networking and Security (Basic) | • | | |
| Automotive Chassis Specialist | • | | | PC Repair Technician (A+ Certification) | • | | |
| Engine Performance | • | | | Web Design | • | | |
| Engine Repair & Machining Specialist | • | | | Electrical/Instrumentation Technology | | • | AS |
| Smog Technician Specialist | • | | | Emergency Medical Services | • | | |
| Transmission Specialist | • | | | Engineering | | | AS |
| Biological Science | | | AS | Environmental Science | | | AS |
| Business | | | | Fire Technology | | • | AS |
| Accounting | | • | AS | Fire Academy | • | • | |
| Accounting Clerk/Bookkeeper | • | | | Journalism | | | AA |
| Administrative Assistant | • | | | Liberal Arts | | | AA |
| Basic Clerical | • | | | Arts/Humanities | | | AA |
| Basic Medical Clerical/Medical Records Clerk | • | | | Behavioral/Social Science | | | AA |
| Business Computer Skills | • | | | Math/Science | | | AA |
| Business Literacy Skills | • | | | Management and Supervision | | • | AS |
| Business Transfer Preparation | • | | | Communication Skills for Managers | • | | |
| Entrepreneurship/Small Business Start-up | • | | | Decision-Making Skills for Managers | • | | |
| Front Office/Medical Billing / Medical Coding | • | | | Human Resource Management Skills | • | | |
| Fundamental Business Skills | • | | | Leadership Skills for Managers | • | | |
| Legal Secretary | • | | | Planning Skills for Managers | • | | |
| Medical Transcription | • | | | Mathematics | | | AS |
| Office Administration | • | • | AS | Music | | | AA |
| Retail Management | | • | | Commercial Music – Business Management | | • | |
| Small Business Operations | • | • | AS | Commercial Music – Performance | | • | |
| Chemistry | | | AS | Nursing | | | |
| Child Development | | • | AS-T* | Registered | | | AS |
| Assistant | • | | | Vocational | | • | |
| Associate Teacher | • | | | Process Technology | | • | AS |
| Curriculum in Early Childhood Education | • | | | Psychology | | | AA-T* |
| Infant Toddler Care | • | | | Real Estate | • | • | AS |
| School-Age Child Care | • | | | Recording Arts | • | • | AA |
| School-Age Development & Education | • | | | Sign Language | • | | |
| School-Age Associate Teacher | • | | | Sociology | | | AA-T* |
| Site Supervisor/ Program Director | • | | | Spanish | • | | |
| Special Needs Care & Education | • | | | Travel Marketing | • | • | AS |
| Communication Studies | | | AA-T* | Cruise Specialist | • | | |
| | | | | Home-Based Travel Specialist | • | | |
| | | | | Welding Technology | | • | AS |

See the Los Medanos College Catalog for information on LMC program requirements.

*Degrees designed especially for those who plan to transfer to a four-year college or university.

Administration of Justice

DEGREES—Associate of Science
Administration of Justice

COLLEGE SKILLS CERTIFICATES

Basic Law Enforcement Academy I
Basic Law Enforcement Academy II
Basic Law Enforcement Academy Module I
Basic Law Enforcement Academy Module II
Basic Law Enforcement Academy Module III
Criminal Investigations Specialist
Criminal Law Specialist

For the Associate of Science Degree in Administration of Justice, complete the units of coursework listed below as well as the 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-042 | Introduction to Corrections | 3 |
| ADJUS-120 | Introduction to the Criminal Justice System | 3 |
| ADJUS-121 | Criminal Law | 3 |
| ADJUS-122 | Criminal Procedures | 3 |
| ADJUS-130 | Cultural Diversity in Criminal Justice | 3 |
| ADJUS-221 | Introduction to Criminal Evidence | 3 |
| TOTAL UNITS | | 18 |

AND SELECT A MINIMUM OF 12 UNITS FROM:

| | | |
|--|---------------------------------------|-----------|
| ADJUS-043 | Parole and Probation | 3 |
| ADJUS-150A | Basic Criminal Investigation | 3 |
| ADJUS-150B | Advanced Criminal Investigation | 3 |
| ADJUS-151 | Basic Drug Laws and Investigation | 3 |
| ADJUS-152 | Gang Theory, Practice and Suppression | 3 |
| ADJUS-222 | Juvenile Law and Procedures | 3 |
| ADJUS-260 | Patrol Procedures | 3 |
| ADJUS 900* | Selected Topics | 3 |
| TOTAL UNITS REQUIRED IN MAJOR COURSES | | 30 |

* 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

Basic Law Enforcement Academy I

| REQUIRED COURSE: | | UNITS |
|--|---------------------------------|-----------|
| ADJUS-005A | Basic Law Enforcement Academy I | 15 |
| TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE | | 15 |

Basic Law Enforcement Academy II

| REQUIRED COURSE: | | UNITS |
|--|--|-----------|
| ADJUS-005B | Basic Law Enforcement Academy Module III | 10 |
| TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE | | 10 |

Basic Law Enforcement Academy Module I

| REQUIRED COURSE: | | UNITS |
|--|--|----------|
| ADJUS-001 | Basic Law Enforcement Academy Module I | 6 |
| TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE | | 6 |

Basic Law Enforcement Academy Module II

| REQUIRED COURSE: | | UNITS |
|--|---|----------|
| ADJUS-002 | Basic Law Enforcement Academy Module II | 9 |
| TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE | | 9 |

Basic Law Enforcement Academy Module III

| REQUIRED COURSE: | | UNITS |
|--|--|----------|
| ADJUS-003 | Basic Law Enforcement Academy Module III | 6 |
| TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE | | 6 |

Criminal Investigations Specialist

| REQUIRED COURSES: | | UNITS |
|--|---|-----------|
| ADJUS-120 | Introduction to the Criminal Justice System | 3 |
| ADJUS-121 | Criminal Law | 3 |
| ADJUS-221 | Introduction to Criminal Evidence | 3 |
| ADJUS-150A | Basic Criminal Investigation | 3 |
| ADJUS-150B | Advanced Criminal Investigation | 3 |
| TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE | | 15 |

Criminal Law Specialist

| REQUIRED COURSES: | | UNITS |
|--|---|-----------|
| ADJUS-120 | Introduction to the Criminal Justice System | 3 |
| ADJUS-121 | Criminal Law | 3 |
| ADJUS-221 | Introduction to Criminal Evidence | 3 |
| ADJUS-122 | Criminal Procedure | 3 |
| TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE | | 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 life skills, the Anthropology major can be used to augment career success in Business, Mental Health, as well as Medical and Social Service occupations. The major in Anthropology also prepares students for further study at a four-year institution.

continued on next page ►

Graduation Requirements

For the Associate of Science Degree in Anthropology, complete the units of coursework listed below as well as the 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 TWO COURSES IN ANTHROPOLOGY FROM: | | UNITS |
|---|--------------------------------|----------|
| ANTHR-005 | General Anthropology | 3 |
| ANTHR-006 | Cultural Anthropology | 3 |
| ANTHR-007 | Anthropology of Culture Change | 3 |
| TOTAL UNITS | | 6 |

AND SELECT:

| | | |
|--------------------|---------------------------------|----------|
| PSYCH-010* | Individual and Social Processes | 3 |
| or | | |
| PSYCH-011* | General Psychology | 3 |
| SOCIO-015* | Introduction to Sociology | 3 |
| or | | |
| SOCIO-016* | Introduction to Social Problems | 3 |
| TOTAL UNITS | | 6 |

AND SELECT A MINIMUM OF TWO ELECTIVE COURSES FROM:

| | | |
|--|---------------------------------|--------------|
| PSYCH-010* | Individual and Social Processes | 3 |
| or | | |
| PSYCH-011* | General Psychology | 3 |
| PSYCH-012 | Family Crisis and Growth | 3 |
| PSYCH-014 | Psychology of Human Sexuality | 3 |
| SOCIO-015* | Introduction to Sociology | 3 |
| or | | |
| SOCIO-016* | Introduction to Social Problems | 3 |
| MATH-034 | Probability and Statistics | 4 |
| TOTAL UNITS REQUIRED IN MAJOR COURSES | | 18-19 |

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

Appliance Service Technology

DEGREE—Associate of Science

Appliance Service Technology

CERTIFICATES OF ACHIEVEMENT—Appliance Technology

Appliance Technician I

Appliance Technician II

COLLEGE SKILLS CERTIFICATES—Appliance Technology

Heating, Ventilation & Air Conditioning Specialist

Electrical Appliance Technician

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 pre-

pared for entry-level positions in the appliance service field, with sufficient back-ground to support a rapid transition to the field technician level.

Associate of Science Degree in Appliance Service Technology

For the Associate of Science Degree in Appliance Service Technology, complete 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.

| REQUIRED COURSES: | | UNITS |
|--|--|------------------|
| APPLI-013 | Beginning Electrical Appliances Tech I | 3 |
| or | | |
| APPLI-015 | Electrical Appliances I | 4 |
| APPLI-014 | Advanced Electrical Appliances Tech I | 3 |
| or | | |
| APPLI-016 | Electrical Appliances II | 4 |
| APPLI-023 | Basic Refrigeration Tech I | 3 |
| or | | |
| APPLI-025 | Refrigeration I | 4 |
| APPLI-024 | Advanced Refrigeration Tech I | 3 |
| or | | |
| APPLI-026 | Refrigeration II | 4 |
| APPLI 020 | Electrical Appliances Shop Practice | 1 |
| APPLI-030 | Refrigeration Shop Practice | 1 |
| APPLI-035 | Appliance Shop Practice-Intermediate | 1 |
| APPLI-036 | Appliance Shop Practice-Advanced | 1 |
| APPLI-046 | Principles and Repair of Microwave Ovens | .5 |
| ACREF-045 | Basic Heating & Cooling | 2 |
| TOTAL UNITS REQUIRED IN MAJOR COURSES | | 18.5-22.5 |

Certificate of Achievement – Appliance Service Technology

For the Certificate of Achievement in Appliance Service Technology, 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.

Appliance Technician I (primarily an evening program)

| REQUIRED COURSES: | | UNITS |
|--|--|-------------|
| APPLI-013 | Beginning Electrical Appliances Tech I | 3 |
| APPLI-014 | Advanced Electrical Appliances Tech I | 3 |
| APPLI 020 | Electrical Appliances Shop Practice | 1 |
| APPLI-023 | Basic Refrigeration Tech I | 3 |
| APPLI-024 | Advanced Refrigeration Tech I | 3 |
| APPLI-030 | Refrigeration Shop Practice | 1 |
| APPLI-035 | Appliance Shop Practice-Intermediate | 1 |
| APPLI-036 | Appliance Shop Practice-Advanced | 1 |
| APPLI-046 | Principles and Repair of Microwave Ovens | .5 |
| ACREF-045 | Basic Heating & Cooling Technology | 2 |
| TOTAL UNITS REQUIRED IN MAJOR COURSES | | 18.5 |

Appliance Technician II (primarily a day program)

| REQUIRED COURSES: | | UNITS |
|--|--------------------------------------|-----------|
| APPLI-015 | Electrical Appliances I | 4 |
| APPLI-016 | Electrical Appliances II | 4 |
| APPLI-020 | Electrical Appliance Shop Practice | 5 |
| APPLI-025 | Refrigeration I | 4 |
| APPLI-026 | Refrigeration II | 4 |
| APPLI-030 | Refrigeration Shop Practice | 5 |
| APPLI-035 | Appliance Shop Practice-Intermediate | 5 |
| APPLI-036 | Appliance Shop Practice-Advanced | 5 |
| TOTAL UNITS REQUIRED IN MAJOR COURSES | | 36 |

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**Heating, Ventilation & Air Conditioning Specialist**

| REQUIRED COURSES: | | UNITS |
|--|--|-------------|
| APPLI-023 or APPLI-024 | Basic Refrigeration Tech I | 3 |
| ACREF-045 | Advanced Refrigeration Tech I | 3 |
| ACREF-073 | Basic Heating & Cooling | 2 |
| ACREF-075 | Basic Refrigeration R1A | 2 |
| ACREF-076 | HVAC Tech H1A Heating Technology | 2 |
| ACREF-077 | Basic HVAC H1B Air Conditioning Repair | 2 |
| ACREF-077 | Air Distribution (Duct) Testing & Repair | 2 |
| ACREF-078 | HVAC AH1B Residential Load Calculation and Duct Design | 1.5 |
| TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE | | 14.5 |

Electrical Appliance Technician

| REQUIRED COURSES: | | UNITS |
|--|--|----------|
| APPLI-013 or 15 | Electrical Appliances I | 3 |
| APPLI-014 or 16 | Electrical Appliances II | 3 |
| APPLI-020 | Electrical Appliances Shop Practice | 1 |
| APPLI-035 or 36 | Electrical Appliances Adv. Shop Practice | 1 |
| TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE | | 8 |

Refrigeration Technician

| REQUIRED COURSES: | | UNITS |
|--|--------------------------------------|-------------|
| APPLI-023 or APPLI-025 | Basic Refrigeration Tech I | 3 |
| APPLI-024 or APPLI-026 | Refrigeration I | 4 |
| APPLI-024 or APPLI-026 | Advanced Refrigeration Tech I | 3 |
| APPLI-026 | Refrigeration II | 4 |
| APPLI-030 | Refrigeration Shop Practice | 1 |
| APPLI-035 or APPLI-036 | Appliance Shop Practice-Intermediate | 1 |
| APPLI-036 | Appliance Shop Practice-Advanced | 1 |
| TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE | | 8-10 |

Art

DEGREES—Associate of Arts

Fine Arts

Graphic Communications

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 of Arts Degree in Fine Arts and Associate of Arts Degree in Graphic Communications

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

| REQUIRED COURSES: | | UNITS |
|---------------------------|---|-----------|
| ART-005 | Visual Arts Concepts | 3 |
| ART-006, 7, 8 or 9 | Western Art History I, II, III or IV | 3 |
| ART-010 | Two-Dimensional Design Concepts | 3 |
| ART-011 | Three-Dimensional Design Concepts | 3 |
| ART-020 | Introduction to Drawing (Fine Arts) | 3 |
| ART-012 | Design Drawing (Graphic Communications) | 3 |
| ART-072 | Introduction to Digital Photography | 3 |
| TOTAL UNITS | | 21 |

Fine Art Electives**SELECT A MINIMUM OF 12 ELECTIVE UNITS FROM:**

| | | |
|--|--|-----------|
| ART-021 | Intermediate Drawing | 3 |
| ART-040 | Introduction to Painting | 3 |
| ART-041 | Intermediate Painting | 3 |
| ART-047 | Color Dynamics in Painting | 1 |
| ART-060 | Ceramic Sculpture | 3 |
| ART-066 | Introduction to Ceramics | 1 |
| ART-067 | Intermediate Ceramics | 3 |
| ART-069 | Ceramic Sculpture | 3 |
| ART-074 | Photo II: Developing a Personal Vision | 3 |
| TOTAL UNITS REQUIRED IN MAJOR COURSES | | 33 |

Graphic Communications Electives**SELECT A MINIMUM OF 12 ELECTIVE UNITS FROM:**

| | | |
|----------------|------------------------------------|---|
| ART-015 | Graphic Design | 3 |
| ART-025 | Advertising and Publication Design | 3 |
| ART-050 | Designing with Adobe InDesign | 3 |

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Graduation Requirements

| | | |
|---------------------------------------|----------------------------------|----|
| ART-054 | Adobe Photoshop | 3 |
| ART-057 | Designing with Adobe Illustrator | 3 |
| ART-085 | Introduction to Animation | 3 |
| ART-086 | Animation and 3D Modeling | 3 |
| TOTAL UNITS REQUIRED IN MAJOR COURSES | | 33 |

Certificate of Achievement in 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 COURSES: | | |
| ART-005* | Visual Arts Concepts | 3 |
| ART-010 | Two-Dimensional Design Concepts | 3 |
| ART-012 | Design Drawing | 3 |
| ART-015 | Graphic Design | 3 |
| ART-025 | Advertising, Marketing, and Publication Design | 3 |
| ART-072 | Introduction to Digital Photography | 3 |
| TOTAL UNITS REQUIRED IN MAJOR COURSES | | 18 |

| | | |
|---|----------------------------------|----|
| AND SELECT A MINIMUM OF 12 ELECTIVE UNITS FROM: | | |
| ART-050 | Designing with Adobe InDesign | 3 |
| ART-054 | Adobe Photoshop | 3 |
| ART-057 | Designing with Adobe Illustrator | 3 |
| ART-085 | Introduction to Animation | 3 |
| ART-086 | Animation and 3D Modeling | 3 |
| JOURN-010 | 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

CERTIFICATE OF ACHIEVEMENT--Automotive Technology

COLLEGE SKILLS CERTIFICATES

- Smog Technician Specialist Certificate
- Air Conditioning Specialist
- Transmission Specialist
- Engine Performance
- Engine Repair & Machining Specialist
- Automotive Chassis 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 Associate of Science Degree in Automotive Technology, complete 24 units of coursework listed below as well as the General Education and Graduation requirements. Consult a Los Medanos College counselor to develop your education plan for the Associate of Science Degree.

For the Certificate of Achievement in 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.

| | | |
|---------------------------------------|---|-----|
| SELECT A MINIMUM OF 18 UNITS FROM: | | |
| AUTO-035 | Automotive Fundamentals | 4 |
| AUTO-037 | Automotive Engine Machining | 4 |
| AUTO-040 | Automotive Engine Diagnosis I | 4 |
| AUTO-041 | Automotive Engine Diagnosis II | 4 |
| AUTO-042 | Automotive Brakes | 4 |
| AUTO-043 | Automotive Suspension and Steering | 4 |
| AUTO-045 | Automotive Laboratory Practice | 1.5 |
| AUTO-046 | Automotive Electricity and Electronics | 4 |
| AUTO-047 | Automotive Heating and Air Conditioning | 4 |
| AUTO-048 | Automatic Transmission and Transaxles | 4 |
| AUTO-049 | Manual Transmission and Differential | 4 |
| AUTO-055 | Clean Air Car Course + OBD II | 3 |
| 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

Smog Technician Specialist

| | | |
|---|--|-------|
| REQUIRED COURSES: | | UNITS |
| AUTO-040 | Automotive Engine Diagnosis I | 4 |
| AUTO-041 | Automotive Engine Diagnosis II | 4 |
| AUTO-046 | Automotive Electricity and Electronics | 4 |
| AUTO-055 | Clean Air Car Course + OBD II | 3 |
| AUTO-057 | Smog Update | .5 |
| TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE | | 15.5 |

Air Conditioning Specialist

| | | |
|---|---------------------------------------|-------|
| REQUIRED COURSES: | | UNITS |
| AUTO-047 | Automotive Heating & Air Conditioning | 3 |
| TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE | | 3 |

Transmission Specialist

| | | |
|-------------------|-------------------------------------|-------|
| REQUIRED COURSES: | | UNITS |
| AUTO-048 | Automatic Transmission & Transaxles | 4 |

| | | |
|--|------------------------------------|----------|
| AUTO-047 | Manual Transmission & Differential | 4 |
| TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE | | 8 |

Engine Performance

| REQUIRED COURSES: | | UNITS |
|--|--|-----------|
| AUTO-035 | Automotive Fundamentals | 4 |
| AUTO-040 | Automotive Engine Diagnosis I | 4 |
| AUTO-041 | Automotive Engine Diagnosis II | 4 |
| AUTO-046 | Automotive Electricity and Electronics | 4 |
| TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE | | 16 |

Engine Repair & Machining Specialist

| REQUIRED COURSES: | | UNITS |
|--|-----------------------------|------------|
| AUTO-035 | Automotive Fundamentals | 4 |
| AUTO-037 | Automotive Engine Machining | 2.5 |
| TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE | | 6.5 |

Automotive Chassis Specialist

| REQUIRED COURSES: | | UNITS |
|--|-----------------------|----------|
| AUTO-042 | Automotive Brakes | 4 |
| AUTO-043 | Automotive Suspension | 4 |
| TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE | | 8 |

Biological Science

DEGREE—Associate of Science

Biological Science

For the Associate of Science Degree in Biological Science, complete the 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-020 | Principles of Biology: Cellular Processes | 5 |
| BIOSC-021 | Principles of Biology: Organismic | 5 |
| TOTAL UNITS | | 10 |
| AND SELECT A MINIMUM OF 8 UNITS FROM: | | |
| BIOSC-007 | Ecology and the Environment* | 4 |
| CHEM-025 | General College Chemistry | 5 |
| CHEM-026 | General College Chemistry | 5 |
| CHEM-028 | Organic Chemistry | 5 |
| CHEM-029 | Organic Chemistry* | 5 |
| MATH-050 | Calculus and Analytic Geometry | 4 |
| MATH-060 | Calculus and Analytic Geometry* | 4 |
| MATH-034 | Introduction to Statistics | 4 |
| PHYS-035 | General College Physics I | 4 |
| PHYS-036 | General College Physics II | 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
Small Business Operations
Office Administration

CERTIFICATES OF ACHIEVEMENT—Business

Accounting
Office Administration
Retail Management
Small Business Operations

COLLEGE SKILLS CERTIFICATES—Business

Fundamental Business Skills
Business Computer Skills
Business Literacy Skills
Basic Clerical
Administrative Assistant
Accounting Clerk/Bookkeeper
Business Transfer Preparation
Entrepreneurship//Small Business Start-Up
Small Business Management and Operations
Basic Medical Clerical/Medical Records Clerk
Front Office/Medical Billing/Medical Coding
Legal Secretary

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 advanced business degrees.

The Business Department offers majors in accounting, 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.

Accounting Associate of Science Degree and Certificate of Achievement

The associate degree and certificate of achievement curriculum in accounting prepare students for entry-level positions and professional

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advancement in public, private, and governmental accounting. Entry-level employment opportunities include 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

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 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 | Financial Accounting+ | 4 |
| BUS-187 | Managerial Accounting+ | 4 |
| BUS-018* | Microsoft Excel for Windows | 3 |
| BUS-109 | Introduction to Business+ | 3 |
| TOTAL UNITS | | 17 |

AND SELECT A MINIMUM OF 6 UNITS FROM:

| | | |
|--|--|---------------|
| BUS-027 | Small Business Management | 3 |
| BUS-294 | Business Law+ | 3 |
| BUS-059** | Business Communications | 3 |
| BUS-091 | Managing/Working in a Diverse Workforce | .5 |
| BUS-092 | Business Ethics | .5 |
| BUS-093 | Dealing with Difficult People | .5 |
| BUS-095 | Developing Customer Service Satisfaction | .5 |
| BUS-096 | Time Management and Goal Setting | .5 |
| BUS-160 | Personal Finance | 3 |
| BUS-170*** | OWEE in Business | 1-2 |
| BUS-900**** | Selected Topics in Business | varies |
| TOTAL UNITS REQUIRED IN MAJOR COURSES | | 23 |

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

**Meets reading/writing competency requirement for Certificate of Achievement.

***Occupational Work Experience Education in Business

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

Small Business Operations Associate of Science Degree and Certificate of Achievement

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 geared 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 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 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 | Financial Accounting+ | 4 |
| BUS-027 | Small Business Management | 3 |
| BUS-035* | Microsoft Office | 3 |
| or | | |
| BUS-035 A/B/C | Microsoft Word/Excel/PowerPoint | 4.5 |
| MANGT-075 | Managing Human Resources+ | 3 |
| TOTAL UNITS | | 12-14.5 |

AND SELECT A MINIMUM OF 17 UNITS- DEGREE; OR 12 UNITS- CERTIFICATE FROM:

| | | |
|--|--|----------------|
| BUS-285 | Tax Accounting+ | 3 |
| BUS-018* | Microsoft Excel for Windows | 3 |
| BUS-109 | Introduction to Business+ | 3 |
| BUS-294 | Business Law+ | 3 |
| BUS-058** | Business English | 3 |
| BUS-059** | Business Communications | 3 |
| BUS-091 | Managing/Working in a Diverse Workforce | .5 |
| BUS-092 | Business Ethics | .5 |
| BUS-093 | Dealing with Difficult People | .5 |
| BUS-095 | Developing Customer Service Satisfaction | .5 |
| BUS-096 | Time Management and Goal Setting | .5 |
| BUS-160 | Personal Finance | 3 |
| BUS 900*** | Selected Topics in Business | varies |
| ART-015 | Graphic Design | 3 |
| COMSC-030 | Web Site Development-Part 1 | 1.5 |
| COMSC-031 | Web Site Development-Part II | 1.5 |
| COMSC-060* | Emerging Microcomputer Technologies | 4 |
| JOURN-035 | Mass Communication | 3 |
| MANGT-050 | Introduction to Supervision+ | 3 |
| MANGT-060 | Making Effective Decisions+ | 3 |
| MANGT-065 | Mastering Management's Essential Tools+ | 3 |
| MANGT-070 | Relating in Human Terms+ | 3 |
| TOTAL UNITS REQUIRED IN MAJOR COURSES | | 24-31.5 |

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

**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).

Office Administration Associate of Science Degree and Certificate of Achievement

The Office Administration Program is designed to provide instruction to 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 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 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-018* | Microsoft Excel for Windows | 3 |
| BUS-047 | Office Procedures and Records Management | 3 |
| BUS-058** | Business English (See Note) | 3 |
| BUS-059** | Business Communication | 3 |
| BUS-065* | Introduction to Word Processing | 3 |
| BUS-091 | Managing/Working in a Diverse Workforce | .5 |
| BUS-092 | Business Ethics | .5 |
| BUS-093 | Dealing with Difficult People | .5 |
| BUS-095 | Developing Customer Service Satisfaction | .5 |
| TOTAL UNITS REQUIRED | | 17 |

SELECT A MINIMUM OF ANY 7 UNITS FROM COURSES BELOW:

| | |
|---|-----------|
| TOTAL UNITS REQUIRED FOR GENERAL OFFICE ADMINISTRATION | 24 |
|---|-----------|

| ELECTIVES: | | UNITS |
|------------------------------|--|-----------|
| BUS 001 | Civil Litigation for Legal Secretaries | 3 |
| BUS 002 | Legal Office Procedures & Records Mangt. | 3 |
| BUS 029 | QuickBooks | 2 |
| BUS 035C | Microsfot Office PowerPoint | 1.5 |
| BUS 045 | Office Accounting Essentials | 3 |
| BUS 080 | Ten-key/Data Entry Skills | 1 |
| BUS 081 | Office Accounting Essentials-A/R & AP | 3 |
| BUS 082 | Payroll 1 | 3 |
| BUS 083 | Basic CPT and ICD-9CM Coding | 3 |
| BUS 086 | Medical Terminology | 3 |
| BUS 087 | Medical Transcription I | 1 |
| BUS 088 | Patient Billing/Accounting | 2 |
| BUS 090 | Advanced Patient Billing | 2 |
| BUS 096 | Time Management & Goal Setting | .5 |
| BUS 098 | Independent Study | 1-3 |
| BUS 181 | Accounting: Applied Principles | 3 |
| BUS 185 | Computer Assisted Accounting+ | 3 |
| BUS 186 | Financial Accounting+ | 4 |
| MANGT 050 | Introduction to Supervision+ | 3 |
| MANGT 060 | Making Effective Decisions+ | 3 |
| MANGT 065 | Mastering Mangt's Essential Tools | 3 |
| MANGT 070 | Relating in Human Terms+ | 3 |
| MANGT 075 | Managing Human Resources | 3 |
| TOTAL UNITS REQUIRED: | | 24 |

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

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

**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-058.

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 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: | | UNITS |
|--|--|--------------|
| BUS-003* | Business Math | 3 |
| or | | |
| MATH-007 | Self-Paced Arithmetic Skills | 3-3.5 |
| or | | |
| MATH-009 | Arithmetic Skills with Applications | 4 |
| BUS-181 | Accounting: Applied Principles | 3 |
| or | | |
| BUS-186 | Financial Accounting | 4 |
| BUS-026^a | Retailing Operations | 3 |
| BUS-033^{aa} | Marketing | 3 |
| BUS-035** | Microsoft Office | 3 |
| or | | |
| BUS-035A/B/C | Microsoft Office Word/Excel/Powerpoint | 3 |
| or | | |
| BUS-018 | Microsoft Excel for Windows | 3 |
| or | | |
| COMSC-060 | Emerging Microcomputer Technologies | 4 |
| BUS-058 | Business English | 3 |
| BUS-059*** | Business Communications | 3 |
| MANGT-050 | Introduction to Supervision | 3 |
| MANGT-070 | Relating in Human Terms | 3 |
| MANGT-075 | Managing Human Resources | 3 |
| TOTAL REQUIRED UNITS IN MAJOR COURSES | | 30-32 |

*Meets mathematics competency requirement for Certificate of Achievement

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

***Meets reading/writing competency requirement for Certificate of Achievement.

^a Currently not offered at LMC, can be taken at DVC (BUSMK256) or Las Positas (Marketing 50).

^{aa} Currently not offered at LMC, can be taken at Las Positas (Marketing 60).

Note: Students who have completed English-100 are not required to complete BUS-058.

College Skills Certificates in Business

Currently, the Business Department offers 13 College Skills Certificates. 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. As students acquire knowledge and build career skills, they can earn one or more Skills Certificates.

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Graduation Requirements

Fundamental Business Skills

| REQUIRED COURSES: | | UNITS |
|---|------------------|-------|
| BUS-003 | Business Math | 3 |
| BUS-058** | Business English | 3 |
| TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE | | 6 |

Business Computer Skills

| REQUIRED COURSES: | | UNITS |
|---|---------------------------|-------|
| BUS-035* | Microsoft Office | 3 |
| BUS-051 | Computer Keyboarding | 1 |
| BUS-080 | Ten Key/Data Entry Skills | 1 |
| TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE | | 5 |

Business Literacy Skills

| REQUIRED COURSES: | | UNITS |
|---|--------------------------|-------|
| BUS-109 | Introduction to Business | 3 |
| BUS-160 | Personal Finance | 3 |
| TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE | | 6 |

Basic Clerical

| REQUIRED COURSES: | | UNITS |
|---|---|-------|
| BUS-047 | Office Procedures | 3 |
| BUS-055 | Typing Speed/Accuracy Development | 1 |
| BUS-065* | Introduction to Word Processing | 3 |
| BUS-091 | Managing/Working in a Diverse Workforce | .5 |
| TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE | | 7.5 |

Note: Students should complete the Basic Clerical Certificate before pursuing a Administrative Assistant Certificate.

Administrative Assistant

| REQUIRED COURSES: | | UNITS |
|---|-----------------------------|-------|
| BUS-059** | Business Communications | 3 |
| MANGT-050 | Introduction to Supervision | 3 |
| BUS-018* | Microsoft Excel for Windows | 3 |
| TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE | | 9 |

Accounting Clerk/Bookkeeper

| REQUIRED COURSES: | | UNITS |
|-------------------|--------------------------------|-------|
| BUS-018* | Microsoft Excel for Windows | 3 |
| BUS-181 | Accounting: Applied Principles | 3 |
| BUS-185 | Computer Assisted Accounting | 3 |
| TOTAL UNITS | | 9 |

AND SELECT A MINIMUM OF 3 UNITS FROM:

| | | |
|---|---|----|
| BUS-045 | Office Accounting Essentials | 3 |
| BUS-082 | Payroll 1 | 3 |
| BUS-081 | Office Accounting Essentials: A/R & A/P | 3 |
| TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE | | 12 |

Business Transfer Preparation

| REQUIRED COURSES: | | UNITS |
|---|-----------------------------|-------|
| BUS-186 | Financial Accounting | 4 |
| BUS-187 | Managerial Accounting | 4 |
| BUS-109 | Introduction to Business | 3 |
| BUS-294 | Business Law | 3 |
| BUS-018* | Microsoft Excel for Windows | 3 |
| or | | |
| BUS-035* | Microsoft Office | 3 |
| TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE | | 17 |

Entrepreneurship/Small Business Start-Up

| REQUIRED COURSES: | | UNITS |
|---|--------------------------------|-------|
| BUS-018* | Microsoft Excel for Windows | 3 |
| BUS-027 | Small Business Management | 3 |
| BUS-181 | Accounting: Applied Principles | 3 |
| BUS-029 | QuickBooks | 2 |
| TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE | | 11 |

Small Business Management and Operations

| REQUIRED COURSES: | | UNITS |
|-------------------|---------------------------|-------|
| BUS-027 | Small Business Management | 3 |
| BUS-294 | Business Law | 3 |
| MANGT-075 | Managing Human Resources | 3 |
| TOTAL UNITS | | 9 |

AND SELECT A MINIMUM OF 3 UNITS FROM:

| | | |
|-------------|---|---|
| BUS-081 | Office Accounting Essentials: A/R & A/P | 3 |
| BUS-082 | Payroll I | 3 |
| BUS-045 | Office Accounting Essentials | 3 |
| TOTAL UNITS | | 3 |

AND SELECT A MINIMUM OF 3 UNITS FROM:

| | | |
|---|--|----|
| MANGT-050 | Introduction to Supervision | 3 |
| MANGT-060 | Making Effective Decisions | 3 |
| MANGT-065 | Mastering Management's Essential Tools | 3 |
| MANGT-070 | Relating in Human Terms | 3 |
| TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE | | 15 |

Basic Medical Clerical/Medical Records Clerk

| REQUIRED COURSES: | | UNITS |
|---|--|-------|
| BUS-084 | Medical Office Procedures/ Records Management | 2 |
| BUS-086 | Medical Terminology | 3 |
| BUS-089 | Medical Law & Ethics for the Medical Office | 1 |
| BUS-091 | Managing/Working in a Diverse Workplace | .5 |
| BUS-093 | Dealing with Difficult People | .5 |
| TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE | | 7 |

Note: Students should complete the Basic Medical Clerical/Medical Records Clerk Certificate before pursuing either a Front Office/Medical Billing Coding or Medical Transcription Certificate.

Front Office/Medical Billing/Medical Coding

| REQUIRED COURSES: | | UNITS |
|--|----------------------------|-----------|
| BUS-059 | Business Communications | 3 |
| BUS-083 | Basic CPT & ICD-9CM Coding | 3 |
| BUS-088 | Patient Billing/Accounting | 2 |
| BUS-090 | Advanced Patient Billing | 2 |
| TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE | | 10 |

Legal Secretary

| REQUIRED COURSES: | | UNITS |
|--|--|-------------|
| BUS 001 | Civil Litigation for Legal Secretaries | 3 |
| BUS-002 | Legal Office Procedures and Records Management | 3 |
| BUS-058** | Business English | 3 |
| BUS-035B/C | Microsoft Office Excel/Powerpoint | 3 |
| BUS-055 | Typing Speed & Accuracy Development | 1 |
| BUS-065* | Introduction to Word Processing | 3 |
| BUS-093 | Dealing with Difficult People | .5 |
| TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE | | 16.5 |

Chemistry

DEGREE–Associate of Science

Chemistry

For the Associate of Science Degree in Chemistry, complete the coursework listed below as well as the 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-025 | General College Chemistry | 5 |
| CHEM-026 | General College Chemistry | 5 |
| CHEM-028 | Organic Chemistry | 5 |
| CHEM-029 | Organic Chemistry | 5 |
| MATH-050 | Calculus and Analytic Geometry I | 4 |
| MATH-060 | Calculus and Analytic Geometry II | 4 |
| MATH-070 | Calculus and Analytic Geometry III | 4 |
| PHYS-040 | Physics for Scientists and Engineers I | 4 |
| PHYS-041 | Physics for Scientists and Engineers II | 4 |
| PHYS-042 | Physics for Scientists and Engineers III | 4 |
| TOTAL UNITS REQUIRED IN MAJOR COURSES | | 44 |

RECOMMENDED ELECTIVE COURSES:

| | | |
|-----------------|------------------------|---|
| MATH-075 | Linear Algebra | 3 |
| MATH-080 | Differential Equations | 3 |

Child Development

DEGREE–Associate in Science for Transfer

Early Childhood Education

**CERTIFICATE OF ACHIEVEMENT–Child Development****COLLEGE SKILLS CERTIFICATES–Child Development**

Assistant

Associate Teacher

Specialization: Infant Toddler Care

Specialization: Curriculum in Early Childhood Education

Specialization: Special Needs Care & Education

Specialization: Site Supervisor/Program Director

Specialization: School Age Child Care

School-Age Development and Education

School-Age Associate Teacher

Certificate of Achievement–Child Development

For the Certificate of Achievement in Child Development, complete 27-31 units of coursework listed below as well as the Graduation Requirements in English, Math and Computer Competency.

For degree, certificate, waiver assistance and educational planning, contact our Department Education Advisor at ext. 3183.

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

| REQUIRED COURSES: FIRST SEMESTER | | UNITS |
|----------------------------------|--|-------|
| CHDEV-001 | Introduction to the Study of Early Childhood Education | 3 |
| CHDEV-010 | Child Growth and Development | 3 |

| REQUIRED COURSES: SECOND SEMESTER | | UNITS |
|-----------------------------------|--|-------|
| CHDEV-020 | Child, Family & Community | 3 |
| CHDEV-062 | Curriculum Foundations for the Young Child | 3 |

| REQUIRED COURSES: THIRD SEMESTER | | UNITS |
|----------------------------------|-------------------------------|-------|
| CHDEV-050 | Teaching in a Diverse Society | 3 |
| CHDEV-011 | Observation & Assessment | 3 |
| Electives** | | 2-3 |

| REQUIRED COURSES: FOURTH SEMESTER | | UNITS |
|--|---|--------------|
| CHDEV-065 | Health, Safety and Nutrition for the Young Child | 3 |
| CHDEV-090 | Supervised Teaching in Local Child Development Programs | 4 |
| TOTAL UNITS REQUIRED IN MAJOR COURSES | | 27-28 |

continued on next page ►

Graduation Requirements

| ** CHILD DEVELOPMENT ELECTIVES: | | |
|---------------------------------|--|-----|
| CHDEV-012 | Parenting Seminar | 2.5 |
| CHDEV-022 | Relationship-Based Discipline Strategies For Children | 2 |
| CHDEV-025 | Creative Art for the Young Child | 2 |
| CHDEV-032 | Caring for and Educating School Age Children | 3 |
| CHDEV-033 | Developmentally and Culturally Appropriate Practice for the School Age Child | 3 |
| CHDEV-035 | Math and Science for the Young Child | 2 |
| CHDEV-040 | Infant and Toddler Care and Development | 3 |
| CHDEV-041 | Developmentally Appropriate Practices For Infants and Toddlers | 3 |
| CHDEV-045 | Music and Movement for the Young Child | 2 |
| CHDEV-055 | Introduction to Children with Special Needs | 3 |
| CHDEV-057 | Developmentally Appropriate Practices for Children with Special Needs | 3 |
| CHDEV-060 | Language and Literacy for the Young Child | 2 |
| CHDEV-077 | Working with Drug-Exposed Children from Birth to 5 years of Age | 2 |
| CHDEV-092 | Adult Supervision/Mentor Teacher Training | 2 |
| CHDEV-095 | Administration of Early Childhood Programs | 3 |
| CHDEV-096 | Supervision and Leadership in Early Childhood Programs | 3 |

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.

Associate in Science Degree in Early Childhood Education for Transfer

The Associate in Science Degree in Early Childhood Education for Transfer is a 60-unit degree program designed to prepare students to transfer and study child development, human development, and early childhood education. The program, which requires 25 units of lower division work in Child Development is combined with the California State university General Education pattern of 40-42 units. Up to 6 units may be double-counted toward the 25 unit major coursework in the CSU GE pattern so the degree can be achieved in 60 units. Students will be prepared to take upper division courses their first semester after transferring. Typically, students who complete this program will be able to complete their upper division coursework in only two additional years.

The Associate in Science Degree in Early Childhood Education for Transfer also prepares students for entry and mid-level career options in child care, preschool education, special education, and before-and-after school programs. Upon completion of this program, students will be eligible to apply for the Teacher level permit on the Child Development Permit Matrix from the State of California Commission on Teacher Credentialing. Students will complete lower division courses in child growth and development, principles and practices in early childhood education, curriculum, observation, assessment, child/family/community relationships, diversity, health and safety, and a culminating student teaching practicum.

| REQUIRED COURSES: | | UNITS |
|--------------------------------------|---|-------|
| CHDEV-010 | Child Growth and Development | 3 |
| CHDEV-020 | Child Family and Community | 3 |
| CHDEV-001 | Introduction to Principles and Practices in Early Childhood Education | 3 |
| CHDEV-062 | Curriculum Foundations for the Young Child | 3 |
| CHDEV-011 | Observation and Assessment | 3 |
| CHDEV-090 | Student Teaching Practicum in Early Childhood Education | 4 |
| CHDEV-065 | Health, Safety and Nutrition in Early Childhood Programs | 3 |
| CHDEV-050 | Teaching in a Diverse Society | 3 |
| TOTAL UNITS REQUIRED FOR THE DEGREE: | | 25 |

College Skills Certificates in Child Development

The following college skills certificates include coursework that may apply to the California Child Development Permit Matrix. Upon completion, teaching permits can be applied for through the State of California Commission on Teacher Credentialing. Contact ext. 3183 for application assistance.

Assistant

| REQUIRED COURSES: | | UNITS |
|---|---|-------|
| CHDEV-001 | Introduction to Early Childhood Studies | 3 |
| CHDEV-010 | Child Growth and Development | 3 |
| TOTAL UNITS REQUIRED FOR THE COLLEGE SKILLS CERTIFICATE | | 6 |

Associate Teacher

| REQUIRED COURSES: | | UNITS |
|---|---|-------|
| CHDEV-001 | Introduction to Early Childhood Studies | 3 |
| CHDEV-010 | Child Growth and Development | 3 |
| CHDEV-020 | Child, Family, and Community | 3 |
| CHDEV-062 | Curriculum Foundation for the Young Child | 3 |
| TOTAL UNITS REQUIRED FOR THE COLLEGE SKILLS CERTIFICATE | | 12 |

Specialization: Infant Toddler Care

| REQUIRED COURSES: | | UNITS |
|---|--|-------|
| CHDEV-040 | Infant and Toddler Care and Development | 3 |
| CHDEV-041 | Developmentally Appropriate Practices For Infants and Toddlers | 3 |
| TOTAL UNITS REQUIRED FOR THE COLLEGE SKILLS CERTIFICATE | | 6 |

Specialization: Curriculum in Early Childhood Education

| SELECT 3 COURSES FROM: | | |
|---|---|---|
| CHDEV-022 | Relationship-Based Discipline Strategies for Children | 2 |
| CHDEV-025 | Creative Arts for the Young Child | 2 |
| CHDEV-050 | Teaching a Diverse Society | 2 |
| TOTAL UNITS REQUIRED FOR THE COLLEGE SKILLS CERTIFICATE | | 6 |

Specialization: Special Needs Care & Education

| REQUIRED COURSES: | | UNITS |
|--|---|----------|
| CHDEV-055 | Introduction to Children with Special Needs | 3 |
| CHDEV-057 | Developmentally Appropriate Practices for Children with Special Needs | 3 |
| TOTAL UNITS REQUIRED FOR THE COLLEGE SKILLS CERTIFICATE | | 6 |

Specialization: Site Supervisor/Program Director

| REQUIRED COURSES: | | UNITS |
|--|--|----------|
| CHDEV-095 | Administration of Early Childhood Programs | 3 |
| CHDEV-096 | Supervision and Leadership in Early Childhood Programs | 3 |
| TOTAL UNITS REQUIRED FOR THE COLLEGE SKILLS CERTIFICATE | | 6 |

Specialization: School Age Child Care

| REQUIRED COURSES: | | UNITS |
|--|--|----------|
| CHDEV-032 | Caring for and Educating School Age Children | 3 |
| CHDEV-033 | Developmentally and Culturally Appropriate Practice for the School Age Child | 3 |
| TOTAL UNITS REQUIRED FOR THE COLLEGE SKILLS CERTIFICATE | | 6 |

School-Age Development and Education

| REQUIRED COURSES: | | UNITS |
|--|---|-----------|
| CHDEV-010 | Child Growth and Development | 3 |
| CHDEV-020 | Child, Family and Community | 3 |
| CHDEV-022 | Relationship-Based Discipline Strategies for Children | 2 |
| CHDEV-032 | Caring for and Educating School Age Children | 3 |
| CHDEV-033 | Developmentally Appropriate Practice for the School Age Child | 3 |
| CHDEV-050 | Teaching in a Diverse Society | 3 |
| TOTAL UNITS REQUIRED FOR THE COLLEGE SKILLS CERTIFICATE | | 17 |

School-Age Associate Teacher

| REQUIRED COURSES: | | UNITS |
|--|---|-----------|
| CHDEV-010 | Child Growth and Development | 3 |
| CHDEV-020 | Child, Family and Community | 3 |
| CHDEV-032 | Caring for and Educating School Age Children | 3 |
| CHDEV-033 | Developmentally Appropriate Practice for the School Age Child | 3 |
| TOTAL UNITS REQUIRED FOR THE COLLEGE SKILLS CERTIFICATE | | 12 |

Communication Studies

DEGREE—Associate in Arts Degree for Transfer
Communication Studies



The Associate in Arts in Communication Studies for Transfer at Los Medanos College is designed to prepare students to transfer and study at a

California State University. The program, which requires a minimum of 18 units of lower division work in Communication; as determined by the community college district; and obtainment of a minimum grade point average of 2.0 across all coursework. Students must earn a C or better in all courses required for the major and in all CSU transferable coursework in the CSU GE (California State University, General Education) pattern to prepare students to take upper division courses at a CSU their first semester on campus. Typically, students who complete this degree will be able to complete their upper division coursework at their CSU in only two additional years. Students will complete lower division courses in public speaking, argumentation, intercultural, interpersonal, and have their choice of preparing for a more traditional degree in Communication Studies or preparation for a degree in Communications with an emphasis in Journalism. Students interested in journalism should also review the Los Medanos College Associate Degree in Journalism.

| REQUIRED COURSES: | | UNITS |
|--------------------|-----------------------------|----------|
| SPCH-110 | Oral Communication | 3 |
| SPCH-120 | Argumentation | 3 |
| SPCH-130 | Interpersonal Communication | 3 |
| TOTAL UNITS | | 9 |

| SELECT TWO COURSES: | | UNITS |
|---------------------|-----------------------------|----------|
| SPCH-160 | Debate Practicum | 3 |
| or | | |
| SPCH-150 | Intercultural Communication | 3 |
| or | | |
| JOURN-035 | Mass Communication | 3 |
| TOTAL UNITS | | 6 |

| SELECT ONE COURSE: | | UNITS |
|------------------------------------|--|-----------|
| ENGL-220 | Critical Inquiry and Analysis | 3 |
| or | | |
| ENGL-221 | Advanced Composition and Critical Thinking | 3 |
| or | | |
| JOURN-010 | Writing for the Media | 3 |
| TOTAL UNITS FOR THE DEGREE: | | 18 |

Computer Science

DEGREE—Associate of Science

Computer Science
Computer Support Specialist-
Networking and Security

CERTIFICATE OF ACHIEVEMENT—Computer Science

Computer Support Specialist (Basic)
Computer Support Specialist (Advanced)
Microcomputer Systems Specialist
Networking and Security (Basic)
Networking and Security (Advanced)

continued on next page ►

COLLEGE SKILLS CERTIFICATES—Computer Science

Foundation
Core Competencies
Game Design
PC Repair Technician (A+ Certification)
Web Design

The **Computer Science AS Degree** is designed for students desiring advanced degrees in **Computer Science** or in **Computer Information Systems**. The LMC Computer Science courses meet lower division transfer requirements for these degrees.

The **Computer Support Specialist** Basic and Advanced Certificates of Achievement program will prepare students for jobs as network support specialists, desktop support specialists, and software and/or hardware support specialists. These jobs require excellent customer service, communication and computer skills and can be found in a variety of organizations - large and small - in the private or public sectors.

The **Networking and Security** Basic and Advanced Certificates of Achievement program will prepare students for jobs in computer forensics and/or networking. These jobs require excellent technical skills and the ability to investigate and solve problems or crimes. Most organizations require network specialists. Given the rise in computer crimes, viruses, and computer hacking, the need for computer forensics professionals has increased in the government and in the private sector.

Associate of Science Degree in Computer Science

| REQUIRED COURSES: | | UNITS |
|-------------------|---|-------|
| COMSC-040 | Introduction to Computers | 4 |
| COMSC-124 | Program Design & Data Structures | 4 |
| COMSC-125 | Assembly Language Programming/ Computer Organization | 4 |
| MATH-050 | Calculus I | 4 |
| MATH-060 | Calculus II | 4 |
| MATH-070 | Calculus III | 4 |
| MATH-075 | Linear Algebra | 3 |
| TOTAL UNITS | | 27 |

SELECT FROM ANY ONE OF THE PROGRAMMING TRACKS (6 UNITS)

| | | |
|----------------------------|---------------------------|----|
| COMSC-044 | C++, Part I | 3 |
| COMSC-048 | C++, Part II | 3 |
| or | | |
| COMSC-051 | Java Programming, Part I | 3 |
| COMSC-052 | Java Programming, Part II | 3 |
| TOTAL UNITS FOR THE MAJOR: | | 33 |

Associate of Science Degree in Computer Support Specialist

| REQUIRED COURSES: | | UNITS |
|-------------------|--------------------------------------|-------|
| COMSC-010 | Introduction to Computer Networking | 2 |
| COMSC-012 | Introduction to Network Security | 2 |
| COMSC-037 | Help Desk-Customer Technical Support | 3 |
| COMSC-040 | Introduction to Computers | 4 |

| | | |
|----------------------------|--|----|
| COMSC-056 | Programming Logic and Design | 3 |
| COMSC-060 | Microcomputers Applications & Emerging Technologies | 4 |
| COMSC-061 | Advanced Microcomputer Applications | 3 |
| COMSC-080 | Survey of Operating Systems | 3 |
| COMSC-090 | PC Repair (Hardware) | 3 |
| COMSC-091 | PC Repair (Software) | 3 |
| COMSC-123 | Computer Ethics | 3 |
| TOTAL UNITS FOR THE MAJOR: | | 33 |

Associate of Science Degree in Networking and Security

| REQUIRED COURSES: | | UNITS |
|-------------------|---|-------|
| COMSC-010 | Introduction to Computer Networking | 2 |
| COMSC-011 | Introduction to Networking Operating Systems | 2 |
| COMSC-012 | Introduction to Network Security | 2 |
| COMSC-037 | Help Desk-Customer Technical Support | 3 |
| COMSC-040 | Introduction to Computers | 4 |
| COMSC-080 | Survey of Operating Systems | 3 |
| COMSC-120 | Introduction to Computer Forensics | 3 |
| COMSC-121 | Computer Forensics Investigations and Analysis | 3 |
| COMSC-123 | Computer Ethics | 3 |
| TOTAL UNITS | | 25 |

ELECTIVES- SELECT TWO ELECTIVES FROM THE LIST OF PROGRAMMING APPLICATIONS

| | | UNITS |
|----------------------------|----------------------------------|-------|
| COMSC-041 | Programming with VB.NET | 3 |
| COMSC-044 | C++, Part I | 3 |
| COMSC-051 | Java Programming | 3 |
| COMSC-056 | Programming Logic and Design | 3 |
| COMSC-124 | Program Design & Data Structures | 4 |
| TOTAL UNITS FOR THE MAJOR: | | 31-32 |

For an Associate of Science Degree, students must complete General Education and Graduation requirements.

Certificate of Achievement in Computer Support Specialist (Basic)

| REQUIRED COURSES: | | UNITS |
|-----------------------------------|--------------------------------------|-------|
| COMSC-010 | Introduction to Computer Networking | 2 |
| COMSC-037 | Help Desk-Customer Technical Support | 3 |
| COMSC-040 | Introduction to Computers | 4 |
| COMSC-090 | PC Repair (Hardware) | 3 |
| COMSC-091 | PC Repair (Software) | 3 |
| COMSC-092 | A+ Certification Exam Prep | 1.5 |
| TOTAL UNITS FOR THIS CERTIFICATE: | | 16.5 |

Certificate of Achievement in Computer Support Specialist (Advanced)

| REQUIRED COURSES: | | UNITS |
|-------------------|-------------------------------------|-------|
| COMSC-010 | Introduction to Computer Networking | 2 |

| | | |
|----------------------------------|--------------------------------------|----|
| COMSC-012 | Introduction to Network Security | 2 |
| COMSC-037 | Help Desk-Customer Technical Support | 3 |
| COMSC-040 | Introduction to Computers | 4 |
| COMSC-056 | Programming Logic and Design | 3 |
| COMSC-060 | Information Technologies | 4 |
| COMSC-061 | Advanced Microcomputer Applications | 3 |
| COMSC-080 | Survey of Operating Systems | 3 |
| COMSC-090 | PC Repair (Hardware) | 3 |
| COMSC-091 | PC Repair (Software) | 3 |
| COMSC-123 | Computer Ethics | 3 |
| TOTAL UNITS FOR THIS CERTIFICATE | | 33 |

Certificate of Achievement in Microcomputer Systems Specialist

Level One

| REQUIRED COURSES: | | UNITS |
|---|--|-------|
| COMSC-040 | Introduction to Computers | 4 |
| COMSC-060 | Microcomputer Applications and Emerging Technologies | 4 |
| COMSC-061 | Advanced Microcomputer Applications | 3 |
| TOTAL UNITS REQUIRED IN LEVEL ONE COURSES | | 11 |

Level Two (requires completion of Level One)

| REQUIRED COURSES: | | UNITS |
|-------------------|-------------------------------|-------|
| COMSC-030 | Web Site Development Part I | 1.5 |
| COMSC-031 | Web Site Development Part II | 1.5 |
| COMSC-056 | Programming Logic and Design | 3 |
| COMSC-080 | A Survey of Operating Systems | 3 |
| TOTAL UNITS | | 9 |

AND SELECT ONE OF THE FOLLOWING PROGRAMMING COURSES FROM:

| | | |
|---|--|----|
| COMSC-041 | Programming with Visual Basic.net | 3 |
| COMSC-044 | Introduction to C++ Programming Part I | 3 |
| COMSC-051 | Introduction to Java Part I | 3 |
| TOTAL UNITS REQUIRED IN LEVEL TWO COURSES | | 12 |

AND SELECT A MINIMUM OF 10 UNITS FROM THE REMAINING COMPUTER SCIENCE COURSES.

| | | |
|-----------|--|---|
| COMSC-011 | Intro to Network Operating Systems | 2 |
| COMSC-012 | Intro to Network Security | 2 |
| COMSC-032 | Web Site Development-Dreamweaver/Flash | 3 |
| COMSC-037 | Help Desk Customer Technical Support | 3 |
| COMSC-048 | Intro to C++ Programming Part II | 3 |
| COMSC-052 | Java for Programmers, Part II | 3 |
| COMSC-053 | Advanced Visual Basic.NET | 3 |
| COMSC-090 | PC Repair – Hardware (A+ Certification) | 3 |
| COMSC-091 | PC Repair – Software (A+ Certification) | 3 |
| COMSC-110 | Gaming: An Introduction | 3 |
| COMSC-111 | Gaming: Beginning Illustration & Storyboarding | 3 |
| COMSC-112 | Gaming: Beginning Game Design | 3 |
| COMSC-120 | Computer Forensics | 3 |

| | | |
|----------------------------------|---|----|
| COMSC-121 | Computer Forensics Investigations and Analysis | 3 |
| COMSC-123 | Introduction to Computer Ethics | 3 |
| COMSC-124 | Programming Design and Data Structures | 4 |
| COMSC-125 | Assembly Language Programming/Computer Organization | 4 |
| TOTAL UNITS | | 10 |
| TOTAL UNITS FOR THIS CERTIFICATE | | 33 |

Certificate of Achievement in Networking and Security (Basic)

| REQUIRED COURSES | | UNITS |
|----------------------------------|---|-------|
| COMSC-010 | Introduction to Computer Networking | 2 |
| COMSC-011 | Introduction to Networking Operating Systems | 2 |
| COMSC-012 | Introduction to Network Security | 2 |
| COMSC-040 | Introduction to Computers | 4 |
| COMSC-080 | Survey of Operating Systems | 3 |
| COMSC-120 | Introduction to Computer Forensics | 3 |
| TOTAL UNITS FOR THIS CERTIFICATE | | 16 |

Certificate of Achievement in Networking and Security (Advanced)

| REQUIRED COURSES | | UNITS |
|------------------|---|-------|
| COMSC-010 | Introduction to Computer Networking | 2 |
| COMSC-011 | Introduction to Networking Operating Operating Systems | 2 |
| COMSC-012 | Introduction to Network Security | 2 |
| COMSC-037 | Help Desk-Customer Technical Support | 3 |
| COMSC-040 | Introduction to Computers | 4 |
| COMSC-080 | Survey of Operating Systems | 3 |
| COMSC-120 | Introduction to Computer Forensics | 3 |
| COMSC-121 | Computer Forensics Investigations & Analysis | 3 |
| COMSC-123 | Computer Ethics | 3 |

ELECTIVES – SELECT TWO ELECTIVES FROM THE LIST OF PROGRAMMING APPLICATIONS:

| | | |
|----------------------------------|----------------------------------|-------|
| COMSC-041 | Programming with VB.NET | 3 |
| COMSC-044 | C++, Part I | 3 |
| COMSC-051 | Java Programming | 3 |
| COMSC-056 | Programming Logic and Design | 3 |
| COMSC-124 | Program Design & Date Structures | 4 |
| TOTAL UNITS FOR THIS CERTIFICATE | | 31-32 |

For a certificate of achievement, students must complete proficiency requirements in English and math.

College Skills Certificates in Computer Science Foundation

| REQUIRED COURSES: | | UNITS |
|---|--|-------|
| COMSC-040 | Introduction to Computers | 4 |
| COMSC-060 | Microcomputer Applications and Emerging Technologies | 4 |
| COMSC-061 | Advanced Microcomputer Applications | 3 |
| TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE | | 11 |

Graduation Requirements

Core Competencies

| REQUIRED COURSES: | | UNITS |
|---|-------------------------------|-------|
| COMSC-030 | Web Site Development Part I | 1.5 |
| COMSC-031 | Web Site Development Part II | 1.5 |
| COMSC-056 | Programming Logic and Design | 3 |
| COMSC-080 | A Survey of Operating Systems | 3 |
| TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE | | 9 |

AND SELECT ONE OF THE FOLLOWING PROGRAMMING COURSES FROM:

| | | |
|---|--|----|
| COMSC-041 | Programming with Visual Basic.net | 3 |
| COMSC-044 | Introduction to C++ Programming Part I | 3 |
| COMSC-051 | Introduction to Java Part I | 3 |
| TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE | | 12 |

Game Design

| REQUIRED COURSES: | | UNITS |
|---|--|-------|
| COMSC-110 | Gaming: An Introduction | 3 |
| COMSC-111 | Gaming: Beginning Illustration and Storyboarding | 3 |
| COMSC-112 | Gaming: Beginning Game Design | 3 |
| ART-027 | Introduction to Cartooning | 3 |
| ART-054 | Adobe Photoshop | 3 |
| TOTAL UNITS REQUIRED FOR THE COLLEGE SKILLS CERTIFICATE | | 15 |

PC Repair Technician (A+ Certification)

| REQUIRED COURSES: | | UNITS |
|---|-----------------------------------|-------|
| COMSC-090 | PC Repair - Hardware | 3 |
| COMSC-091 | PC Repair – Software | 3 |
| COMSC-092 | A+ Certification Exam Preparation | 1.5 |
| TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE | | 7.5 |

Web Design

| REQUIRED COURSES: | | UNITS |
|---|--|-------|
| COMSC-030 | Web Site Development Part I | 1.5 |
| COMSC-031 | Web Site Development Part II | 1.5 |
| COMSC-032 | Web Site Development – Dreamweaver and Flash | 3 |
| COMSC-040 | Introduction to Computers | 4 |
| TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE | | 10 |

Electrical/Instrumentation Technology

DEGREES—Associate of Science

Electrical Technology
Instrumentation Technology

CERTIFICATES OF ACHIEVEMENT

Electrical Technology
Instrumentation Technology

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 complete the coursework listed below as well as the 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

| REQUIRED COURSES: | | UNITS |
|--|--|-------|
| MATH-012 | Pre-Algebra | 4 |
| ENGL-090 | Integrated Reading, Writing, and Critical Thinking | 5 |
| TOTAL UNITS REQUIRED FOR PROGRAM ENTRY | | 9 |

| REQUIRED COURSES: FIRST SEMESTER | | UNITS |
|----------------------------------|------------------------------|-------|
| ETEC-010 | Direct Current Circuits | 4 |
| ETEC-012 | Alternating Current Circuits | 4 |
| MATH-025 | Elementary Algebra | 5 |
| TOTAL UNITS | | 13 |

| REQUIRED COURSES: SECOND SEMESTER | | UNITS |
|-----------------------------------|------------------------|-------|
| ETEC-020 | Electric Motor Control | 3 |
| ETEC-022 | Semiconductor Devices | 2 |
| ETEC-024 | Digital Devices | 2 |

| | | |
|--------------------|-------------------------|-----------|
| PHYS-015 | Introduction to Physics | 4 |
| TOTAL UNITS | | 11 |

| REQUIRED COURSES: THIRD SEMESTER | | UNITS |
|---|--|--------------|
| ETEC-030 | Programmable Logic Controllers | 4 |
| ETEC-032 | Instrumentation Process Measurement | 3 |
| ETEC-034 | Instrument Calibration | 1 |
| CHEM-006 | Introduction to Inorganic and Physical Chemistry (for Instrumentation Specialization only) | 4 |
| TOTAL UNITS | | 8-12 |
| TOTAL UNITS REQUIRED IN MAJOR COURSES: | | 32-36 |

Electrical Specialization

| REQUIRED COURSES: FOURTH SEMESTER | | UNITS |
|--|-------------------------------------|-----------|
| ETEC-040 | National Electrical Code | 3 |
| ETEC-042 | Wiring Methods and Code Application | 1 |
| ETEC-044 | Power Distribution & Transformers | 3 |
| ETEC-046 | DC & AC Motors & Generators | 3 |
| TOTAL UNITS REQUIRED IN MAJOR COURSES - ELECTRICAL SPECIALIZATION | | 42 |

Instrumentation Specialization

| REQUIRED COURSES: FOURTH SEMESTER | | UNITS |
|---|--------------------------------------|-----------|
| ETEC-050 | Instrumentation Process Control | 3 |
| ETEC-052 | Applied Process Control | 1 |
| ETEC-056 | Code for instrument Application | 1 |
| ETEC-058 | Analytical Instrumentation | 2 |
| ETEC-059 | System Integration & Troubleshooting | 2 |
| TOTAL UNITS REQUIRED IN MAJOR COURSES - INSTRUMENTATION SPECIALIZATION | | 45 |

Emergency Medical Services

COLLEGE SKILLS CERTIFICATES

- Emergency Medical Services
- Emergency Medical Services Recertification

Emergency Medical Services

| REQUIRED COURSES: | | UNITS |
|--|--------------------------------|----------|
| EMS-010 | Emergency Medical Technician I | 6 |
| TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE | | 6 |

Emergency Medical Services Recertification

| REQUIRED COURSES: | | UNITS |
|--|--|----------|
| EMS-011 | Emergency Medical Technician I Recertification | 1 |
| TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE | | 1 |

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 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-010 | Introduction to Engineering | 3 |
| ENGIN-020 | Programming with C++ for Engineers and Scientists | 4 |
| or | | |
| ENGIN-022 | Programming with MATLAB for Engineers and Scientists | 4 |
| ENGIN-025 | Engineering Graphics | 3 |
| ENGIN-030 | Materials Science | 4 |
| ENGIN-045 | Engineering Circuits | 3 |
| CHEM-025 | General College Chemistry | 5 |
| PHYS-040 | Physics for Scientists and Engineers I | 4 |
| PHYS-041 | Physics for Scientists and Engineers II | 4 |
| PHYS-042 | Physics for Scientists and Engineers III | 4 |
| MATH-050 | Calculus and Analytic Geometry I | 4 |
| MATH-060 | Calculus and Analytic Geometry II | 4 |
| MATH-070 | Calculus and Analytic Geometry III | 4 |
| MATH-080 | Differential Equations | 3 |
| TOTAL UNITS | | 49 |

AND SELECT TWO RESTRICTED ELECTIVES FROM:

| | | |
|--|-------------------------|-----------|
| ENGIN-036 | Engineering Statics | 3 |
| ENGIN-038 | Manufacturing Processes | 3 |
| ENGIN-046 | Engineering Dynamics | 3 |
| MATH-075 | Linear Algebra | 3 |
| TOTAL UNITS REQUIRED IN MAJOR COURSES | | 55 |

continued on next page ►

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 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: | | UNITS |
|---------------------------------------|--|-------|
| ENVSCI-001 | Freshman Seminar | 2 |
| BIOSC-026 | Ecology Field Studies | 1 |
| BIOSC-020 | Principles of Biology: Cellular | 5 |
| BIOSC-021 | Principles of Biology: Organismic | 5 |
| CHEM-025 | General College Chemistry I | 5 |
| CHEM-026 | General College Chemistry II | 5 |
| MATH-050 | Calculus and Analytic Geometry I | 4 |
| PHYS-035 | General College Physics I | 4 |
| PHYS-036 | General College Physics II | 4 |
| TOTAL UNITS | | 35 |
| AND SELECT ONE ELECTIVE FROM: | | |
| ENVSCI-010 | Introduction to Environmental Sciences | 4 |
| GEOL-020 | Physical Geology | 4 |
| GEOG-015 | Physical Geography | 4 |
| TOTAL UNITS REQUIRED IN MAJOR COURSES | | 39 |

Fire Technology

DEGREE—Associate of Science Fire Technology

CERTIFICATE OF ACHIEVEMENT Fire Technology

COLLEGE SKILLS CERTIFICATE Basic Fire Academy

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

For the Certificate of Achievement in 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.

| 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-010 | Emergency Medical Technician I | 6 |
| TOTAL UNITS REQUIRED IN MAJOR COURSES | | 21 |

For the College Skills Certificate in Basic Fire Academy, complete 15 units of coursework listed below. The Basic Fire Academy program prepares students for the California State Firefighter certification. Prerequisites for the Basic Fire Academy include: 9 units from the Fire Technology required course list, positive evaluation (sports physical) from an approved medical facility, satisfactory score on the Candidate Physical Agility (CPAT) test or equivalent; and current Emergency Medical Technician (EMT) certification.

College Skills Certificate in Fire Technology

Basic Fire Academy

| REQUIRED COURSES: | | UNITS |
|---|---------------|-------|
| FIRE-120 | Basic Academy | 15 |
| TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE | | 15 |

Journalism

DEGREE—Associate of Art Journalism

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 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

| REQUIRED COURSES: FIRST SEMESTER | | UNITS |
|----------------------------------|-------------------------------|----------|
| JOURN-010 | Writing for the Media | 3 |
| ELECTIVE | Select from accompanying list | 3 |

| REQUIRED COURSES: SECOND SEMESTER | | UNITS |
|-----------------------------------|---------------------------------|----------|
| JOURN-015A | Media Writing Practicum I | 1 |
| or | | |
| JOURN-016A | Visual Storytelling Practicum I | 1 |
| JOURN-020 | Publication Production I* | 3 |
| ELECTIVE | Select from accompanying list | 3 |

| REQUIRED COURSES: 3RD SEMESTER | | UNITS |
|--------------------------------|----------------------------------|----------|
| JOURN-015B | Media Writing Practicum II | 1 |
| or | | |
| JOURN-016B | Visual Storytelling Practicum II | 1 |
| JOURN-030 | Publication Production II | 3 |

| REQUIRED COURSES: FOURTH SEMESTER | | UNITS |
|-----------------------------------|-------------------------------|----------|
| JOURN-015C | Media Writing Practicum | 1 |
| OR | | |
| JOURN-016C | Visual Storytelling Practicum | 1 |
| or | | |

The beginning journalism practicum in the other course sequence (15-A or 16-A)

| | | |
|--|---------------------------|-----------|
| JOURN-035 | Mass Communication | 3 |
| TOTAL REQUIRED UNITS IN MAJOR COURSES | | 21 |

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-015: Graphic Design, **3 units**

ART-020: Introduction to Drawing, **3 units**

ART-025: Advertising, Marketing and Publication Design, **3 units**

ART-050: Designing with Adobe InDesign, **3 units**

ART-054: Adobe Photoshop, **3 units**

ART-057: Designing with Adobe Illustrator, **3 units**

ART-072: Introduction to Digital Photography, **3 units**

COMSC-030: Web Site Development - Part I, **1.5 units**

COMSC-031: Web Site Development - Part II, **1.5 units**

COMSC-032: Web Site Development - Dreamweaver and Flash, **3 units**

ENGL-111: Creative Writing, **3 units**

LIBST-014: Library Research and Information Literacy Skills, **1 unit**

LIBST-017: Introduction to Internet Information Resources, **.5 units**

LIBST-018: 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

Behavioral Science and Social Science

Math and Science

The Liberal Arts major provides a rich educational experience through coursework in a broad range of academic disciplines. Liberal Arts provide 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.

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Liberal Arts: Arts and Humanities

SELECT AT LEAST 18 UNITS FROM:

Art 5, 6, 7, 8, 9 or any transferable Art course
 ACS 10,15
 Chinese 30, 40
 Drama 15, 16, 30, 70 or any transferable Drama course
 Education 40
 English 3, 100, 111, 127, 128, 129, 132, 133, 205, 231
 200, 201, 202, 220, 221, 230
 Filipino 60, 61
 French 60, 61
 Humanities 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, 68, 72
 Spanish 50, 51, 52, 53

Liberal Arts: Behavioral Science and Social Science

SELECT AT LEAST 18 UNITS FROM:

Administration of Justice 120
 Anthropology 5, 6, 7
 Business 109, 294
 Child Development 10, 20, 50
 Economics 5, 10, 11
 Education 10, 15, 40
 History 29, 30, 31, 33, 34, 35, 36, 37, 38, 39, 40, 46, 47,
 48, 49, 52
 Political Science 10, 20, 33, 43
 Psychology 10, 11, 12, 14, 17
 Social Science 45
 Sociology 15, 16, 17

Liberal Arts: Math and Science

SELECT AT LEAST 18 UNITS SELECT FROM:

Astronomy 10, 11
 Biological Science 5, 7, 10, 20, 21, 26, 30, 40, 45, 50
 Chemistry 6, 7, 8, 25, 26, 28, 29
 Computer Science 40
 Engineering 10
 Environmental Science 10
 Geography 15
 Geology 20
 Math 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

DEGREES—Associate of Science

Management and Supervision

CERTIFICATE OF ACHIEVEMENT

Management and Supervision

COLLEGE SKILLS CERTIFICATES

Communication Skills for Managers
 Decision Making Skills for Managers
 Human Resource Management Skills
 Leaderships Skills for Managers
 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 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-050 | Introduction to Supervision | 3 |
| BUS-059** | Business Communications | 3 |
| MANGT-060 | Making Effective Decisions | 3 |
| MANGT-065 | Mastering Management's Essential Tools | 3 |
| MANGT-070 | Relating in Human Terms | 3 |
| TOTAL UNITS | | 15 |

AND SELECT A MINIMUM OF 9 UNITS FROM:

| | | |
|-----------------------|---------------------------------|------------|
| BUS-018* | Microsoft Excel for Windows | 3 |
| BUS-027 | Small Business Management | 3 |
| BUS-035* | Microsoft Office | 3 |
| BUS-035 A/B/C* | MS Word/Excel/PowerPoint (each) | 1.5 |
| BUS-058** | Business English | 3 |
| BUS-065* | Introduction to Word Processing | 3 |
| BUS-109 | Introduction to Business | 3 |
| BUS-294 | Business Law | 3 |
| COMSC-040* | Introduction to Computers | 4 |

| | | |
|---------------------|--------------------------|------------|
| MANGT-075 | Managing Human Resources | 3 |
| MANGT-170*** | OWEE in Management | 1-3 |

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.

***Occupational Work Experience Education in Management

College Skills Certificates in Management and Supervision

Currently, the Business Department offers 5 College Skills Certificates. 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. As students acquire knowledge and build career skills, they can earn one or more skills certificates.

Communication Skills for Managers

| REQUIRED COURSES: | UNITS |
|--|----------|
| MANGT-050 Introduction to Supervision | 3 |
| BUS-059** Business Communications | 3 |
| TOTAL REQUIRED UNITS FOR COLLEGE SKILLS CERTIFICATE | 6 |

Decision Making Skills for Managers

| REQUIRED COURSES: | UNITS |
|--|----------|
| MANGT-050 Introduction to Supervision | 3 |
| MANGT-060 Making Effective Decisions | 3 |
| TOTAL REQUIRED UNITS FOR COLLEGE SKILLS CERTIFICATE | 6 |

Human Resource Management Skills

| REQUIRED COURSES: | UNITS |
|--|----------|
| MANGT-050 Introduction to Supervision | 3 |
| MANGT-075 Managing Human Resources | 3 |
| TOTAL REQUIRED UNITS FOR COLLEGE SKILLS CERTIFICATE | 6 |

Leadership Skills for Managers

| REQUIRED COURSES: | UNITS |
|--|----------|
| MANGT-050 Introduction to Supervision | 3 |
| MANGT-070 Relating in Human Terms | 3 |
| TOTAL REQUIRED UNITS FOR COLLEGE SKILLS CERTIFICATE | 6 |

Planning Skills for Managers

| REQUIRED COURSES: | UNITS |
|--|----------|
| MANGT-050 Introduction to Supervision | 3 |
| MANGT-065 Mastering Management's Essential Tools | 3 |
| TOTAL REQUIRED UNITS FOR COLLEGE SKILLS CERTIFICATE | 6 |

Mathematics

DEGREE—Associate of Science

Mathematics

For the Associate of Science Degree in Mathematics, complete the units of coursework listed below as well as the 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-034 Introduction to Statistics | 4 |
| MATH-050 Calculus and Analytic Geometry I | 4 |
| MATH-060 Calculus and Analytic Geometry II | 4 |
| MATH-070 Calculus and Analytic Geometry III | 4 |
| MATH-075 Linear Algebra | 3 |
| MATH-080 Differential Equations | 3 |
| TOTAL UNITS REQUIRED IN MAJOR COURSES | 22 |

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

Music

CERTIFICATES OF ACHIEVEMENT—Music

Commercial – Business Management

Commercial – Performance

Commercial – Pedagogy

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

| REQUIRED COURSES: | UNITS |
|--|------------|
| MUSIC-005 or 6 Recital Class (2 semesters) | 2 |
| MUSIC-013 Musicianship I | 2 |
| MUSIC-014 Musicianship II | 2 |
| MUSIC-015 Basic Music (or pass theory placement exam) | 3 |
| MUSIC-016 Fundamentals of Music Theory | 3 |
| MUSIC-017 Harmony | 4 |
| MUSIC-018 Advanced Harmony | 4 |
| MUSIC-031 Piano I | 1.5 |

continued on next page ►

Graduation Requirements

| | | |
|--------------------|-------------------------------|------------|
| MUSIC-032 | Piano II | 1.5 |
| or | | |
| MUSIC-033A | Intermediate Piano | 1.5 |
| MUSIC-033B | Advanced Piano | 1.5 |
| MUSIC-081 | Introduction to Improvisation | 1 |
| TOTAL UNITS | | 24 |

Music Major Ensemble Requirements

AND SELECT A MINIMUM OF SIX SEMESTERS FROM:

| | | |
|------------------------------|--------------------------------|-----------------|
| MUSIC-040 | Concert Band* | 2 |
| MUSIC-050, 52, 54, 56 | Chamber Ensembles | (each) 1 |
| MUSIC-060 | College Chorus* | 2 |
| MUSIC-063 | Oratorio and Cantata Chorus I | .5-1 |
| MUSIC-064 | Oratorio and Cantata Chorus II | .5-1 |
| MUSIC-066 | Gospel Choir | 1 |
| MUSIC-070 | Jazz Ensemble | 2 |
| MUSIC-074 | Jazz Studio | 1 |
| MUSIC-077 | Chamber Chorale | 1 |
| MUSIC-082 | Jazz/Funk/Latin Workshop | 1 |
| MUSIC-250 | Night Jazz Band | 1 |
| TOTAL UNITS | | 6-12 |

TOTAL UNITS REQUIRED IN MAJOR COURSES **30-36**

NOTE: Summer Ensembles will not fulfill the above 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-033A/B | Intermediate/Advanced Piano | |
| or | | |
| MUSIC-037 | 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-027 | Small Business Management 3 |
| BUS-294 | Business Law 3 |
| MUSIC-012 | Popular Music in American Culture 3 |
| MUSIC-013 | Musicianship I 2 |
| MUSIC-015 | Basic Music (or pass theory placement exam) 3 |
| MUSIC-028 | Songwriting I 1 |
| MUSIC-030 | Basic Keyboard Skills 1.5 |
| MUSIC-081 | Introduction to Improvisation 1 |
| or | |
| MUSIC-082 | Jazz/Funk/Latin Workshop (each) 1 |
| MUSIC-089 | Music and Recording Industry Business 2 |
| MUSIC-093 | Studio Music Production I 2 |
| RA-010 | Introduction to Recording Arts 2 |
| RA-021 | The Role of the Producer (Basic Session Producing) 2 |

| | |
|--|------------------|
| Any performance classes | 4-8 |
| (See list of music major ensemble requirements, page 62) | |
| TOTAL UNITS | 32.5-36.5 |

AND SELECT TWO COURSES FROM:

| | | |
|------------------|----------------------------------|------------|
| MUSIC-034 | Jazz/Rock Keyboard | 1.5 |
| MUSIC-065 | Class Voice | 1 |
| MUSIC-067 | Jazz and Popular Vocal Technique | 1 |

or

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

| | |
|--|----------------|
| TOTAL UNITS REQUIRED IN MAJOR COURSES | 34.5-39 |
|--|----------------|

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-010 | Music Literature 3 |
| MUSIC-012 | Popular Music in American Culture 3 |
| MUSIC-013 | Musicianship I 2 |
| MUSIC-015 | Basic Music (or pass theory placement exam) 3 |
| MUSIC-016 | Fundamentals of Music Theory 3 |
| MUSIC-028 | Songwriting I 1 |
| MUSIC-030 | Basic Keyboard Skills 1.5 |
| MUSIC-038 | Studio Musicianship 1 |
| MUSIC-081 | Introduction to Improvisation 1 |
| or | |
| MUSIC-082 | Jazz/Funk/Latin Workshop (each) 1 |
| MUSIC-089 | Music and Recording Industry Business 2 |
| MUSIC-093 | Studio Music Production I 2 |
| MUSIC-094 | Studio Music Production II 2 |
| or | |
| MUSIC-095 | Studio Music Production III 2 |
| RA-010 | Introduction to Recording Arts 2 |
| Any performance classes | 4-8 |
| (See list of music major ensemble requirements, page 62) | |

| | |
|--------------------|------------------|
| TOTAL UNITS | 27.5-34.5 |
|--------------------|------------------|

AND SELECT TWO COURSES FROM:

| | | |
|------------------|-----------------------------------|------------|
| MUSIC-034 | Jazz/Rock Keyboard | 1.5 |
| MUSIC-065 | Class Voice | 1 |
| MUSIC-067 | Jazz and Popular Vocal Techniques | 1 |

or

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

| | |
|--|----------------|
| TOTAL UNITS REQUIRED IN MAJOR COURSES | 29.5-37 |
|--|----------------|

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. Con-

sult 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 or MUSIC 82, 83,or 84 | Introduction to Improvisation | 1 |
| | Jazz/Funk/Latin Workshop | (each) 1 |
| MUSIC 89 | Music Business Management | 2 |
| MUSIC 93 | Intro to MIDI | 2 |
| Any performance classes (See list of music major ensemble requirements) | | 4-8 |

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 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, and 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—Associate of Science

ADN—Registered Nursing

ADN—LVN to RN

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 and on the LMC web site (www.losmedanos.edu/nursing).

The handbook also contains complete information on all options for advanced placement. Please refer to the Handbook and Nursing Department website for updates and estimated costs for the program.

Registered Nursing

The registered nursing program requires two academic years beyond completion of the prerequisite courses and General Education requirements. Completion of prerequisite courses and required GPA are 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

| REQUIRED COURSES: PREREQUISITE | | UNITS |
|--------------------------------|--|------------|
| ENGL-100 | College Composition | 3 |
| MATH-030 | See LMC catalog for descriptions and current graduation requirements | 4-5 |
| BIOSC-040 | Human Anatomy | 5 |
| BIOSC-045 | Human Physiology | 5 |
| BIOSC-050 | Intro to Microbiology | 4 |
| PSYCH-010 or 11 | General Psychology | 3 |

| REQUIRED COURSES: GRADUATION REQUIREMENTS | | UNITS |
|--|--|------------|
| COMSC-049 | Computer Literacy | 1.5 |
| POLSC-010 or 20 | American Institution & Ideals or Intro to Politics | 3 |
| SPCH-110 | Oral Communication | 3 |
| Social Science General Education Course | | 3 |
| Creative Arts General Education Course | | 3 |
| Ethnic Multicultural Course | | 3 |
| Physical Education Activity Course(s) | | 2 |

TOTAL UNITS REQUIRED FOR PREREQUISITES AND GRADUATION REQUIREMENTS 42.5-43.5

continued on next page ►

Registered Nursing Curriculum

| REQUIRED COURSES: FIRST SEMESTER | | UNITS |
|---|---------------------------------------|------------|
| RNURS-022 | Foundations of Nursing Practice | 9.5 |
| RNURS-023 | Nursing Skills Simulation I | 1 |
| RNURS-024 | Pharmacology for RN Program I | 1 |
| REQUIRED COURSES: SECOND SEMESTER | | UNITS |
| RNURS-026 | Nursing in Health and Illness I | 9.5 |
| RNURS-027 | Nursing Skills Simulation II | 1 |
| RNURS-028 | Pharmacology for RN Program II | 1 |
| REQUIRED COURSES: THIRD SEMESTER | | UNITS |
| RNURS-031 | Nursing in Health & Illness II | 9.5 |
| RNURS-033 | Nursing Skills Simulation III | 1 |
| RNURS-034 | Pharmacology for RN Program III | 1 |
| REQUIRED COURSES: FOURTH SEMESTER | | UNITS |
| RNURS-030 | Leadership/Management/Professionalism | 1 |
| RNURS-036 | Nursing in Health & Illness III | 9.5 |
| RNURS-038 | Nursing Skills Simulation IV | 1 |
| RNURS-039 | Pharmacology for RN Program IV | 1 |
| TOTAL UNITS REQUIRED IN NURSING CURRICULUM | | 47 |

LVN to RN Program

The LVN to RN program for California Licensed Vocational Nurses requires successful completion of all prerequisites, required GPA, the second-year RN curriculum, and General Education requirements.

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. Please refer to the Nursing Application Handbook for current admission eligibility criteria and updates.

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

| REQUIRED COURSES: PREREQUISITES | | UNITS |
|--|--|------------|
| ENGL-100 | College Composition | 3 |
| MATH-030 | See LMC catalog for descriptions and current graduation requirements | 4-5 |
| BIOSC-040 | Human Anatomy | 5 |
| BIOSC-045 | Human Physiology | 5 |
| BIOSC-050 | Intro to Microbiology | 4 |
| PSYCH-010 or 11 | General Psychology | 3 |
| REQUIRED COURSES: GRADUATION REQUIREMENTS | | UNITS |
| COMSC-049 | Computer Literacy | 1.5 |
| POLSC-010 or 20 | American Institution & Ideals | 3 |
| SPCH-110 | Oral Communication | 3 |
| Social Science General Education Course | | 3 |
| Creative Arts General Education Course | | 3 |

| | |
|---|------------------|
| Ethnic Multicultural Course | 3 |
| Physical Education Activity Course(s) | 2 |
| TOTAL UNITS REQUIRED FOR PREREQUISITES AND GRADUATION REQUIREMENTS | 42.5-43.5 |

Registered Nursing Curriculum

| REQUIRED COURSES: | | UNITS |
|--|--|-------------|
| RNURS-020 | Transition to RN Program Third Semester | .3 |
| RNURS-031 | Nursing in Health & Illness II | 9.5 |
| RNURS-033 | Nursing Skills Simulation III | 1 |
| RNURS-034 | Pharmacology for RN Program III Fourth Semester | 1 |
| RNURS-030 | Leadership/Management/Professionalism | 1 |
| RNURS-036 | Nursing in Health & Illness III | 9.5 |
| RNURS-038 | Nursing Skills Simulation IV | 1 |
| RNURS-039 | Pharmacology for RN Program IV | 1 |
| TOTAL UNITS REQUIRED IN REGISTERED NURSING CURRICULUM | | 24.3 |

Vocational Nursing

The Vocational Nursing Program is three semesters in length. The Certificate of Achievement is awarded upon successful completion of the program. Completion of prerequisite courses and required GPA are 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).

Certificate of Achievement -Vocational Nursing

| RECOMMENDED | | UNITS |
|--|---|------------------|
| RNURS-001 | Nursing Careers Seminar | 0.3 |
| REQUIRED COURSES: PREREQUISITES | | UNITS |
| BIOSC-030 | Intro to Anatomy and Physiology | 3 |
| COMSC-049 | Computer Literacy | 1.5 |
| ENGL-090 | Integrated Reading, Writing, and Critical Thinking | 5 |
| MATH-030 | See LMC catalog for descriptions and current graduation requirements | 4-5 |
| NUTRI-055 | Introduction to Nutrition | 3 |
| VONUR-008 | Medical Terminology | 1 |
| TOTAL UNITS REQUIRED FOR PREREQUISITE COURSES | | 17.5-18.5 |

| REQUIRED COURSES: FIRST SEMESTER | | UNITS |
|----------------------------------|--|----------|
| VONUR-004 | Introduction to Clinical Pharmacology | 1 |
| VONUR-005 | Fundamentals of Vocational Nursing | 6 |
| VONUR-006 | Fundamentals of Vocational Nursing Practice | 6 |
| VONUR-007 | Vocational Nursing Role Relationships | 1 |

| REQUIRED COURSES: SECOND SEMESTER | | UNITS |
|-----------------------------------|--|----------|
| VONUR-010 | Intermediate Core Concepts in Clinical Pharmacology | 1 |

| | | |
|------------------|-----------------------------------|----------|
| VONUR-011 | Medical Surgical Nursing | 5 |
| VONUR-012 | Medical Surgical Nursing Practice | 6 |

| REQUIRED COURSES: THIRD SEMESTER | | UNITS |
|---|---|-------------|
| VONUR-015 | Advanced Core Concepts in Clinical Pharmacology | 1 |
| VONUR-016 | Family Centered Nursing | 5 |
| VONUR-017 | Family Centered Nursing Practice | 6.5 |
| VONUR-018 | Professional Issues in Vocational Nursing | 1 |
| TOTAL UNITS REQUIRED FOR VOCATIONAL NURSING CURRICULUM | | 39.5 |

Process Technology

DEGREE—Associate of Science
Process Technology

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 Associate of Science Degree in Process Technology, complete 33 units of coursework listed below as well as the General Education and Graduation requirements. Consult a Los Medanos College counselor to develop your education plan for the Associate of Science Degree

For the Certificate of Achievement in 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.

| REQUIRED COURSES: PROGRAM ENTRY | | UNITS |
|---|--|-----------|
| MATH-025 | Elementary Algebra | 5 |
| ENGL-090 | Integrated Reading, Writing, and Critical Thinking | 5 |
| TOTAL UNITS REQUIRED FOR PROGRAM ENTRY | | 10 |

| REQUIRED COURSES: | | UNITS |
|-------------------|--|----------|
| PTEC-010 | Introduction to Process Technology | 3 |
| PTEC-012 | Petrochemical Safety, Health and Environment | 1 |
| PTEC-024 | Process Instrumentation | 3 |
| PTEC-025 | Process Technology I – Equipment | 3 |
| PTEC-027 | Applied Instrumentation | 1 |
| PTEC-035 | Process Technology II – Systems | 3 |
| PTEC-044 | Petrochemical Simulation Laboratory | 1 |
| PTEC-045 | Process Technology III – Operations | 3 |
| PTEC-048 | Process Trouble Shooting | 3 |
| MATH-030* | Intermediate Algebra | 4 |

| | | |
|--|--|-----------|
| CHEM-006 | Introduction to Inorganic and Physical Chemistry | 4 |
| or | | |
| CHEM-007 | Introduction General, Organic and Biochemistry | 4 |
| PHYS-015** | Introduction to Physics | 4 |
| TOTAL UNITS | | 33 |
| TOTAL UNITS REQUIRED IN MAJOR COURSES | | 43 |

*Math 30 also satisfies the Math requirement for the AS Degree.

** Physics 15 also satisfies the Physical Science requirement for the AS Degree.

Psychology

DEGREE—Associate in Arts for Transfer
Psychology



The Psychology major at Los Medanos College will provide students with an introduction to the field of psychology. This major will focus on behavior and its contributions to understanding social evolution, interpersonal relationships and healthy and disordered functioning. Students will be exposed to psychology as the scientific study of thought, feeling and behavior and as a helping profession dedicated to solving human problems.

Psychology includes a variety of subfields, including clinical, counseling, developmental, forensic, social, cognitive, biological, industrial, health, educational and school psychology. Most career options require more than two years of college study. This Associate in Arts Degree in Psychology for Transfer provides preparation for transfer to psychology programs at four-year institutions. Transferring, completion of a bachelor's degree in psychology can lead to careers as psychotherapists, college professors, scientific researchers, administrations and business consultants.

To achieve the Associate in Arts Degree in Psychology for Transfer from LMC students must (1) complete the psychology major requirements (2) fulfill requirements of either the CSU-General Education (3) complete 60 units college transfer level units and (4) obtain a minimum grade point average of 2.0.

| REQUIRED COURSES: | | UNITS |
|-------------------------------|----------------------------|-----------|
| MATH-034 | Introduction to Statistics | 4 |
| PSYCH-011 | General Psychology | 3 |
| PSYCH-017 or SOCIO-017 | Introduction to Research | 3 |
| BIOSC-010 | Introduction to Biology | 4 |
| SOCIO-015 | Introduction to Sociology | 3 |
| TOTAL UNITS | | 17 |

SELECT ONE COURSE:

| | | |
|------------------|---------------------------------|----------|
| PSYCH-010 | Individual and Social Processes | 3 |
| or | | |

continued on next page ►

| | |
|--|-----------|
| PSYCH-012 or SOCIO-012 | |
| Marriage and Family | 3 |
| TOTAL UNITS | 3 |
| TOTAL UNITS REQUIRED FOR DEGREE | 20 |

Real Estate

DEGREES—Associate of Science
Real Estate

CERTIFICATE OF ACHIEVEMENT
Real Estate

COLLEGE SKILLS CERTIFICATE
Real Estate Sales

LMC offers students the choice of pursuing a degree or a certificate in Real Estate. The degree and certificate programs include business courses as well as skills in Real Estate. The Real Estate program provides students with the theory, knowledge and skills necessary for entry level real estate positions, and will prepare students for state licensing.

| REQUIRED COURSES: | | UNITS |
|---|----------------------------------|-----------|
| REAL-005*/**** | Real Estate Principles | 3 |
| REAL-020*/** | Real Estate Practice | 3 |
| REAL-025**/** | Real Estate Finance | 3 |
| TOTAL UNITS | | 9 |
| AND SELECT 18 UNITS OF ELECTIVE COURSES FROM: | | |
| BUS-018***** | Microsoft Excel for Windows | 3 |
| BUS-109 | Introduction to Business | 3 |
| BUS-181*** | Accounting: Applied Principles | 3 |
| BUS-186** | Financial Accounting | 4 |
| BUS-294 | Business Law* | 3 |
| BUS-027 | Small Business Management | 3 |
| BUS-185 | Computerized Assisted Accounting | 3 |
| BUS-029 | QuickBooks | 2 |
| Any Management course | | 3 |
| TOTAL UNITS REQUIRED IN MAJOR COURSES. | | 27 |

*Required for California Real Estate Sales License

**Required for California Real Estate Broker's License

***Electives for California Real Estate Sales License

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

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

□Courses currently not offered at LMC, can be taken at DVC. REAL-010 equivalent to RE-161, REAL 015 equivalent to RE-162, consult with a Business faculty advisor.

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

College Skills Certificate in Real Estate

This career certificate is 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.

Real Estate Sales

| REQUIRED COURSES: | | UNITS |
|--------------------|------------------------|----------|
| REAL-005 | Real Estate Principles | 3 |
| REAL-020 | Real Estate Practice | 3 |
| TOTAL UNITS | | 6 |

AND SELECT A MINIMUM OF 3 UNITS FROM:

| | | |
|--|--------------------------------|----------|
| REAL-025 | Real Estate Finance | 3 |
| BUS-045 | Office Accounting Essentials | 3 |
| BUS-181 | Accounting: Applied Principles | 3 |
| BUS-186 | Financial Accounting | 3 |
| BUS-294 | Business Law+ | 3 |
| TOTAL REQUIRED UNITS FOR COLLEGE SKILLS CERTIFICATE | | 9 |

Recording Arts

DEGREE—Associate of Arts
Recording Arts

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 Associate of Arts Degree in Recording Arts, complete 32 units of coursework listed below as well as the General Education and Graduation requirements. Consult a Los Medanos College counselor to develop your education plan for the Associate of Arts Degree.

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.

| REQUIRED COURSES: | | UNITS |
|-------------------|--|----------|
| RA-010 | Recording Arts I | 3 |
| RA-012 | Sound Reinforcement | 3 |
| RA-015 | Music Fundamentals for Audio Professionals | 3 |
| RA-020 | Recording Arts II | 3 |
| RA-021 | The Role of the Producer | 2 |
| RA-025 | Basic Tracking Sessions | 3 |

| | | |
|--------------------|-------------------------------|----------------|
| RA-030 | Recording Arts III | 3 |
| RA-032 | Recording Arts Workshop | (min) 1 |
| RA-035 | Protools Production & Editing | 3 |
| RA-040 | Recording Arts IV | 3 |
| TOTAL UNITS | | 27 |

AND SELECT A MINIMUM OF 5 UNITS FROM:

| | | |
|------------------|---------------------------------------|----------|
| ETEC-010 | Direct Current Circuits | 3 |
| MUSIC-015 | Basic Music | 3 |
| MUSIC-089 | Music and Recording Industry Business | 2 |
| MUSIC-093 | Studio Music Production I | 2 |
| MUSIC-094 | Studio Music Production II | 2 |
| MUSIC-095 | Studio Music Production III | 2 |
| RA-033 | Summer Recording Arts Workshop | 3 |

or

Electives approved by Recording Arts Department Chair

| | | |
|--------------------|--|----------|
| TOTAL UNITS | | 5 |
|--------------------|--|----------|

| | | |
|--|--|-----------|
| TOTAL UNITS REQUIRED IN MAJOR COURSES | | 32 |
|--|--|-----------|

Sociology

DEGREE—Associate in Arts Degree for Transfer

Sociology



The Sociology major at Los Medanos College will provide students with an introduction to the field of sociology. This major will focus on the principles and theoretical perspectives of sociology. Students will be provided an opportunity to examine how sociological phenomena can influence social institutions and social behavior. The sociological examination of the various modes of inquiry will develop an awareness of the importance as well as the complexity of collecting and reporting research data.

Most career options require more than two years of college study. This associate degree provides preparation for transfer to sociology programs at four year institutions. Transferring and the completion of the baccalaureate degree and graduate studies in sociology can lead to a variety of careers in social services, college and university teaching and research, administration and government fields and business consultants.

To achieve the Associate of Arts in Sociology for Transfer from Los Medanos College, students must 1. Complete the Sociology major requirements, 2. Fulfill requirements of either the CSU-General Education or the IGETC general education pattern, 3. Complete 60 units of college transfer level courses, and 4. Obtain a minimum grade point average of 2.0.

| REQUIRED COURSES: | | UNITS |
|-------------------------------|----------------------------|----------|
| SOCIO-015 | Introduction to Sociology | 3 |
| MATH-034 | Introduction to Statistics | 4 |
| SOCIO-017 or PSYCH-017 | Introduction to Research | 3 |
| SOCIO-012 or PSYCH-012 | Marriage and Family | 3 |

| | | |
|--|---------------------------------|-----------|
| SOCIO-016 | Introduction to Social Problems | 3 |
| PSYCH-011 | General Psychology | 3 |
| TOTAL UNITS REQUIRED FOR DEGREE | | 19 |

Travel Marketing

DEGREE—Associate of Science

Travel Marketing

CERTIFICATE OF ACHIEVEMENT

Travel Marketing

COLLEGE SKILLS CERTIFICATES

Travel Marketing

Home-Based Travel Specialist

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. Proficiencies in English, Math, and Computer Science should be met 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: | | UNITS |
|--------------------|------------------------------|-----------|
| TRAVL-072 | Introduction to Travel | 3 |
| TRAVL-076 | Travel Sales and Marketing | 3 |
| TRAVL-077 | Customized Vacation Planning | 2 |
| TRAVL-095 | Advanced Travel Concepts | 3 |
| TOTAL UNITS | | 11 |

AND SELECT 3 UNITS OF DESTINATION SPECIALIST GEOGRAPHY COURSES FROM:

| | | |
|------------------|---------------------------------------|------------|
| TRAVL-074 | North American Destination Specialist | 3 |
| TRAVL-075 | Western Europe Destination Specialist | 3 |
| TRAVL-083 | Hawaii Destination Specialist | 1.5 |
| TRAVL-084 | Caribbean Destination Specialist | 1.5 |
| TRAVL-085 | South Pacific Destination Specialist | 1.5 |
| TRAVL-087 | Mexico Destination Specialist | 1.5 |
| TRAVL-096 | Alaska Destination Specialist | 1.5 |

continued on next page ►

Graduation Requirements

AND SELECT A MINIMUM OF 7 ELECTIVE UNITS FROM:

| | | |
|---------------------------------------|--|-------|
| TRAVL-074 | North American Destination Specialist | 3 |
| TRAVL-075 | Western Europe Destination Specialist | 3 |
| TRAVL-082 | All About Cruising | 3 |
| TRAVL-083 | Hawaii Destination Specialist | 1.5 |
| TRAVL-084 | Caribbean Destination Specialist | 1.5 |
| TRAVL-085 | South Pacific Destination Specialist | 1.5 |
| TRAVL-087 | Mexico Destination Specialist | 1.5 |
| TRAVL-096 | Alaska Destination Specialist | 1.5 |
| 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-114 | Group Travel Management | 1.5 |
| TRAVL-170 | Cooperative Education in Travel (Travel Internship) | 1-2 |
| 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** – This can be achieved by completing Math 9 or 12, or a higher level Math course, or by taking the Assessment Test and achieving a high score.
3. **Computer literacy** – This can be achieved by completing Computer Science 40 or 49; Business 18, 35 or 65 or by taking the Assessment Test and achieving a high score. (Consult page 37 for the list of courses that satisfy computer literacy.)

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 Certificates in Travel

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. Required courses are not offered every semester, so careful planning will minimize the amount of time to complete this certificate.

| REQUIRED COURSES : | | UNITS |
|--------------------|----------------------------|-------|
| TRAVL-072 | Introduction to Travel | 3 |
| TRAVL-076 | Travel Sales and Marketing | 3 |
| TRAVL-095 | Advanced Travel Concepts | 3 |
| TOTAL UNITS | | 9 |

AND SELECT A MINIMUM OF 3 ELECTIVE UNITS FROM:

| | | |
|--|--|-------|
| TRAVL-074 | North American Destination Specialist | 3 |
| TRAVL-075 | Western Europe Destination Specialist | 3 |
| TRAVL-077 | Customized Vacation Planning | 2 |
| TRAVL-082 | All About Cruising | 3 |
| TRAVL-083 | Hawaii Destination Specialist | 1.5 |
| TRAVL-084 | Caribbean Destination Specialist | 1.5 |
| TRAVL-085 | South Pacific Destination Specialist | 1.5 |
| TRAVL-087 | Mexico Destination Specialist | 1.5 |
| TRAVL-096 | Alaska Destination Specialist | 1.5 |
| 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-114 | Group Travel Management | 1.5 |
| TRAVL-170 | Cooperative Education in Travel (Travel Internship) | 1-2 |
| TRAVL 900* | Selected Topics in Travel | .3 –3 |
| TOTAL UNITS REQUIRED IN COLLEGE SKILLS CERTIFICATE | | 12 |

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. Required courses are not offered every semester, so careful planning will minimize the amount of time to complete this certificate.

| Required Courses: | | Units |
|-------------------|--|-------|
| TRAVL-072 | Introduction to Travel | 3 |
| TRAVL-076 | 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 |
| TOTAL UNITS | | 9 |

SELECT 3 UNITS OF DESTINATION SPECIALIST GEOGRAPHY COURSES FROM:

| | | |
|-----------|---------------------------------------|-----|
| TRAVL-074 | North American Destination Specialist | 3 |
| TRAVL-075 | Western Europe Destination Specialist | 3 |
| TRAVL-083 | Hawaii Destination Specialist | 1.5 |
| TRAVL-084 | Caribbean Destination Specialist | 1.5 |
| TRAVL-085 | South Pacific Destination Specialist | 1.5 |
| TRAVL-087 | Mexico Destination Specialist | 1.5 |
| TRAVL-096 | Alaska Destination Specialist | 1.5 |

AND SELECT A MINIMUM OF 5 ELECTIVE UNITS FROM:

| | | |
|---|---------------------------------------|--------------|
| TRAVL-074 | North American Destination Specialist | 3 |
| TRAVL-075 | Western Europe Destination Specialist | 3 |
| TRAVL-077 | Customized Vacation Planning | 2 |
| TRAVL-082 | All About Cruising | 3 |
| TRAVL-083 | Hawaii Destination Specialist | 1.5 |
| TRAVL-084 | Caribbean Destination Specialist | 1.5 |
| TRAVL-085 | South Pacific Destination Specialist | 1.5 |
| TRAVL-095 | Advanced Travel Concepts | 3 |
| TRAVL-087 | Mexico Destination Specialist | 1.5 |
| TRAVL-096 | Alaska Destination Specialist | 1.5 |
| TRAVL-114 | Group Travel Management | 1.5 |
| TRAVL 900* | Selected Topics in Travel | .3 –3 |
| TOTAL UNITS REQUIRED IN COLLEGE SKILLS CERTIFICATE | | 17 |

Cruise Specialist

This 8-unit certificate prepares the student to specialize in selling cruises. Employment possibilities include working for a full-service or a cruise-only travel agency, or operating a home-based travel business. Required courses are not offered every semester, so careful planning will minimize the amount of time to complete this certificate.

| REQUIRED COURSES: | | UNITS |
|--|------------------------------|-------|
| TRAVL-082 | All About Cruising | 3 |
| TRAVL-076 | Travel Sales and Marketing | 3 |
| TRAVL-077 | Customized Vacation Planning | 2 |
| TOTAL UNITS REQUIRED IN COLLEGE SKILLS CERTIFICATE | | 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/travel.

Welding Technology

DEGREE—Associate of Science

Welding Technology

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

| REQUIRED COURSES: | | UNITS |
|---------------------------------------|-----------------------------------|-------|
| WELD-010 | Basic Arc Welding Theory | 3 |
| WELD-011 | Basic Arc Welding Practice | 3 |
| WELD-015 | Basic Oxyacetylene Welding | 2 |
| WELD-016 | Advanced Oxyacetylene Welding | 1 |
| WELD-021 | Advanced Arc Welding Practice | 3 |
| WELD-031 | TIG, MIG and FCA Welding Practice | 3 |
| WELD-035 | Blueprint Reading for Welders | 3 |
| WELD-040 | TIG, MIG and FCA Welding Theory | 3 |
| WELD-041 | 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.

World Languages

COLLEGE SKILLS CERTIFICATE

American Sign Language
Cultural Competence in Modern World Language
Spanish

American Sign Language

| REQUIRED COURSES | | UNITS |
|--|---------------------------|----------|
| SIGN 068 | American Sign Language IV | 3 |
| SIGN 072 | Deaf Culture | 3 |
| TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE | | 6 |

**Cultural Competence in Modern World Language
American Sign Language**

| ANY THREE OF THE FIVE WORLD LANGUAGES LISTED BELOW: | | UNITS |
|---|--------------------------|--------------|
| SIGN 065 | American Sign Language I | 3 |
| FILIP 060 | Elementary Filipino I | 5 |
| ITAL 060 | Elementary Italian I | 5 |
| FRNCH 060 | Elementary French I | 5 |
| SPAN 050 | Elementary Spanish I | 5 |
| TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE: | | 13-15 |

Spanish

| REQUIRED COURSES: | | UNITS |
|--|-------------------------|----------|
| SPAN-053 | Intermediate Spanish II | 5 |
| TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE | | 5 |

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.

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/Management and Supervision/Real Estate

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.

Drama

Program Completion/Learning Outcomes:

1. To analyze, dissect, and critically evaluate a script or theatrical event or film with working knowledge of its historical, cultural, and societal origins and contexts.
2. To use strongly developed physical, vocal, and emotional foundations to build a personalized acting process for approaching a text or character in order to effectively communicate on stage or in film.
3. To understand how and be able to write, produce, direct, manage, promote, and star in a theatrical event or film.
4. To be academically and fundamentally prepared to enter the entertainment industry or transfer to a 4-year theatre or film program with an advanced standing.

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)

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.

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.

English-as-a-Second Language

Program Completion/Learning Outcomes:

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
 - 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

Environmental Sciences

Program Completion/Learning Outcomes:

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.
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

Program Completion/Learning Outcomes:

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.

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.

Mathematics (Transfer)

Program Completion/Learning Outcomes:

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)

Program Completion/Learning Outcomes:

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

Program Completion/Learning Outcomes:

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).

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.

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.

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 & Records 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 "P", "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 ("NP", "D", or "F"). See the "Standards of Scholarship" section 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. LR will appear at the end of the course description for letter grade 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 39 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.

Course Identification Numbering System (C-ID)

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

confirm how each college's course will be accepted at a particular four-year college or university for transfer credit.

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

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

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 | 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 |
| Occupational work experience Field work | Contract and/or paid work with instructor evaluation. | 0 | 1 unit 75 paid hours per semester or 60 nonpaid hours per semester |

Classes of less than one semester in length will be assigned units proportional to semester hours.

Academic and Career Success

ACS-010 AVID I (Advancement Via Individual Determination)

54 total hours lecture 3 Units

Advisory: *Eligibility for ENGL-090*

(formerly EDUC-010) Assists students in developing a strong sense of academic 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 not be repeated. LR

LMC: DA

Transfer: *CSU Gen. Ed. Area E*

ACS-015 AVID II (Advancement Via Individual Determination)

54 total hours lecture, 18 total hours lab 3 Units

Prerequisite: *ACS-10 (formerly EDUC-010)*

(formerly EDUC-015) Building on the AVID core skills of critical reflection contained in the course prerequisite (ACS-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. ACS-015 helps students to see leadership in day to day interactions and to understand the value of leaders of empathy and of understanding differing perspectives in improving their lives and their communities. It enables students to strengthen their academic identities through leadership. ACS-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*

ACS-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.*

ACS-100 Educational Services and Strategies

18 total hours lecture, 36 total hours lab 1.5 Units

(formerly HMSRV-100) 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. P/NP

LMC: NDA

Transfer: *CSU*

ACS-110 Academy for College Excellence Foundation Course

9 total hours lecture, 54 total hours lab 1.5 Units

Advisory: *Eligibility for ENGL-090*

(formerly HMSRV-110) This is an introductory course to the Academy for College Excellence that helps students develop professional behaviors that lead to academic and "knowledge work" career success such as developing self-discipline, leading self-managed teams, and creating effective teams composed of individuals with different working styles. May not be repeated. SC

LMC: DA

ACS-111 Academy for College Excellence Team Self-Management Course

36 total hours lab .5 Unit

Prerequisite: *ACS-110 (formerly HMSRV-110 may be taken concurrently)*

Advisory: *Eligibility for ENGL-090*

(formerly HMSRV-111) Introduces the theory and practice of team self-management and its application in work organizations: exploring the connections between one's purpose and intentions and one's behaviors, and develops the self-management skills to successfully attain one's goals. May be repeated three times. SC

LMC: DA

ACS-112 Academy for College Excellence Survey Research on Community Issues

27 total hours lecture, 54 total hours lab 2.5 Units

Prerequisite: *ACS-110 (formerly HMSRV-110 may be taken concurrently)*

Co-requisite: *ACS-111 (formerly HMSRV-111)*

Advisory: *Eligibility for ENGL-090*

(formerly HMSRV-112) Explores fundamental topics related to knowledge work: conducting survey research of a community issues; leading and working on a self-managing work team; developing project management skills; and identifying and analyzing opportunities that lead to proposals and business plans. Additional topics include: defining knowledge work cultures, solving a social justice problem through utilizing discovery-based research methodology, history of survey research, problems of cross-cultural research, criticisms of survey research, and marketing new ideas. May be repeated once. SC

LMC: DA

ACS-170 Occupational Work Experience Education in Education

60-300 total hours 1-4 Units

Prerequisite: *Approved online application***Advisory:** *Eligibility for ENGL-090*

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**ACS-170A Internship in Education**

60-300 total hours 1-4 Units

Prerequisite: *Approved online application and employer placement***Advisory:** *Eligibility for ENGL-090*

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 career technical 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 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**ACS-900s Selected Topics in Education**

DA varies with course content.

Administration of Justice**ADJUS-001 Basic Law Enforcement Academy - Module III**

80 total hours lecture, 102 total hours lab 6 Units

Prerequisite: *Students are required to: 1) complete an academy application, 2) have a high school diploma or GED, 3) be at least 18 years old, 4) have a valid driver's license, 5) show proof of vehicle insurance at the first class meeting, 6) supply a statement from a physician indicating his/her ability to engage in strenuous physical activity, 7) obtain clearance with the Department of Justice and, 8) sign a Felony Disclaimer.*

Advisory: *Eligibility for ENGL-100*

The Basic Law Enforcement Academy - Module III is for persons wishing to apply as a Level III Reserve with a participating law enforcement agency or, upon completion of Modules II and I, apply as a full-time regular law enforcement officer with a participating law enforcement agency. The basic course is certified by the California Commission on Peace Officer Standards and Training (P.O.S.T.) and is presented in the extended (evenings and weekends) format. Module III consists of 182 instructional hours. Subject matter includes but is not limited to: professional orientation, community relations, criminal law, laws of evidence, communications, vehicle operations, force and weaponry, traffic enforcement, First Aid/ CPR, criminal investigation, custody, physical fitness, defense techniques and the Arrest and Firearms training requirements specified in Penal Code section PC832. Interested students must contact the Office of the Sheriff, Contra Costa County, Law Enforcement Training Center, 340 Marina Blvd., Pittsburg, CA by calling (925) 427-8238, to register for the Academy. Mandatory materials fee due on first day on instruction. May not be repeated. LR

LMC: DA**Transfer:** CSU**ADJUS-002 Basic Law Enforcement Academy - Module II**

103 total hours lecture, 168 total hours lab 9 Units

Prerequisite: *1) Successful completion of Module III within the preceding 12 months and 2) current (within the last 3 years) in PC 832 Arrest and Firearms training. Students are required to: 1) complete an academy application, 2) have a high school diploma or GED, 3) be at least 18 years old, 4) have a valid driver's license, 5) show proof of vehicle insurance at the first class meeting, 6) supply a statement from a physician indicating his/her ability to engage in strenuous physical activity, 7) obtain clearance with the Department of Justice and, 8) sign a Felony Disclaimer.*

Advisory: *Eligibility for ENGL-100*

The Basic Law Enforcement Academy- Module II is for persons wishing to apply as a Level II Reserve with a participating law enforcement agency or, upon completion of Modules III and I, apply as a full-time regular law enforcement officer with a participating law enforcement agency. The course is certified by the California Commission on Peace Officer Standards and Training (P.O.S.T.) and is presented in the extended (evenings and weekends) format. Module II consists of 271 instructional hours. Subject matter includes but not limited to: property crimes, laws of arrest, community relations, criminal law, investigative report writing, laws of evidence, force and weaponry, traffic enforcement, criminal investigation, custody, physical fitness, and defense techniques. Interested students must contact the Office of the Sheriff, Contra Costa County, Law Enforcement Training

Center, 340 Marina Blvd., Pittsburg, CA by calling (925) 427-8238, to register for the Academy. Mandatory materials fee due on first day on instruction. May not be repeated. LR

LMC: DA

Transfer: CSU

ADJUS-003 Basic Law Enforcement Academy - Module I

160 total hours lecture, 290 total hours lab 14 units

Prerequisite: 1) Successful completion of Modules III and II, 2) current (within the last 3 years) in PC 832 Arrest and Firearms training requirements and 3) passage of the POST-Constructed Comprehensive Module II End-of-Course Proficiency Test within the preceding 12 months. Students are required to: 1) complete an academy application, 2) have a high school diploma or GED, 3) be at least 18 years old, 4) have a valid driver's license, 5) show proof of vehicle insurance at the first class meeting, 6) supply a statement from a physician indicating his/her ability to engage in strenuous physical activity, 7) obtain clearance with the Department of Justice and, 8) sign a Felony Disclaimer.

Advisory: Eligibility for ENGL-100

The Basic Law Enforcement Academy- Module I is for persons wishing to apply as a Level I reserve police officer with a participating law enforcement agency or, having completed Modules III and II, apply as a full-time regular law enforcement officer or Level I reserve with a participating law enforcement agency. The course is certified by the California Commission on Peace Officer Standards and Training (P.O.S.T.) and is presented in the extended (evenings and weekends) format. Module I consists of 450 instructional hours. Subject matter includes but is not limited to: victimology, crimes against children, juvenile law and procedure, ABC law, patrol techniques, crimes in progress, handling disputes/crowd control, unusual occurrences, missing persons, traffic collision investigation, people with disabilities, emergency management, lifetime fitness, arrest control/defense tactics, firearms, interview and interrogation, and courtroom testimony. Interested students must contact the Office of the Sheriff, Contra Costa County, Law Enforcement Training Center, 340 Marina Blvd., Pittsburg, CA by calling (925) 427-8238, to register for the Academy. Mandatory materials fee due on first day on instruction. May not be repeated. LR

LMC: DA

Transfer: CSU

ADJUS-005A Basic Law Enforcement Academy I

102 total hours lecture, 514 total hours lab 15 Units

Prerequisite: Students are required to: 1) complete an academy application, 2) have a high school diploma or GED, 3) be at least 18 years old, 4) have a valid driver's license, 5) show proof of vehicle insurance at the first class meeting, 6) supply a statement from a physician indicating his/her ability to engage in strenuous physical activity, 7) obtain clearance with the Department of Justice and, 8) sign a Felony Disclaimer.

Co-requisite: ADJUS-005B

Advisory: Eligibility for ENGL-100

The Basic Law Enforcement Academy I is the first in a series of two courses designed for persons seeking full-time employment in law enforcement and for those who have been recently hired by a local law enforcement agency. It is certified by the California Commission on Peace Officer Standards and Training (P.O.S.T.) and is presented in the intensive full-time for-

mat consisting of 616 hours of instruction delivered over 16 weeks. Subject matter includes: Leadership, Officer Safety, Use of Force, Legal Authority/Individual Rights, Police Vehicle Operation, Conflict Resolution, Problem Solving/Decision-Making, Communication, Ethics, Stress Tolerance and Emotional Maturity. Upon successful completion of this course and co-requisite course ADJUS-005B student will be eligible for employment as a peace officer in most California jurisdictions. Interested students must contact the Office of the Sheriff, Contra Costa County, Law Enforcement Training Center, 340 Marina Blvd., Pittsburg, CA by calling (925) 427-8238 to register for the Academy. Mandatory materials fee due on first day on instruction. May not be repeated. LR

LMC: DA

Transfer: CSU

ADJUS-005B Basic Law Enforcement Academy II

60 total hours lecture, 344 total hours lab 10 Units

Prerequisite: Students are required to: 1) complete an academy application, 2) have a high school diploma or GED, 3) be at least 18 years old, 4) have a valid driver's license, 5) show proof of vehicle insurance at the first class meeting, 6) supply a statement from a physician indicating his/her ability to engage in strenuous physical activity, 7) obtain clearance with the Department of Justice and, 8) sign a Felony Disclaimer.

Pre-requisite: ADJUS-05A Basic Law Enforcement Academy I.

Advisory: Eligibility for ENGL-100

The Basic Law Enforcement Academy II is the second in a series of two courses designed for persons seeking full-time employment in law enforcement and for those who have been recently hired by a local law enforcement agency. It is certified by the California Commission on Peace Officer Standards and Training (P.O.S.T.) and is presented in the intensive full-time format consisting of 404 hours of instruction delivered over 10 weeks. Subject matter includes: Leadership, Officer Safety, Gang Awareness, Legal Authority/Individual Rights, Juvenile Law Procedure, Conflict Resolution, Problem Solving/Decision-Making, Communication, Ethics, Stress Tolerance and Emotional Maturity. Upon successful completion of this course and of co-requisite ADJUS-005A the student will receive a Certificate of Completion and is eligible for employment as a peace officer in most California jurisdictions. Interested students must contact the Office of the Sheriff, Contra Costa County, Law Enforcement Training Center, 340 Marina Blvd., Pittsburg, CA by calling (925) 427-8238 to register for the Academy. Mandatory materials fee due on first day on instruction. May not be repeated. LR

LMC: DA

Transfer: CSU

ADJUS-042 Introduction to Corrections

54 total hours lecture 3 Units

Prerequisite: ADJUS-120**Advisory:** Eligibility for ENGL-090

This course explores criminal behavior, the historical development, current concepts and practices, functions and objectives of the criminal justice system. The focus is on the institutions, probation and parole processes as they modify the offender's behavior. It also covers professional career opportunities in public and private agencies. May not be repeated. SC

LMC: DA**Transfer:** CSU**ADJUS-043 Parole and Probation**

54 total hours lecture 3 Units

Prerequisite: ADJUS-120**Advisory:** Eligibility for ENGL-090

This course is designed for students planning a career in the field of corrections or as a parole or probation officer. The intricacies of probation programs and the skills required to succeed in probation and diversion programs will be thoroughly explored. Parole reentry programs will be analyzed. The conditions of parole will be assessed, and reasons for recidivism and parole revocation will be carefully examined. May not be repeated. SC

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

ADJUS-120 Introduction to the Criminal Justice System

54 total hours lecture 3 Units

Advisory: Eligibility for ENGL-100

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 subsystems; 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:** UC, CSU**ADJUS-121 Criminal Law**

54 total 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 crimes, 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**

54 total hours lecture 3 Units

Prerequisite: ADJUS-120**Advisory:** Eligibility for ENGL-090

This course offers a comprehensive look at the origin, development, philosophy and legal basis of criminal procedures in California. The course includes the application of procedural state law, case law, and the constitutional law governing arrest, use of force, motions, rules of discovery, and applicable rules of evidence. In particular, the course reviews how procedures affect the California court system, the California grand jury system, pre-trial motions, adult trial procedures, juvenile trial procedures, sentencing and the appellate process. May not be repeated. SC

LMC: DA**Transfer:** CSU**ADJUS-130 Cultural Diversity in Criminal Justice**

54 total hours lecture 3 Units

Advisory: ADJUS-120; eligibility for ENGL-090

This course is a theoretical and conceptual overview of multicultural concepts and issues, including those relating to culture, racial, gender, age, and sexual orientation and how their applications are put into place in criminal justice disciplines (law enforcement, the court system, and corrections). The identification of problems related to our increasingly diverse population will be examined and strategies analyzed to overcome those problems particularly related to the maintenance of social order. Conflict resolution and problem solving techniques are applied. Criminal justice agency hiring practices are defined and examined. May not be repeated. SC

LMC: DA**Transfer:** CSU

ADJUS-150A Basic Criminal Investigations

54 total hours lecture 3 Units

Prerequisite: ADJUS-121**Advisory:** Eligibility for ENGL-100

This course will enable the student to identify proper investigative techniques and determine their appropriate applications. Topics covered in this basic course will be the assessment of crime scenes, search authority, crime scene sketches and mapping, crime scene photography, evidence documentation and chain of evidence, evidence preservation, DNA, trace evidence, fingerprints, and autopsy evidence. 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. Students will correctly demonstrate basic evidence gathering techniques and evidence chain-of-command. This course is the first course of a two-semester series. May not be repeated. SC

LMC: DA**Transfer:** CSU**ADJUS-150B Advanced Criminal Investigations**

54 total hours lecture 3 Units

Prerequisite: ADJUS-150A**Advisory:** Eligibility for ENGL-100

This course will enable students to identify proper investigative techniques and determine their appropriate applications. Topics to be covered in this course will be blood spatter patterns, firearms, trajectories, arson investigation, explosives, cyber crimes, sexual assault evidence, narcotics investigations, vice investigations and proper courtroom testimony procedures. 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. Students will demonstrate the correct evidence gathering skills. This is the second course a two-course semester series. May not be repeated. SC

LMC: DA**Transfer:** CSU**ADJUS-151 Basic Drug Laws and Investigation**

54 total hours lecture 3 Units

Advisory: ADJUS-120; eligibility for ENGL-090

This course is an introduction to the evolution of drug laws, including a study of legal and illegal drugs and the symptoms of drug use. Students will learn how to apply the proper under-the-influence testing procedures. Students will analyze mock investigation reports, create and evaluate appropriate basic investigative procedures. May not be repeated. SC

LMC: DA**Transfer:** CSU**ADJUS-152 Gang Theory, Practice and Suppression**

54 total hours lecture 3 Units

Prerequisite: ADJUS-120**Advisory:** Eligibility for ENGL-090

This course covers issues dealing directly with gang theory including prison and street gangs, and the violence and crime related to these disruptive groups. It will include the Identification of gang practices, communications and gang structures. The effects that gangs have had on the United States criminal justice system will be analyzed. Finally, the course will define the basic techniques that law enforcement uses to suppress gang violence and investigate these unique criminal cases. May not be repeated. SC

LMC: DA**Transfer:** CSU**ADJUS-170 Occupational Work Experience Education in Administration of Justice**

60-300 total hours 1-4 Units

Prerequisite: Approved online application**Advisory:** Eligibility for ENGL-090

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**

60-300 total hours 1-4 Units

Prerequisite: Approved online application and employer placement**Advisory:** Eligibility for ENGL-090

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 career technical 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 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 Criminal Evidence

54 total hours lecture

3 Units

Prerequisite: ADJUS-120**Advisory:** Eligibility for ENGL-090

This course covers the origin, development, philosophy and the legal basis for California rules of evidence; the presentation of evidence; judicial decisions and the 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, and admissions and confessions. May not be repeated. SC

LMC: DA**Transfer:** CSU**ADJUS-222 Juvenile Law and Procedures**

54 total hours lecture

3 Units

Advisory: ADJUS-120; eligibility for ENGL-090

This course will explain the philosophy of the legal and procedural handling of 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 covered in depth. May not be repeated. SC

LMC: DA**Transfer:** CSU**ADJUS-260 Patrol Procedures**

54 total hours lecture

3 Units

Advisory: Eligibility for ENGL-090

This course will focus on the responsibilities, purpose, and the methods of police patrol, the effects upon the community, as well as decision making and the judgment of law enforcement officers working patrol. Students will actively participate through interacting physically in role plays, evaluating scenarios, demonstrating officer safety hands-on, exploring the use of force options and tactical communications. May not be repeated. SC

LMC: DA**Transfer:** CSU**ADJUS-900s Selected Topics in Administration of Justice**

DA varies with course content.

Air Conditioning and Refrigeration

ACREF-045 Basic Heating and Cooling Technology

18 total hours lecture, 54 total hours lab

2 Units

Advisory: Prior or concurrent enrollment in: APPLI-023, 024, 025 or 026

This course is designed to present the basic fundamentals of domestic heating and air conditioning systems. Students will get hands on practice working on heating and cooling systems. The focus will be on system installation, understanding refrigeration system operation, proper charging techniques, electrical circuitry, and the different voltages used in these units. This class is for students in the Appliance Program or those interested in learning basic heating and air conditioning technology. The course will include the new R-410A refrigerant that is replacing R-22. 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 Commercial Refrigeration Technology**

27 total hours lecture, 44 total hours lab

2 Units

Advisory: ETEC-004; MATH-007; eligibility for ENGL-090

An introductory course in commercial refrigeration systems which provides a background in the scientific principles related to heat and temperature, and transfer of heat. This course includes a study of the basic refrigeration cycle, the function of each system component, and interrelationships between components. Applied refrigeration concepts will be covered in demonstrations in the classroom, labs, and computer simulations. May be repeated three times. SC

LMC: DA**Transfer:** CSU**ACREF-075 HVAC Technician H1A Heating Technology**

27 total hours lecture, 44 total hours lab

2 Units

Advisory: ETEC-004 (formerly EETEC-010); MATH-007; eligibility for ENGL-090

An introductory course in residential and small commercial heating technology, including a background into the scientific principles related to heat, temperature, and heat transfer. The course will cover electric and gas systems, as well as newer technologies such as combined hydronics and geothermal heating. The main focus will be on forced air natural gas systems, including theory, operation, and maintenance of such equipment. Properties of fuel gases, gas combustion, furnace operation, pilot and ignition devices, electrical and mechanical systems will be covered along with system and component troubleshooting and maintenance. Concepts will be covered in demonstrations in the classroom and in labs. May be repeated three times. SC

LMC: DA**Transfer:** CSU

ACREF-076 HVAC-Residential and Small Commercial Air Conditioning Technology

27 total hours lecture, 44 total hours lab 2 Units

Advisory: ETEC-004; MATH-007; ACREF-073 or equivalent; eligibility for ENGL-090

This is an introductory course in residential and light commercial air conditioning which provides a background on the scientific principles related to heat and temperature, transfer of heat, and air conditioning systems. This covers applied air conditioning concepts through demonstrations in the labs, and computer simulation. It prepares students/technicians for specific HVAC industry competency, licensing and certification examinations. May be repeated three times. SC

LMC: DA**Transfer:** CSU**ACREF-077 Air Distribution (Duct) Testing and Repair**

27 total hours lecture, 44 total hours lab 2 Units

Advisory: ETEC-004; MATH-007; eligibility for ENGL-090

This introduction to residential and small commercial air handling and duct testing and repair provides a background in the scientific principles related to fluid flow, heat transfer, and air distribution. California Energy Commission and Utility duct testing concepts and techniques will be covered in demonstration in the classroom, in labs, and in actual field environments. Major tools will include duct blasters, door blowers, infrared thermography, and other pressure measurement tools. This course will also introduce building envelope and building science concepts and practices. May be repeated three times. SC

LMC: DA**Transfer:** CSU**ACREF-078 HVAC - Load Calculation and Duct Design**

18 total hours lecture, 36 total hours lab 1.5 Units

Advisory: MATH-007; eligibility for ENGL-090

An introduction to residential and light commercial 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 manual's J and D methods and concepts will be covered in the classroom. Wrightsoft design software will be used in the labs. May be repeated three times. SC

LMC: DA**Transfer:** CSU**ACREF-098 Independent Study in Refrigeration**

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**

60-300 total hours 1-4 Units

Prerequisite: Approved online application**Advisory:** Eligibility for ENGL-090

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**

60-300 total hours 1-4 Units

Prerequisite: Approved online application and employer placement**Advisory:** Eligibility for ENGL-090

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 career technical 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 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.

Anthropology

ANTHR-005 General Anthropology

54 total hours lecture

3 Units

Advisory: *Eligibility for ENGL-090*

An introduction and general overview of the five fields of anthropology focusing on the study of human evolution and culture. Topics center on the variety of characteristics which are the product of human existence everywhere. These include: the uniqueness of human learning, evolution of cultural and physical variation, human and non-human primate development, Australopithecus divergence, variations of cultures, human languages and communications, social and family organizations, 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. SC

LMC: GE: Behavioral Science; DA

Transfer: UC; CSU Gen. Ed. Area D1; IGETC Area 4A

ANTHR-006 Cultural Anthropology

54 total hours lecture

3 Units

Advisory: *ENGL-100*

This course is 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 observations and analysis of cultural traditions, i.e. child-rearing processes, life styles types and adaptations, social and family organizations, 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 Culture Change and Globalization

54 total hours lecture

3 Units

Advisory: *Eligibility for ENGL-100*

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. SC

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

54 total hours lecture

3 Units

Advisory: *Concurrent enrollment in APPLI-020, 035 or 036 and ETEC-004; eligibility for ENGL-090*

This is an introductory course in electrical appliances for students interested in pursuing a career in Appliance Technology. The student will learn the theory and practice in the diagnosis and repair of major brands of washers, dryers, ranges and dishwashers. The focus will be on understanding the working parts and electrical parts of these appliances, as well as troubleshooting, estimating and proper procedure in making repairs. The latest in computer and electronics technology is applied to home appliances. This is an introductory class in the Appliance Service Technician I Certificate of Achievement (primary an evening program.) May not be repeated. SC

LMC: DA

Transfer: CSU

APPLI-014 Advanced Electrical Appliances Tech I

54 total hours lecture

3 Units

Advisory: *APPLI-013; concurrent enrollment in lab class APPLI-020, 035 or 036; eligibility for ENGL-090*

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. Detailed consideration 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. Up-to-date information will be presented on how computer and electronic technology is applied to home appliances. May not be repeated. SC

LMC: DA

Transfer: CSU

APPLI-015 Electrical Appliances I

72 total hours lecture, 18 total hours lab 4 Units

Advisory: Concurrent enrollment in lab class APPLI-020, 035 or 036 and ETEC-004; eligibility for ENGL-090

This is an introductory course in electrical appliances and is offered to all students who are interested in pursuing a program in appliance technology. The student will learn theory and practice in the diagnosis and repair of major brands of washers, dryers, ranges and dishwashers. The focus will be on understanding the working parts and electrical parts of these appliances, as well as troubleshooting, estimating and proper procedure in making repairs. The latest in computer and electronics technology is applied to home appliances. May not be repeated. SC

LMC: DA**Transfer:** CSU**APPLI-016 Advanced Electrical Appliances II**

72 total hours lecture, 18 total hours lecture 4 Units

Advisory: Concurrent enrollment in APPLI-020, 035 or 036; eligibility for ENGL-090

This is a continuation of APPLI-015 with special attention paid to repairing high efficiency appliances. Emphasis will be on troubleshooting and diagnosing of both gas and electrical/electronic appliances. Servicing techniques will cover the use of computer based information used in the appliance field, wiring diagrams and schematics with application under simulated industry-type conditions. Students will learn theory and practice in the diagnosis and repair of major brands of washers, dryers, ranges and dishwashers. The focus will be on understanding the working parts and electrical parts of these appliances, as well as troubleshooting, estimating and proper procedure in making repairs. The latest in computer and electronics technology is applied to home appliances. Material that is covered will be put into practice in the accompanying lab/shop practice class. May not be repeated. SC

LMC: DA**Transfer:** CSU**APPLI-020 Electrical Appliance Shop Practice**

54-270 total hours lab 1-5 Units

Advisory: Concurrent enrollment in APPLI-013, 014, 015 or 016

This introductory course in electrical appliances shop practice provides students with the hands-on foundation needed to repair electrical appliances. The course is designed to give a beginning student the shop practice necessary to develop skills in troubleshooting and repairing electrical appliances. The course focuses on practice in the diagnosis and repair of major brands of washers, dryers, ranges, dishwashers and electrical circuit use. The shop provides an atmosphere that simulates conditions in the appliance repair field enabling students to work on various brands of washers, dryers, dishwashers, cooking appliances and shop safety. May be repeated three times. SC

LMC: DA**Transfer:** CSU**APPLI-023 Basic Refrigeration Tech I**

54 total hours lecture 3 Units

Advisory: Concurrent enrollment in lab class APPLI-020, 035 or 036; eligibility for ENGL-090

This is a basic domestic refrigeration course covering refrigeration principles and theories. The function and operation of each system component and the relationship between those components and electrical circuits will be addressed. Servicing of compressor type refrigeration units and troubleshooting electrical circuits are the major content areas 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/shop practice class. May not be repeated. SC

LMC: DA**Transfer:** CSU**APPLI-024 Advanced Refrigeration Tech I**

54 total hours lecture 3 Units

Advisory: APPLI-023; concurrent enrollment in lab class APPLI-030, 035 or 036; eligibility for ENGL-090

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. Emphasis 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. The function and operation of each system component and the relationship between those components and electrical circuits will be addressed. Servicing of standard type compressors systems, variable speed compressors and troubleshooting electrical/electronic circuits are the major content of this course. Material that is covered will be put into practice in the accompanying lab/shop practice class. May not be repeated. SC

LMC: DA**Transfer:** CSU**APPLI-025 Refrigeration I**

72 total hours lecture, 18 total hours lab 4 Units

Advisory: Concurrent enrollment in lab class APPLI-020, 035 or 036 and prior or concurrent enrollment in ETEC-004; eligibility for ENGL-090

This is a basic refrigeration course covering refrigeration principles and theories. The function and operation of components and electrical circuits will be covered. Servicing of compressor type refrigeration units and troubleshooting of 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. May not be repeated. SC

LMC: DA**Transfer:** CSU

APPLI-026 Advanced Refrigeration II

72 total hours lecture, 18 total hours lab 4 Units

Advisory: Concurrent enrollment in lab class APPLI-030, 035 or 036; eligibility for ENGL 90

This course is a continuation of APPLI-025 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. It will cover the theory and practice in the diagnosis and repair of major brands of refrigerators as well as understanding the operations of mechanical and electrical/electronic components. Servicing of standard type compressor systems, variable speed compressors and troubleshooting electrical/electronic circuits are the major content of this course. Troubleshooting and diagnosing of both mechanical and electrical/electronic 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. SC

LMC: DA**Transfer:** CSU**APPLI-030 Refrigeration Shop Practice**

54-270 total hours lab 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 is performed in a shop atmosphere simulating conditions in the appliance repair field. Work will include sealed system repairs, brazing equipment, electrical test equipment, proper refrigerant recovery methods, and diagnosis and repair of refrigeration units. Students will work on various brands of refrigerators, freezers, and window air conditioners provided. May be repeated three times. SC

LMC: DA**Transfer:** CSU**APPLI-035 Intermediate Appliance Lab**

54-270 total hours lab 1-5 Units

Advisory: APPLI-020, APPLI-030; concurrent enrollment in APPLI-013, 014, 015 or 016

This is an intermediate shop practice course and is a continuation of APPLI 20 and 30 in repairing electrical appliances and domestic refrigeration units. Emphasis will be placed on hands-on applications troubleshooting, diagnosing, estimating and servicing techniques in a simulated industry-type shop environment. The course focuses on practicing the diagnosis and repair of major brands of washers, dryers, ranges, dishwashers and electrical circuits, while emphasizing shop safety. Students in this class will work as group leaders teaching beginning students how to repair appliances in the shop. May be repeated three times. SC

LMC: DA**Transfer:** CSU**APPLI-036 Advanced Appliance and Refrigeration Lab**

54-270 total hours lab 1-5 Units

Advisory: APPLI-020, APPLI-030 and APPLI-035; concurrent enrollment in APPLI-023, 024, 025 or 026

This is a continuation of APPLI-035 and is an advanced shop practice course in repairing electrical appliances, gas appliances and domestic refrigeration units. Students will practice diagnosing and repairing the latest major brands of washers, dryers, ranges, dishwashers, refrigerators and electrical circuits. Emphasis will be placed on developing job skills needed in the appliance field such as troubleshooting, diagnosing, estimating, and providing customer service. Students will learn how to repair brand name washers, dryers, ranges, dishwashers, and refrigeration units. Students will work in a shop atmosphere simulating the conditions found in the appliance repair field. 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: Concurrent or prior enrollment in APPLI-013, 014, 015 or 016

This course is designed for students in the appliance program and appliance technicians working in the field. It will cover basic microwave oven concepts, principles of operation, electrical circuitry, electronic controls, high voltage circuits, troubleshooting techniques and safety procedures. Students will learn using the latest models of microwaves and ranges with microwaves integrated into the ovens. Material that is covered in the lecture will be put into practice in the accompanying lab/shop practice class. 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

60-300 total hours 1-4 Units

Prerequisite: *Approved online application***Advisory:** *Eligibility for ENGL-090*

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**

60-300 total hours 1-4 Units

Prerequisite: *Approved online application and employer placement***Advisory:** *Eligibility for ENGL-090*

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 career technical 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 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-005 Visual Arts Concepts**

54 total hours lecture 3 Units

Advisory: *Eligibility for ENGL-100*

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)**

54 total hours lecture 3 Units

Advisory: *Eligibility for ENGL-100*

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)**

54 total hours lecture 3 Units

Advisory: *Eligibility for ENGL-100*

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)

54 total hours lecture 3 Units

Advisory: *Eligibility for ENGL-100*

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: Modern, Postmodern and Contemporary Art**

54 total hours lecture 3 Units

Advisory: *Eligibility for ENGL-100*

Presents art as an aspect of Western Europe and the United States, 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. Meets Creative Arts/Humanities 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-010 Two-Dimensional Design Concepts**

36 total hours lecture, 72 total hours lab 3 Units

Advisory: *Eligibility for ENGL-090*

This is a foundation art course. It presents the process and discipline of design as applied in two-dimensional forms such as drawing, painting and collage. Focus is placed on the methods, tools, and materials of two-dimensional form presented in theoretical, historical, and cultural contexts. This course is an in-depth exploration of the visual elements, including line, shape, space, texture, value, and color. This foundation course 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-011 Three-Dimensional Design Concepts**

36 total hours lecture, 72 total hours lab 3 Units

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**

36 total hours lecture, 72 total hours lab 3 Units

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, particularly useful for students majoring in product, environmental/architectural and graphic design. Required foundation course for art majors and Certificate of Achievement in Graphic Communications. "An optional material fee may be applied". May be repeated three times. SC

LMC: DA**Transfer:** UC, CSU**ART-015 Graphic Design**

36 total hours lecture, 72 total hours lab 3 Units

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**

36 total hours lecture, 72 total hours lab 3 Units

Advisory: *ART-010 or equivalent*

This is a studio art course that focuses on basic drawing skills and the conventions of representational, two-dimensional art. Line, shape, value, texture, illusionistic depth, and the figure will be explored using various dry and wet drawing media. Emphasis will be on fundamental skills that the student can use in the development of a personal approach to drawing. Lectures will reflect contemporary and historical uses of drawing and its various applications within the wider field of art. "An optional material fee may be applied". May be repeated three times. LR

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

ART-021 Intermediate Drawing

36 total hours lecture, 72 total hours lab 3 Units

Advisory: ART-020

This is a studio art course where students begin to use their foundational skills to develop a personal approach to drawing. Line, form, value, texture, and spatial manipulation will be further explored using various dry and wet drawing media, as well as mixed media. Theory and concepts in drawing, such as abstraction, are introduced. Slides and lectures will reflect contemporary and historical uses of drawing as an art form. "An optional material fee may be applied." May not be repeated. LR

LMC: DA**Transfer:** UC, CSU**ART-025 Advertising, Marketing and Publication Design**

36 total hours lecture, 45 total hours lab 3 Units

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-040 Introduction to Painting**

36 total hours lecture, 72 total 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. "An optional material fee may be applied." May be repeated three times. SC

LMC: DA**Transfer:** UC, CSU**ART-041 Intermediate Painting**

36 total hours lecture, 72 total hours lab 3 Units

Advisory: ART-040

(Formerly ART-045) Continuing studies and practices in tools, materials and techniques of painting in oil, acrylic and water-color media at the intermediate level. 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. "An optional material fee may be applied." May be repeated twice. SC

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

36 total hours lecture, 54 total 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**

36 total hours lecture, 54 total hours lab 3 Units

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

36 total hours lecture, 54 total hours lab 3 Units

Advisory: *Eligibility 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 Concepts of Sculpture**

36 total hours lecture, 72 total hours lab 3 Units

Advisory: *ART-011; eligibility for ENGL-090*

This introductory course explores the concepts of sculpture through the use of plaster, metal, wood, and mixed media as expressive and utilitarian mediums. This course will emphasize self expression and development of personal imagery as well as technical aspects of working with these materials. Lab assignments focus on modeling, casting, construction and fabrication techniques. Lectures will highlight the use of these versatile media from contemporary, cultural and historical perspectives. "An optional material fee may be applied." May be repeated three times. SC

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

36 total hours lecture, 72 total hours lab 3 Units

Advisory: *ART-011; eligibility for ENGL-090*

This introductory course that explores the use of clay as an expressive and utilitarian medium. This course will emphasize self expression and development of personal imagery as well as technical aspects of clay. Lab assignments focus on hand building and throwing techniques. Lectures will highlight the use of this versatile medium from contemporary, cultural and historical perspectives. "An optional material fee may be applied." ART-066 and ART-067 may be repeated for a combined total of four times. SC

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

36 total hours lecture, 72 total hours lab 3 Units

Prerequisite: *ART-066 or equivalent***Advisory:** *ART-011; eligibility for ENGL-090*

This intermediate level course explores the use of clay as an expressive and utilitarian medium. This course will emphasize self expression and development of personal imagery as well as technical aspects of clay. Lab assignments focus on hand building, throwing techniques and glazing. Lectures will highlight the use of the versatile medium from contemporary, cultural and historical perspectives. Students will purchase clay and tools. "An optional material fee may be applied." ART-067 and ART-066 may be repeated for a combined total of four times. SC

LMC: DA**Transfer:** UC, CSU**ART-069 Ceramic Sculpture**

36 total hours lecture, 72 total hours lab 3 Units

Advisory: *ART-011; eligibility for ENGL-090*

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 students will observe and model the human and animal figure as a way to develop their ceramic technique and artistic expression. Projects will include representational subjects such as studies of the hand, head, and torso, as well as the full figure. Lecture, demonstrations, discussions, and journal writing will cover topics such as anatomy and proportion, historical figure sculptures, and using the figure for personal expression. "An optional material fee may be applied." May not be repeated. SC

LMC: DA**Transfer:** CSU**ART-072 Introduction to Digital Photography**

36 total hours lecture, 54 total hours lab 3 Units

Advisory: *Eligibility for ENGL-090*

Studies and practice in digital photography. This course will explore the technical areas of f-stop and shutter speed, exposure and lighting, the artistic concepts of balance, and composition as well as the communications possibilities of the medium. Students will complete projects designed to help them learn to solve their own photographic problems. Students will concentrate on solving problems and creating portfolio quality pieces. Taught with an artistic and technical emphasis, this course addresses the use of digital cameras, scanners and computers in creating high quality photographs. May be repeated once. SC

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

9 total hours lecture, 27 total hours lab 1 Unit

Advisory: *Beginning photography course or equivalent*

This course covers studies and practice in photographing on location, including landscapes, cityscapes, people in action and events. Students will create photographs concentrating on composition, technique, and capturing a mood. Students must supply their own adjustable digital camera and media cards. May be repeated once. SC

LMC: DA**Transfer:** CSU

ART-074 Photo II: Developing a Personal Vision

36 total hours lecture, 54 total hours lab 3 Units

Prerequisite: ART-072

This course presents a methodical approach to creating high-quality photographs through the 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 affect of technology on photography. May be repeated three times. P/NP

LMC: DA**Transfer:** CSU**ART-085 Introduction to Animation**

36 total hours lecture, 72 total 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**

36 total hours lecture, 72 total 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-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

60-300 total hours 1-4 Units

Prerequisite: *Approved online application***Advisory:** *Eligibility for ENGL-090*

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**

60-300 total hours 1-4 Units

Prerequisite: *Approved online application and employer placement***Advisory:** *Eligibility for ENGL-090*

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 career technical 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 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

54 total hours lecture

3 Units

Advisory: *Eligibility for ENGL-100*

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; IGETC Area 5A

ASTRO-011 Astronomy Laboratory

54 total hours lab

1 Unit

Prerequisite: *Prior or concurrent enrollment in ASTRO-010***Advisory:** *Eligibility for ENGL-100*

This course provides laboratory experience in astronomical observation. It involves the study of fundamental concepts of astronomy, including investigations of the moon, sun, planets and stars and offers practical experience in the use of telescopes and other tools. ASTRO-010 and ASTRO-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

54-108 total hours activity

1-2 Units

Advisory: *High school athletic experience*

This course is 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. ATH-006 and PE-006 may be repeated for a combined total of three times SC

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

ATH-008 Strength and Weight Training for Athletes

54 total hours activity

1 Unit

Advisory: *High school athletic experience*

This course includes instruction in all elements of weight training for student athletes. It includes weight training techniques, safety procedures, knowledge of muscle groups, equipment use, warm-up, strength and endurance training, exercise progression and improved fitness. ATH-008 and PE-008 may be repeated for a combined total of three times. SC

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

ATH-014 Advanced Volleyball Skills for Athletes

108 total hours activity

2 Units

Advisory: *High school volleyball or club experience recommended*

This course is designed to prepare the student for competition in the California Community College Volleyball season and upon completion be able to transfer to a 4 year university. Intercollegiate volleyball provides the opportunity for competition as a member of an LMC team in conference play, which includes a state championship playoff. Students are eligible to participate for 2 seasons at the community college level. ATH-014, PE-014, and ATH-076 may be repeated for a combined total of three times. SC

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

ATH-026 Advanced Soccer Skills for Athletes

108 total hours activity

2 Units

Advisory: *High school soccer or club experience recommended*

This course is designed to prepare the student for competition in the California Community College Soccer season and upon completion be able to transfer to a 4 year university. Advanced skills in kicks, dribbles and passes as well as offensive and defensive strategies will be emphasized to prepare the student to excel. ATH-026, ATH-089, and PE-026 may be repeated for a combined total of three times. SC

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

ATH-027 Offensive Football Skills and Conditioning

108 total hours activity 2 Units

Advisory: *Designed for intercollegiate football participants*

This course is an introduction to fundamentals, techniques and procedures of intercollegiate football with a focus on offensive philosophies. Skill area such as blocking, catching, passing, and route running. ATH-027, ATH-028, and ATH-077 may be repeated for a combined total of three times. SC

LMC: DA

Transfer: UC, CSU

ATH-028 Defensive Football Skills and Conditioning

108 total hours activity 2 Units

Advisory: *Designed for intercollegiate football participants*

This course is an introduction to fundamentals, techniques and procedures of intercollegiate football with a focus on defensive philosophies. Skill area such as block destruction, turnovers, tackling, and techniques specific to a defensive position will be covered. ATH-028, ATH-027, and ATH-077 may be repeated for a combined total of three times. SC

LMC: DA

Transfer: UC, CSU

ATH-046 Advanced Basketball Skills for Athletes

108 total hours activity 2 Units

Advisory: *High school basketball or club experience recommended*

This course is designed to prepare the student for competition in the California Community College Basketball season and upon completion be able to transfer to a 4 year university. Intercollegiate basketball provides the opportunity for competition as a member of an LMC team in conference play, which includes a state championship playoff. Students are eligible to participate for 2 seasons at the community college level. ATH-046, ATH-079, ATH-090, and PE-046 may be repeated for a combined total of three times. SC

LMC: DA

Transfer: UC, CSU

ATH-062 Advanced Baseball Skills for Athletes

108 total hours activity 2 Units

Advisory: *High school baseball or club experience recommended*

This course is designed to prepare the student for competition in the California Community College Baseball season and upon completion be able to transfer to a 4 year university. Advanced skills in hitting for power, batting hit-and-run, bunting, fielding, throwing, pitching, catching, and base running will be emphasized to prepare the student to excel. ATH-062 and ATH-081 may be repeated for a combined total of three times. SC

LMC: DA

Transfer: UC, CSU

ATH-066 Advanced Softball Skills for Athletes

108 total hours activity 2 Units

This course is designed to prepare the student for competition in the California Community College Softball season. Advanced skills in hitting for power, batting hit-and-run, slapping, bunting, fielding, throwing, pitching, catching, and base running will be emphasized to prepare the student to excel. ATH-066 and ATH-092 may be repeated for a combined total of three times. SC

LMC: DA

Transfer: UC, CSU

ATH-067 Introduction to Sports Medicine & Athletic Training

36 total hours lecture, 54 total hours lab 3 Units

Advisory: *BIOSC-030 or equivalent*

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. SC

LMC: DA

Transfer: UC, CSU

ATH-076 Intercollegiate Volleyball

180 total hours activity 3 Units

Advisory: *High school volleyball or club experience recommended*

Intercollegiate volleyball provides the opportunity for competition as a member of an LMC team in conference play, which includes a state championship playoff. Students are eligible to participate for 2 seasons at the community college level. ATH-076, PE-014, and ATH-014 may be repeated for a combined total of three times. SC

LMC: DA

Transfer: UC, CSU

ATH-077 Intercollegiate Football

180 total hours activity 3 Units

Advisory: *ATH-006, 008, 027 or 028; High school football experience*

Intercollegiate Football provides the opportunity for competition as a member of an LMC team in conference play which includes championship playoffs. ATH-077, ATH-027, and ATH-028 may be repeated for a combined total of three times. LR

LMC: DA

Transfer: UC, CSU

ATH-079 Intercollegiate Basketball for Men

180 total hours activity 3 Units

Advisory: *High school basketball or club experience recommended*

Intercollegiate basketball provides the opportunity for competition as a member of an LMC team in conference play, which includes a state championship playoff. Students are eligible to participate for 2 seasons at the community college level. ATH-079, ATH-046, and PE-046 may be repeated for a combined total of three times. SC

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

180 total hours activity 3 Units

Advisory: *High school baseball or club experience recommended*

Intercollegiate baseball provides the opportunity for competition as a member of an LMC team in conference play, which includes a state championship playoff. Students are eligible to participate for 2 seasons at the community college level. ATH-081 and ATH-062 may be repeated for a combined total of three times. SC

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

180 total hours activity 3 Units

Advisory: *High school soccer or club experience recommended*

Intercollegiate soccer provides the opportunity for competition as a member of an LMC team in conference play, which includes a state championship playoff. Students are eligible to participate for 2 seasons at the community college level. ATH-089, ATH-026, and PE-026 may be repeated for a combined total of three times. SC

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

180 total hours activity 3 Units

Advisory: *High school basketball or club experience recommended*

Intercollegiate Women's Basketball provides the opportunity for competition as a member of an LMC team in conference play, which includes a state championship playoff. Students are eligible to participate for 2 seasons at the community college level. ATH-090, ATH-046, and PE-046 may be repeated for a combined total of three times. SC

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

180 total hours activity 3 Units

Advisory: *High school softball experience recommended*

Intercollegiate softball provides the opportunity for competition as a member of an LMC team in conference play, which includes a state championship playoff. Students are eligible to participate for 2 seasons at the community college level. ATH-092 and ATH-066 may be repeated for a combined total of three times. SC

LMC: DA**Transfer:** UC, CSU**ATH-098 Independent Study in Athletics**

Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit). May be repeated three times. SC

LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.**Transfer:** *Independent Study courses may be DA or transferable depending on specific course. See your counselor.***ATH-170 Occupational Work Experience Education in Athletics**

60-300 total hours 1-4 Units

Prerequisite: *Approved online application***Advisory:** *Eligibility for ENGL-090*

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

60-300 total hours 1-4 Units

Prerequisite: *Approved online application and employer placement***Advisory:** *Eligibility for ENGL-090*

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 career technical 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 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

54 total hours lecture, 72 total hours lab 4 Units

Advisory: *Eligibility for ENGL-090*

The course is designed to give both theory and practical hands-on training for rebuilding and diagnosing four stroke engines. The skills taught include machining, engine rebuilding, and their service and repair. This course is a good foundation for automotive technicians. May be repeated three times. SC

LMC: DA**Transfer:** CSU**AUTO-037 Automotive Engine Machining**

36 total hours lecture, 108 total hours lab 4 Units

Advisory: *Eligibility for ENGL-090*

The course teaches students how to diagnose, rebuild and machine a modern automotive engine. This course is designed for students seeking a career as an automotive technician. It prepares students for the A.S.E. M1, M2 and M3 Examination. May be repeated three times. SC

LMC: DA**Transfer:** CSU**AUTO-040 Automotive Engine Diagnosis I**

36 total hours lecture, 108 total hours lab 4 Units

Advisory: *Eligibility for ENGL-090*

This course provides a practical background in the theory, operation, and testing of automotive engine systems and emission control components. This is the first of two courses (AUTO-040 and AUTO-041) designed to familiarize the student with engine systems. It will prepare students for the ASE A-6 Examination. May be repeated three times. SC

LMC: DA**Transfer:** CSU**AUTO-041 Automotive Engine Diagnosis II**

36 total hours lecture, 108 total hours lab 4 Units

Advisory: *AUTO-040; eligibility for ENGL-090*

This advanced course is the second of two courses on tune-ups and diagnostics. The course is designed to give students the ability to gain and refine the skills necessary to perform engine tune-ups and diagnostic techniques on late model vehicles. The course places emphasis on manufacturer's standards and procedures required to keep the automobile engine performing within state and federal specifications. It course prepares students for the ASE A-8 Examination. May be repeated three times. SC

LMC: DA**Transfer:** CSU**AUTO-042 Automotive Brakes**

36 total hours lecture, 54-108 total hours lab 3-4 Units

Advisory: *Eligibility for ENGL-090*

This course is designed to give students the knowledge, and practical skills necessary to troubleshoot, diagnose and repair modern automotive brakes and ABS systems. The course places emphasis on manufacturers' standards and procedures required to keep brakes performing within state and federal specifications. This course will prepare students for the California Brake Installer's License exam and the ASE A-5 Examination. May be repeated three times. SC

LMC: DA**Transfer:** CSU**AUTO-043 Automotive Suspension and Steering**

36 total hours lecture, 54-108 total hours lab 3-4 Units

Advisory: *Eligibility for ENGL-090*

The course is designed for students to learn and improve the skills necessary to diagnose and repair wheels, tires, shocks, steering, suspension systems and alignment procedures. The course places emphasis on the manufacturer's 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-045 Automotive Laboratory Practice

72 total 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

36 total hours lecture, 108 total hours lab 4 Units

Advisory: *Eligibility for ENGL-090*

The course covers automotive electrical principles including reading wiring diagrams, diagnosing electronic components, and using meters/lab scopes. This course is designed for the student seeking a career as an automotive technician as well as the existing technicians who want to expand their knowledge. This course will prepare students to take the California Automotive Lamp Installer's license and the ASE A-6 Examination. May be repeated three times. SC

LMC: DA

Transfer: CSU

AUTO-047 Automotive Heating and Air Conditioning

36 total hours lecture, 54 total hours lab 3 Units

Advisory: *Eligibility for ENGL-090*

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 retrofitting R12 to R134a systems. This course will prepare students to take the federal exam for a refrigerant handling license and the ASE A-7 Examination. May be repeated three times. SC

LMC: DA

Transfer: CSU

AUTO-048 Automatic Transmission and Transaxles

36 total hours lecture, 108 total hours lab 4 Units

Advisory: *Eligibility for ENGL-090*

This course is designed to provide students with the knowledge and skills to maintain and repair automotive transmissions and transaxles. This course provides experience in complete overhaul and rebuilding of automatic transmissions. It prepares students for the ASE A2 Examination. May be repeated three times. SC

LMC: DA

Transfer: CSU

AUTO-049 Manual Transmission and Differential

36 total hours lecture, 108 total hours lab 4 Units

Advisory: *Eligibility for ENGL-090*

The course is designed to provide students with the knowledge and ability 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 learn diagnostic skills necessary to trouble shoot, repair and adjust most modern manual transmission and transaxle systems. It will prepare students for the ASE A-5 Examination. May be repeated three times. SC

LMC: DA

Transfer: CSU

AUTO-055 Clean Air Car Course + OBD II

36 total hours lecture, 48 total hours lab 3 Units

Advisory: *AUTO-040 and 041*

This course is designed for students seeking a career smog technicians. 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-056 Advanced Level Smog Training

14 total hours lecture, 22 total hours lab 1 Unit

Advisory: *AUTO-055; eligibility for ENGL-090*

This course is required by the State of California Bureau of Automotive Repair (B.A.R.) for automotive technicians to complete their education requirements for the state smog license certification. This course provides a practical background in the theory, operation, and testing of automotive engine systems and emission control components. May be repeated three times. SC

LMC: DA

Transfer: CSU

AUTO-057 Smog Update

8 total hours lecture, 12 total 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

60-300 total hours 1-4 Units

Prerequisite: Approved online application

Advisory: Eligibility for ENGL-090

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

60-300 total hours 1-4 Units

Prerequisite: Approved online application and employer placement

Advisory: Eligibility for ENGL-090

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 career technical 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 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 Human Biology and Health

54 total hours lecture, 18 total lab hours by arrangement 3 Units

This is an introductory course that covers the biological concepts and principles underlying human health and fitness. We will cover not only the basic functions of the human cardiovascular, respiratory, nervous, digestive, immune, and reproductive systems, but also the effects of diet, exercise, prescription and illicit drugs, and stress on these systems and how you can make changes to improve your health. The course includes up-to-date information on biological and medical discoveries related to human health. In addition, we will discuss issues related to mental health, addiction, sexually transmitted diseases. The impact of human beings on the environment, and their resulting health consequences will also be emphasized. Hands-on mini-lab assignments will serve to demonstrate concepts that are critical to the health and wellbeing of the whole individual. May not be repeated. LR

LMC: GE: Biological Sciences; GCR: Health Education; DA

Transfer: UC; CSU Gen. Ed. Area E1

BIOSC-007 Ecology and the Environment

54 total hours lecture, 54 total hours lab 4 Units

Advisory: ENGL-090

This course provides an introduction to the biological concepts and principles underlying ecology. Problem solving and critical thinking skills will be emphasized as students explore biodiversity, examine relationships between organisms and the environment, and investigate current issues facing our global ecosystem using an interdisciplinary approach. Lab experiments, field exercises, and trips to local environments will facilitate further understanding of ecological topics and provide hands-on experience throughout the 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

54 total hours lecture, 72 total hours lab 4 Units

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

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 Processes

54 total hours lecture, 108 total hours lab 5 Units

Prerequisite: MATH-030 or equivalent**Advisory:** BIOSC-010, High school biology, chemistry

This is an integrated study of the fundamental concepts of biology. Using laboratory methods and techniques, the principles and laws underlying plant and animal life processes are addressed on the molecular and cellular levels. An interdisciplinary approach will be used to treat cytology, biochemical cycles, proteonomics, genomics, reproduction, and embryonic development. The critical and creative process of scientific inquiry and the implications of scientific knowledge will be emphasized. Skills in critical thinking, problem solving, and effective learning will be employed throughout the course. May not be repeated. LR

LMC: DA**Transfer:** UC; CSU Gen. Ed. Area B2, B3; IGETC Area 5B**BIOSC-021 Principles of Biology: Organismal**

54 total hours lecture, 108 total hours lab 5 Units

Prerequisite: BIOSC-020; MATH-030 or equivalent**Advisory:** BIOSC-010, High school biology, chemistry

This is an integrated study of the vast array of organisms on this planet. It focuses on biological processes and principles that lead to increasing higher levels of organization. The course is centered 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**

36 total hours lecture, 72 total lab hours by arrangement 3 Units

This course is designed to cover basic anatomy and physiology. Fundamentals of body structure and function and the elegant interrelationships between body organs and how they perform will be explored. All of the systems of the body, including very basic microscopic anatomy and simple physiological chemistry will be covered in this one semester course. May not be repeated. LR

LMC: DA**Transfer:** CSU**BIOSC-040 Human Anatomy**

54 total hours lecture, 108 total hours lab 5 Units

Advisory: BIOSC-030 or equivalent

This course is a comprehensive exploration of gross and microscopic anatomy from cellular to systems that presents the human body as an integrated organism. Extensive dissection 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**

54 total hours lecture, 108 total hours lab 5 Units

Advisory: BIOSC-040 and CHEM-007 (or another college-level chemistry course)

This course is a comprehensive exploration of general human physiology that begins 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 Microbiology**

36 total hours lecture, 108 total hours lab 4 Units

Prerequisite: CHEM-006, 007, 008, 020, 021 or 025, or equivalent

This course explores the fundamental principles that are related to bacteria, viruses, and other microorganisms. It examines the microbial world with an emphasis on bacteria and their role in disease. Basic areas to be studied in the classroom and the 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 process of scientific inquiry will be emphasized, and opportunities for analytical thinking and problem solving will be interwoven throughout the course. May not be repeated. LR

LMC: 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). 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.**BIOSC-900s Selected Topics in Biological Science**

DA varies with course content.

Business

BUS-001 Civil Litigation for Legal Secretaries

54 total hours lecture 3 Units

Advisory: *Eligibility for ENGL-090, BUS-065, Typing 30+ WPM*

This course is a general introduction to civil litigation in California. It is designed to prepare students to enter the legal secretarial field, but can also help people who are currently employed in a law office, (receptionists and/or clerks), to upgrade their skills and qualify for a beginning legal secretarial position. Students will learn to analyze the procedures necessary to assemble, complete and/or create the forms necessary for most day to day procedures in a civil litigation law office. Students are taught how to prepare court documents, court forms, calendaring, court filings, civil court procedures, local civil court jurisdiction, rules of the court, legal terminology and other concepts related to civil litigation. At the conclusion of the class the student should be familiar with civil litigation terms and procedures and have the skills to function as a beginning litigation secretary. May not be repeated. SC

LMC: DA

Transfer: CSU

BUS-002 Legal Office Procedures and Records Management

3 hours lecture 3 Units

Advisory: *Eligibility for ENGL-090, BUS-065, Typing 30+ WPM*

This course prepares students to enter the legal secretarial field and can help those currently employed in a law office, (receptionists and/or clerks), to upgrade their skills and qualify for a beginning legal secretarial position. Students learn about the law office, office duties, computers and office systems, preparing legal correspondence, the court structure, litigation procedures, and substantive law. Students will be introduced to the legal library and the basic tools for legal research at a secretarial level. Upon completion of this course, students will understand basic legal concepts and the various fields of law (Family Law, Real Estate Law, Corporate Law, Criminal Law, Trusts, Wills, and Probate) and will be able to select documents appropriate for a particular situation, identify the information necessary to complete the documents and be able to prepare the documents correctly. Students will also learn how to create a resume, cover letter, fill out an employment application and prepare for an interview. May not be repeated. SC

LMC: DA

Transfer: CSU

BUS-003 Business Math

54 total hours lecture, 18 total hours lab 3 Units

Business Math covers the basic math concepts and applications needed to succeed in business and to support further business study. The class is designed to prepare students to develop the fundamental mathematical problem-solving and critical thinking skills they will need in their personal and professional lives. Course covers operations with whole numbers, exponents, integers/signed numbers, common fractions, decimals, percents, writing/solving basic algebraic equations, and order of operations. Using business applications, students will use the math concepts they learn to solve business problems involving mortgages, consumer credit, simple/compound interest, future/present value of money, annuities and sinking funds, trade and cash discounts, markup/markdown, payroll, and business statistics. May not be repeated. SC

LMC: DA

BUS-018 Microsoft Excel for Windows

54 total hours lecture, 18 total hours lab 3 Units

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

This is a hands-on computer spreadsheet course that covers fundamental to intermediate level MS Excel features and functions in the Windows environment; Students will produce business reports, financial statements, budgets, payroll, graphs, etc.) The class emphasizes spreadsheet design, data analysis, and the use of Excel as a problem-solving tool for a variety of business applications in various industries. Students will learn to create professional spreadsheets, will develop their problem-solving and decision-making skills and will increase their MS Windows file management proficiency. This course prepares students to use Excel in a variety of college-level courses as well as prepares them for entry-level employment opportunities. BUS-018 satisfies the college's computer literacy requirement. May not be repeated. SC

LMC: GCR: Computer Literacy; DA

Transfer: CSU

BUS-027 Small Business Management

54 total 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

27 total hours lecture, 27 total hours lab 2 Units

Advisory: BUS-181, 186, or 185, and BUS-018; eligibility for ENGL-090

This two-unit course introduces QuickBooks accounting software. QuickBooks is an easy-to-use commercial accounting system for small to medium size 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 Microsoft Office**

54 total hours lecture, 18 total hour lab 3 Units

Advisory: Eligibility for ENGL-090

Business 035 is a skills/performance-based class that provides the student the opportunity to learn the basic and intermediate features of work processing; spreadsheet and graphic presentation software to solve common business problems, and to create common business and personal documents. The Microsoft Office Suite which includes Word, Excel, and PowerPoint, is one of the most commonly used software tools used by American businesses today. May not be repeated. SC

LMC: GCR: Computer Literacy; DA**Transfer:** CSU**BUS-035A Microsoft Word**

18 total hours lecture, 27 total hours lab 1.5 Units

Advisory: Eligibility for ENGL-090

Business 35A is a skills/performance-based class that provides students the opportunity to learn the basic and intermediate features of one of the most widely used word processing programs - Microsoft Word. Students learn how to create, edit, and format common business and personal documents such as letters, memos, reports, and flyers; and use more intermediate features to produce newsletters and prepare documents for mass mailing. May not be repeated. SC

LMC: DA**Transfer:** CSU**BUS-035B Microsoft Excel**

18 total hours lecture, 27 total hours lab 1.5 Units

Advisory: BUS-003 or equivalent math skills

Business 35B is a skills/performance-based class that provides students the opportunity to learn the basic features of one of the most vital and widely used spreadsheet programs - Microsoft Excel. Students learn how to create, edit, and format common business and personal spreadsheet documents such as budgets, invoices, expense reports, balance sheets, and other basic financial reports, how to use basic math formulas/functions in Excel, and how to create basic charts. May not be repeated. SC

LMC: DA**Transfer:** CSU**BUS-035C Microsoft Powerpoint**

18 total hours lecture, 27 total hours lab 1.5 Units

Advisory: Eligibility for ENGL-090

Business 35C is a skills/performance-based class that provides students the opportunity to learn the basic and intermediate features of one of the most widely used graphic presentation programs, Microsoft PowerPoint, to create common business and personal presentations. Students learn how to create and edit slide shows; enhance slides with sound, graphics, and animation; create and use custom templates, and prepare presentations for various types of delivery. May not be repeated. SC

LMC: DA**Transfer:** CSU**BUS-045 Office Accounting Essentials**

54 total hours lecture, 18 total hours lab 3 Units

Advisory: Completion of other courses in the Certificate- BUS-018, BUS-080 & BUS-181 ; BUS-003; eligibility for ENGL-090

This course enables students to learn the accounting clerical processes (Payables, Receivables & Payroll) from beginning to end. It presents theory and regulations with hands-on application for accounting functions both manually and computerized. This course focuses on the Payables, billing and payroll cycles: purchase order creation, receiving, vendor invoice verification, coding, and payment; customer billing, credit, and collections; preparation of gross payroll, deductions, net pay, employer's taxes, journal entries, and tax deposits; preparation of monthly, quarterly and annual tax statements/reports; corrections to tax statements; electronic tax deposits; and compliance record keeping. Both federal and California compliance topics are covered, along with the accompanying forms. 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-047 Office Procedures and Records Management**

54 total hours lecture 3 Units

Advisory: BUS-051 OR concurrent enrollment in BUS 51 OR Typing @ 25 WPM; BUS-035 OR concurrent enrollment in BUS-035 OR MS Office Proficiency; eligibility for ENGL-090

This course introduces students to the administrative responsibilities of a 21st century office. Students prepare business correspondence, plan/deliver oral presentations, and learn administrative office procedures (processing mail, telephone etiquette, making travel arrangements, scheduling appointments, planning meetings and conferences, etc.), along with time management, job search, interpersonal, and organizational skills. Emphasis is placed on career assessment, career preparation, records management, and the importance of developing "soft" skills. May not be repeated. SC

LMC: DA**Transfer:** CSU

BUS-051 Keyboarding

9 total hours lecture, 18 total hours lab 1 Unit

This course enables the student to develop the skills necessary to operate the computer keyboard with ease and by "touch," and to develop a net typing speed of up to 30 gross words per minute. 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: *Demonstrated keyboarding speed of 30 GWAM (gross words a minute)*

This course is designed to improve typing skills (keyboard proficiency, typing speed and accuracy) through individualized skill analysis and drills designed to correct keyboarding weaknesses. The course also includes numerous five minute timed writings to prepare student for "pre-employment" testing. May be repeated three times. P/NP

LMC: NDA

BUS-058 Business English

54 total hours lecture 3 Units

Advisory: *Eligibility for ENGL-090*

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 and by analyzing business e-mail, memos, letters, and other types of routine business correspondence. May not be repeated. SC

LMC: DA

Transfer: CSU

BUS-059 Business Communications

54 total 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 and oral communications; students learn to compose e-mail, letters, memos, and reports; learn to network and identify other successful job search strategies, prepare resumes and improve interviewing skills, learn to be a successful and productive team member and leader. May not be repeated. SC

LMC: DA

Transfer: CSU

BUS-065 Introduction to Word Processing

54 total hours lecture, 18 total hours lab 3 Units

Advisory: *Prior or concurrent enrollment in BUS-051 OR Typing@25WPM; eligibility for ENGL-090*

This is a hands-on word processing course that covers fundamental to intermediate-level MS Word features and functions in the Windows environment. Students will create, edit, and format professional memos, letters, and reports of varying complexity and plan, research, write, revise documents (tables, flyers, brochures, etc.) to meet specific information needs. The class emphasizes using Word as a tool for business applications. Students will develop business problem-solving skills and increase their MS Windows file management proficiency. This course prepares students for entry-level employment opportunities and will equip them to use Word in college-level courses. BUS-065 satisfies the college's computer literacy requirement. May not be repeated. SC

LMC: GCR: Computer Literacy; DA

Transfer: CSU

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 the computer numeric keypad. The course focuses on proper posture, correct fingering, and accuracy. Speed will develop as technique is learned. This course satisfies both degree and certificate electives within the Business Area and is recommended to be taken before enrolling in BUS-045, BUS-081 and BUS-082. May be repeated three times. P/NP

LMC: DA

BUS-081 Office Accounting Essentials - Accounts Receivable & Accounts Payable

54 total hours lecture, 18 total hours lab 3 Units

Advisory: *Completion of the other courses in the certificate: BUS-018, BUS-080, BUS-181 (previously BUS-010), and BUS-003; eligibility for ENGL 90*

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

54 total hours lecture, 18 total hours lab 3 Units

Advisory: Completion of the other courses in the certificate: BUS-018, BUS-080, BUS-181 (previously BUS-010), and BUS-003; eligibility for ENGL-090

This course was developed to enable 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. This 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, bi-weekly, 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

54 total hours lecture, 18 total hours lab 3 Units

Advisory: BUS-086; eligibility for ENGL-090

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 and Records Management

27 total hours lecture, 27 total hours lab 2 Units

Advisory: BUS-051 OR concurrent enrollment in BUS 51, OR Typing @ 25 WPM; BUS-035 OR concurrent enrollment in BUS 35, OR MS Office proficiency; eligibility for ENGL-090

This course provides an introduction to the administrative responsibilities of the front and back office of the medical profession. Students will be introduced to a variety of common medical office procedures and learn patient medical records management. Through projects, computer simulations, working papers, and forms, students will acquire the knowledge they need for a career in a medical office. Students prepare correspondence, patient charts/records, patient bills, process health and insurance claims forms, and financial records. Students will also learn general office procedures (written and oral communications, telephone etiquette, scheduling appointments, processing mail, reporting, and other administrative responsibilities), along with time management, organizational, and interpersonal skills. Students explore career opportunities in the medical office field and learn the importance of developing "soft" skills. May not be repeated. SC

LMC: DA

Transfer: CSU

BUS-086 Medical Terminology

54 total hours lecture 3 Units

Advisory: Eligibility for ENGL-090

This course focuses on analysis of medical terms by body system incorporating structure body systems, and basic anatomy, physiology, and disease processes. Emphasis is placed on spelling, usage and pronunciation of medical terms. May not be repeated. LR

LMC: DA

Transfer: CSU

BUS-087 Medical Transcription I

36 total hours lecture, 54 total hours lab 3 Units

Advisory: BUS-086; eligibility for ENGL-090; word processing at 40 wpm

This course is an introduction to the practice of medical transcription. Students learn to apply special formatting and learn additional medical terminology while transcribing dictation for a variety of medical specialties. Using industry-standard tools and reference materials, students learn to type, proofread, and edit medical reports for accuracy. HIPAA regulations and the confidentiality of medical documents are emphasized. May be repeated three times. SC

LMC: DA

Transfer: CSU

BUS-088 Patient Billing/Accounting

36 total hours lecture, 18 total hours lab 2 Units

Advisory: Eligibility for ENGL-090

This course prepares students to work in a health care practice. Students learn how to 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 not be repeated. SC

LMC: DA

Transfer: CSU

BUS-089 Medical Law and Ethics for the Medical Office

18 total hours lecture 1 Unit

Advisory: Eligibility for ENGL-090

This course provides an introduction to medical law and ethical concepts and their application to a variety of medical settings. The course introduces the complex legal, moral, and ethical issues facing medical office workers. Topics include an introduction to law and ethics, medical record legalities, workplace legalities, bioethical issues, and interpersonal relationships in the health care field. Upon completion, students should be able to meet the legal and ethical responsibilities of a skilled healthcare professional. May not be repeated. SC

LMC: DA

Transfer: CSU

BUS-090 Advanced Patient Billing

36 total hours lecture, 18 total hours lab 2 Units

Advisory: Eligibility for ENGL-090

Students will receive enhanced training in medical office procedures using a Patient Management System (i.e. MediSoft) preparing them 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 and Working in a Diverse Workplace**

8 total hours lecture .5 Unit

Advisory: Eligibility for ENGL-090

The primary goal of the course is to enhance student's awareness and understanding of workplace diversity issues thereby increasing their ability to live and work in an increasingly complex and diverse 21st-century global environment. The students are taught to recognize that everyone has learned different cultural values which leads them to different world views and causes them to approach problems in very different ways. This course will help students learn how important it is to respect the dimensions that shape people's values, experiences, and behavior in the workplace and help them to value the diversity of ideas that come from those differences. Students will learn to identify their own biases and the things that keep them from fully embracing the diversity that exists in the workplace enabling them to develop an action plan that can help them to achieve positive change. May not be repeated. P/NP

LMC: DA**Transfer:** CSU**BUS-092 Business Ethics**

8 total hours lecture .5 Unit

Advisory: Eligibility for ENGL-090

A primary goal of the Business Ethics course is to help students define ethics, recognize the characteristics of an ethical organization and identify what it means to be an ethical employee. Students think through ethical issues that arise in the workplace and identify methods that they can employ as individuals to facilitate ethical organizational change. May not be repeated. P/NP

LMC: DA**Transfer:** CSU**BUS-093 Dealing with Difficult People**

8 total hours lecture .5 Unit

Advisory: Eligibility for ENGL-090

In this class, students explore why "difficult" people act the way they do, and learn strategies for getting along and communicating tactfully with the "difficult" people they encounter in the workplace. They will learn how to identify different personality types and why some personality types may be difficult for them to work with peacefully. Emphasis is placed on helping students recognize that often they are the "difficult" person in the workplace. Students learn that dealing with "difficult" people leads to conflict, then they learn conflict resolution techniques, and develop skills to constructively manage conflict in today's diverse and increasingly complex workplace. May not be repeated. P/NP

LMC: DA**Transfer:** CSU**BUS-095 Developing Customer Service Satisfaction**

8 total hours lecture .5 Unit

Advisory: Eligibility for ENGL-090

The class is designed to provide students with skills, strategies, and techniques that will help them handle customers professionally, tactfully, and diplomatically. Real-life situations are discussed and analyzed to enhance students' knowledge and increase their ability to achieve success in a modern, service-oriented workplace. May not be repeated. P/NP

LMC: DA**Transfer:** CSU**BUS-096 Time Management and Goal Setting**

8 total hours lecture .5 units

Advisory: Eligibility for ENGL-090

The primary goal of this course is to help students set goals, and recognize and apply time management principles and techniques. Students analyze their professional and personal commitments and identify methods that they can utilize to facilitate change and improvement. 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

54 total hours lecture 3 Units

Advisory: BUS-018 and BUS-035C or BUS-035; eligibility for ENGL-100

A contemporary overview of major topics and main fields in business: marketing, managing, accounting, law, entrepreneurship, international trade and information management. Builds a strong foundation for students to take more advanced business classes as well as provides a broad overview of how the fields are interconnected. 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**

54 total hours lecture, 18 total hours lab 3 Units

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

This is an introductory personal finance course designed to help students become financially literate, and to learn 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 institution 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**

60-300 total hours 1-4 Units

Prerequisite: Approved online application**Advisory:** Eligibility for ENGL-090

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**

60-300 total hours 1-4 Units

Prerequisite: Approved online application and employer placement**Advisory:** Eligibility for ENGL-090

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 career technical 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 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**

54 total hours lecture, 18 total hours lab 3 Units

Advisory: BUS-003, MATH-012; eligibility for ENGL-090

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 certificate in small business operations. May not be repeated. SC

LMC: DA**Transfer:** CSU**BUS-185 Computer Assisted Accounting**

36 total hours lecture, 54 total hours lab 3 Units

Advisory: BUS-018; BUS-181 or BUS-186; eligibility for ENGL-100

A hands-on, computerized course which introduces students to the use of micro-computers in the accounting field. Includes practice in maintaining master files; recording journal entries throughout the accounting cycle; preparing payroll, inventory, depreciation, and bank reconciliations; generating subsidiary ledgers, trial balances, financial statements; performing other basic accounting functions; and setting up a new company's books or converting an existing set of records to a computerized system. May be repeated three times. SC

LMC: DA**Transfer:** CSU

BUS-186 Financial Accounting

72 total hours lecture 4 Units

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

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**

72 total hours lecture 4 Units

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

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**

54 total hours lecture 3 Units

Advisory: Eligibility for ENGL-090

This is a course in income tax preparation and the Internal Revenue Code. It is designed for individuals 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. May not be repeated. SC

LMC: DA**Transfer:** CSU**BUS-294 Business Law**

54 total hours lecture 3 Units

Advisory: BUS-109; eligibility for ENGL-100

This course includes a study of the legal environment of business and the basic principles of business law. Included are contracts, agency, employment, sales, property, forms of ownership, 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

54 total hours lecture, 72 total hours lab 4 Units

Prerequisite: MATH-025 or one year high school algebra

An introduction to inorganic chemistry and physical concepts relevant to chemistry, focused toward the understanding of structure and properties of matter. Topics include scientific measurements, metric units, unit conversions, atomic structure, naming chemical compounds, types of chemical reactions, chemical formulas, mole, stoichiometry, chemical bonding, gases, solutions and acid-base chemistry. 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**

54 total hours lecture, 72 total hours lab 4 Units

Prerequisite: MATH-025 or its equivalent or one year of high school algebra

This course is a one-semester survey of the principles of general, organic, and biochemistry. Satisfies the chemistry prerequisite of health career programs requiring only one semester of chemistry, including most nursing programs at CSUs and four-year colleges. It is one option to fulfill the chemistry prerequisite for LMC Microbiology (BIOSC-050). May not be repeated. LR

LMC: DA**Transfer:** CSU Gen. Ed. Area B1, B3**CHEM-008 Introduction to Organic and Biological Chemistry**

54 total hours lecture, 72 total hours lab 4 Units

Prerequisite: CHEM-006

CHEM-008 provides a focused introduction to the chemistry of living things. Organic chemistry (the study of carbon compounds) is linked to biochemistry (the chemical basis of life) through the relationship of molecular structure and function. This course will survey the physical and chemical properties of organic compounds and discuss the structure and function of cellular components such as proteins, carbohydrates, lipids, nucleic acids and other biomolecules. May not be repeated. LR

LMC: DA**Transfer:** UC; CSU Gen. Ed. area B1, B3; IGETC Area 5A

CHEM-025 General College Chemistry

54 total hours lecture, 108 total hours lab 5 Units

Prerequisite: CHEM-006 or high school chemistry; MATH-030

CHEM-025 is the first semester of a one year course and fulfills the general chemistry requirement for students in chemistry, engineering, life science, physics, pre-dental, and pre-medical programs. Students will gain knowledge in the foundations of atomic and molecular structure, nomenclature, physical and chemical changes of matter, fundamentals of chemical reactivity, chemical bonding, thermochemistry and the properties of gases. Throughout the course, skills in critical thinking, problem-solving, and effective learning will be developed. May not be repeated. LR

LMC: DA**Transfer:** UC; CSU Gen. Ed. Area B1, B3; IGETC Area 5A**CHEM-026 General College Chemistry**

54 total hours lecture, 108 total hours lab 5 Units

Prerequisite: CHEM-025 or equivalent

CHEM-026 is the second semester of a one year course and fulfills the general chemistry requirement for students in chemistry, engineering, life science, physics, pre-dental, and pre-medical programs. Topics include solutions, equilibrium, acids and bases, kinetics, thermodynamics, electrochemistry, coordination chemistry, nuclear, organic and biological chemistry. Laboratory emphasizes quantitative techniques, including instrumentation, and qualitative analysis. May not be repeated. SC

LMC: DA**Transfer:** UC; CSU Gen. Ed. Area B1, B3; IGETC Area 5A**CHEM-028 Organic Chemistry**

54 total hours lecture, 108 total hours lab 5 Units

Prerequisite: CHEM-026

CHEM-028 is a study of the physical and chemical properties of organic compounds. The principles and practice of common synthetic and analytical procedures will be introduced. This is the first semester of a two-semester Organic Chemistry sequence. CHEM-028 explores the chemistry of alkanes, alkenes, alkynes, and alkyl halides, along with stereochemistry and modern techniques of spectroscopy. May not be repeated. LR

LMC: DA**Transfer:** UC; CSU Gen. Ed. Area B1, B3; IGETC Area 5A**CHEM-029 Organic Chemistry**

54 total hours lecture, 108 total hours lab 5 Units

Prerequisite: CHEM-028

CHEM-029 is a study of the physical and chemical properties of organic compounds. The principles and practice of common synthetic and analytical procedures will be introduced. This is the second semester of a two-semester Organic Chemistry sequence. CHEM-029 explores the chemistry of aromatics, alcohols, ethers, aldehydes, ketones, carboxylic acids & derivatives, carbonyl substitution & condensation reactions, and selected biomolecules. The techniques of instrumental analysis that were introduced in CHEM-028 will be further explored in the context of these new organic families. 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 Principles and Practices in Early Childhood Education

54 total hours lecture 3 Units

Advisory: Eligibility for ENGL-100

An examination of the underlying theoretical principles of developmentally appropriate practices applied to early childhood care and education programs and environments, emphasizing the key role of relationships, play, constructive adult-child interactions, and teaching strategies in supporting physical, social, creative and intellectual development for all children. This course includes a review of the historical roots of early childhood programs and the evolution of the professional practices promoting advocacy, ethics and professional identity. May not be repeated. SC

LMC: DA**Transfer:** CSU**CHDEV-010 Child Growth and Development**

54 total 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. (C-ID CDEV 100) SC

LMC: GE: Behavioral Sciences; DA**Transfer:** UC; CSU Gen. Ed. Area D7, E; IGETC Area 4G

CHDEV-011 Observation and Assessment

54 total 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 an 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 play, 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. (C-ID ECE 200) SC

LMC: DA**Transfer:** CSU**CHDEV-012 Parenting Seminar A**

36 total hours lecture, 27 total hours lab 2.5 Units

Advisory: Eligibility for ENGL-090

This course is a parenting course that covers relationship-based discipline strategies, basic childhood nutrition, early math, language, literacy development and strategies, as well as a range of resources that parents can use to support their child and family. Students are required to have a TB clearance. May not be repeated. SC

LMC: DA**Transfer:** CSU**CHDEV-020 Child, Family and Community**

54 total hours lecture 3 Units

Advisory: Eligibility for ENGL-100

This course examines the development of a psycho-social understanding of the child as a member of the family and as part of the community; patterns of family living in contemporary society; roles and interrelationships; diversity in both the family, community and the issues that go along with it. Required for CHDEV majors. Satisfies Dept. of Social Services Category II. May not be repeated. SC

LMC: DA**Transfer:** UC; CSU Gen. Ed. Area D7**CHDEV-022 Relationship-Based Discipline Strategies for Children**

36 total hours lecture 2 Units

Advisory: Eligibility for ENGL-090

The course is designed for students who work with or interact with children in a classroom or family setting. Students will learn how to differentiate between compliance and relationship-based discipline methods, implement relationship-based discipline strategies, and identify children's needs based on Maslow's Hierarchy of Needs. Other topics covered include brain development, rewards and praise, and conflict resolution. May not be repeated. SC

LMC: DA**Transfer:** CSU**CHDEV-023 Positive Discipline for the Young Child**

18 total hours lecture 1 Unit

Advisory: Eligibility for ENGL-090

This course focuses on positive discipline approaches for early childhood programs. Age appropriate strategies that promote children's self control and self esteem will be covered. The difference between punishment and discipline will be explored. May not be repeated. SC

LMC: DA**CHDEV-025 Creative Art for Young Children**

36 total 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-027 Art and the Creative Process for Young Children**

36 total 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**

36 total 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

54 total hours lecture 3 Units

Advisory: *Eligibility for ENGL-100*

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 a School-Age Emphasis. May not be repeated. SC

LMC: DA**Transfer:** CSU**CHDEV-033 Developmentally and Culturally Appropriate Practice for the School Age Child**

54 total hours lecture 3 Units

Advisory: *Concurrent enrollment in CHDEV-170A*

This course is an exploration of program design and curriculum planning for school-age child care programs. In depth topics of study are developmentally and culturally appropriate practice related to routines; the classroom environment; curriculum planning; family partnerships; and health, safety and nutrition. May not be repeated. SC

LMC: DA**Transfer:** CSU**CHDEV-040 Infant and Toddler Care and Development**

54 total hours lecture 3 Units

Advisory: *Eligibility for ENGL-090*

This is one of two courses to meet the Infant Toddler Specialization for the Child Development Permit. This course covers growth and developmental milestones of infants and toddlers. Components of providing quality group care for the very young, including developmentally appropriate practices, the design of effective environments, 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**

54 total hours lecture 3 Units

Advisory: *CHDEV-040; eligibility for ENGL-090*

This is one of two courses to meet the Infant Toddler Specialization for the Child Development Permit. This course covers quality infant and toddler care components including daily caregiving routines, primary care-giving, developmentally appropriate environments, Program for Infant Toddler Caregivers (PITC) and Resources for Infant Educators (RIE) curriculum models as well as establishing partnerships with families through culturally responsive interactions. This course satisfies the Department of Social Services (DSS) category IV. May not be repeated. SC

LMC: DA**Transfer:** CSU**CHDEV-050 Teaching in a Diverse Society**

54 total 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: GE: Behavioral Sciences: GCR: Ethnic/Multicultural Studies;DA**Transfer:** CSU**CHDEV-055 Introduction to Children with Special Needs**

54 total hours lecture 3 Units

Advisory: *Eligibility for ENGL-090*

This is one of two courses to meet the Children with Special Needs Specialization for the Child Development Permit. The course focuses on learning about young children with developmental disabilities and those who are at risk. It will include discussions of the following: special education laws, special education terminology, typical and atypical patterns of development, specialized services and contemporary issues and challenges. Several class sessions will be devoted to the understanding of developmental delays and specific disabilities, such as, autism, sensory impairments, and the effects of pre-natal substance exposure. May not be repeated. SC

LMC: DA**Transfer:** CSU

**CHDEV-057 Developmentally Appropriate Practices
for Children with Special Needs**

54 total hours lecture 3 Units

Advisory: CHDEV-055; eligibility for ENGL-090

This is one of two courses to meet the Children with Special Needs Specialization for the Child Development "Permit." The course focuses on learning to work with children with disabilities in inclusive, early childhood and special education settings. It will include discussions of the following: assessments and curriculum; teaching methods, techniques and instructional strategies; adapting materials and activities for children with disabilities; managing challenging behaviors; adapting the physical environment; and working with parents, therapists and specialists. May not be repeated. SC

LMC: DA**Transfer:** CSU**CHDEV-062 Curriculum Foundations for the Young
Child**

54 total hours lecture 3 Units

Advisory: CHDEV-001 or CHDEV-010; eligibility for ENGL-100

This course examines the role of curriculum in early childhood settings. Students will learn about different curriculum models and how to plan, implement and document curriculum that is developmentally appropriate. Students will plan and implement learning experiences in the areas of art, math, science and language arts as well as practicing group times. Key components include principles of curriculum development, environment design, play, family involvement, observation and documentation. May not be repeated. SC

LMC: DA**Transfer:** CSU**CHDEV-065 Health, Safety, and Nutrition in Early
Childhood Programs**

54 total hours lecture 3 Units

Prerequisite: CHDEV-001**Advisory:** Eligibility for ENGL-090

This course provides an introduction to the laws, standards, policies, procedures, and curriculum related to child health safety and nutrition in educational settings. The key components that ensure physical health, mental health, and safety for both children and staff are identified, along with the importance of collaboration with families and health professionals. There is a focus on integrating the concepts into everyday planning and practices in programs for young children. May not be repeated. SC

LMC: DA**Transfer:** CSU**CHDEV-076 Introduction to Foster Parenting**

27 total hours lecture 1.5 Units

Advisory: Eligibility for ENGL-090

This course is designed for those who are interested in becoming foster/adoptive parents or working with foster youth from birth through eighteen years. This class covers the role of Children and Family Services with foster and adoptive youth placement, the domains of child development, and the impact of abuse and neglect on attachment and bonding. Additional issues covered are working with the birth parents of the foster child, the changes of family dynamics when a child enters the family and working with foster children in early childhood programs. This course is required by Children and Family Services to become a foster or adoptive parent in Contra Costa County. May not be repeated. P/NP

LMC: DA**Transfer:** CSU**CHDEV-077 Working with Drug-Exposed Children
Birth to 5 Years Old**

36 total hours lecture 2 Units

Advisory: Eligible for ENGL-090

This class is intended for those who are parenting, interested in, or are currently working with drug exposed children ages birth through 5. Covers normal infant development, as well as problems to be aware of when working with children at risk. Some of the issues covered include working with the Foster Care system, understanding the addiction and recovery process, HIV in mothers and babies, affects of drugs and alcohol on the developing fetus, sudden infant death, infant massage, and infant nutrition. May not be repeated. P/NP

LMC: DA**Transfer:** CSU**CHDEV-083 Field Experience in Early Childhood Pro-
grams**

54-162 total hours lab 1-3 Units

Advisory: CHDEV-001 and 010 strongly recommended; eligibility for ENGL-090

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 Student Teaching Practicum in Early Childhood Education

36 total hours lecture, 108 total hours by arrangement 4 Units

Prerequisite: CHDEV-001, 010, 011, 020, 062, and 083**Advisory:** Eligibility for ENGL-100

Students will engage in a demonstration of developmentally appropriate early childhood teaching competencies under guided supervision. Students will utilize practical classroom experiences with young children to make connections between theory and practice, to develop professional behaviors, and to build comprehensive understanding of children and families. Child-centered, play-oriented approaches to teaching/learning/assessment; and knowledge of developmentally appropriate and culturally relevant curriculum content will be emphasized as student teachers design, implement, and evaluate experiences that promote positive development and learning for all young children. May not be repeated. LR

LMC: DA**Transfer:** CSU**CHDEV-092 Adult Supervision / Mentor Teacher Training**

36 total hours lecture 2 Units

Prerequisite: CHDEV-010**Advisory:** Eligibility for ENGL-100

This course meets the two-unit requirement for adult supervision under the California Child Development Permit Matrix for the Master Teacher or Site Supervisor or Program Director. It is also required for teachers who want to become community-based mentors for LMC students in field placement coursework. Students will learn principles of and effective strategies to mentor and coach teachers and aides in the early childhood workforce. May not be repeated. SC

LMC: DA**Transfer:** CSU**CHDEV-095 Administration of Early Childhood Programs**

54 total hours lecture 3 Units

Prerequisite: CHDEV-001**Advisory:** Eligibility for ENGL-100

This course covers the basic principles and practices of administering an early childhood program. Major topics include types of programs, nutrition and menu planning, budgeting, staffing, Federal and State regulations and requirements and creating safe learning environments. This course is required for the Children's Center Supervision Permit from the State of California and satisfies the Department of Social Services Category UI requirement. May not be repeated. SC

LMC: DA**Transfer:** CSU**CHDEV-096 Staff Development and Leadership in Early Childhood Programs**

54 total hours lecture

3 Units

Prerequisite: CHDEV-010**Advisory:** Eligibility for ENGL-100

This course is one of a two part series covering the administration and supervision components of directing an early childhood program. This course covers effective practices to supervise, manage and lead an early childhood program. Topics include consensus building, shared decision making, mission and vision statements, supervisory styles, time management, delegation, motivation, communication, and conflict. CHDEV-096 satisfies the Department of Social Services Category IV requirement and is one of the courses needed for the California Commission on Teacher Credentialing Children's Center Supervision Permit. May not be repeated. SC

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). 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.

CHDEV-170 Occupational Work Experience Education in Child Development

60-300 total hours

1-4 Units

Prerequisite: Approved online application**Advisory:** Eligibility for ENGL-090

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

60-300 total hours 1-4 Units

Prerequisite: *Approved online application and employer placement***Advisory:** *Eligibility for ENGL-090*

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 career technical 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 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

90 total hours lecture 5 Units

Advisory: *Eligibility for ENGL-090*

This course is the first semester of Mandarin Chinese. It covers a visual/oral/aural approach to understanding, speaking, reading and writing Chinese with a focus on pronunciation of the four tones. The content which includes greetings, counting, telling time, names for family members is infused with the rich Chinese culture. This course is equivalent to two years of high school Chinese. May not be repeated. SC

LMC: DA**Transfer:** UC; CSU Gen. Ed. Area C2; IGETC Area 6**CHIN-040 Elementary Chinese II**

90 total hours lecture 5 Units

Prerequisite: *CHIN-030 (or two years high school Chinese)***Advisory:** *Eligibility for ENGL-090*

This course is the second semester of Mandarin Chinese. It covers a visual/oral/aural approach to understanding, speaking, reading and writing Chinese with a focus on the Pinyin System of pronunciation. The content which includes expressing preferences, negations, affirmations, and sports vocabulary is infused with the rich Chinese culture. This course is equivalent to two years of high school Chinese. May not be repeated. SC

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

Advisory: *Eligibility for ENGL-100*

Introduction to Computer Networking is intended for students considering careers in the networking field and individuals looking to understand and apply networking concepts in business or home environment. By solving "real world" problems, students will develop an understanding of networking standards and protocols while being guided step-by-step through software and hardware configurations. No previous networking experience is necessary; however students should have knowledge of basic computer practices. May be repeated twice. SC

LMC: DA**Transfer:** CSU**COMSC-011 Introduction to Network Operating Systems**

27 total hours lecture, 36 total hours lab 2 Units

Advisory: *COMSC-010 or equivalent; eligibility for ENGL-090*

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 educational networks. Students in this course will work 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 Network Security

27 total hours lecture, 36 total hours lab 2 Units

Advisory: *Eligibility for ENGL-100*

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 activities. May be repeated twice. SC

LMC: DA**Transfer:** CSU**COMSC-030 Web Site Development-Part I**

27 total hours lecture 1.5 Units

Advisory: *Eligibility for ENGL-090*

This course will teach students how to program web pages for the Internet using HTML and XHTML, and other web software programs. Understanding the structure of HTML and XHTML is essential to edit and troubleshoot web sites. The course also includes web site design and layout, how Internet web sites perform, and how to create a web site for a business, eBay, educational, a nonprofit organization, or personal use. 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 or experience with web-development*

This course is an introduction to different web designing software programs used to design a web site. It covers the layout and organizing of content, photos, video, sounds and graphics on a web page, selecting a domain name, finding a web host, and how to upload web pages to the Internet. Students will design a web site for their business, educational, non-profit, or personal use. May not be repeated. SC

LMC: DA**Transfer:** CSU**COMSC-032 Web Site Development- Dreamweaver/Flash**

54 total hours lecture 3 Units

Advisory: *COMSC-030 and 031 or experience with web development; eligibility for ENGL-090*

This course teaches students how to design a professional-looking website integrating two web designing software computer programs- Dreamweaver and Flash- which are ideal web tools for Web Site Development. This software is used to create Web Sites with the most advanced designs possible on the Web. Flash is the professional standard for producing high-impact Web experiences. Students will use both programs to make their own web site and upload the web site to the Internet. May not be repeated. SC

LMC: DA**Transfer:** CSU**COMSC-037 Help Desk Customer Technical Support**

36 total hours lecture, 72 total hours lab 3 Units

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

A basic course in the skills and tools required for entry level I/T support specialist positions. This includes how to analyze computer related problems and formulate action plans; best practices in communicating with end users; and using diagnostics tools and I/T support tracking software. In addition, students will learn soft skills to improve employability in the I/T sector. May be repeated three times. SC

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

54 total hours lecture, 36 total hours lab 4 Units

Advisory: *Eligibility for ENGL-090*

This introductory course in computer information systems with a foundation for computer science that includes basic concepts, terminology, and the operation of computers and related technologies. Also included is practical experience with common computer applications and the fundamentals of computer programming using Qbasic. May not be repeated. SC

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

54 total hours lecture 3 Units

Advisory: *COMSC-040 or COMSC-060*

This is an introductory programming course using Microsoft Visual Basic.Net (VB.NET). It introduces students to the development of graphically oriented, event driven programs. Students will learn fundamental programming structures, as well as the use of the language of develop web based applications. May not be repeated. SC

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

54 total 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

54 total 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

Advisory: Eligibility for ENGL-090

An introductory course in computer information systems surveying basic concepts, terminology, and the operation of computers and related technologies. Also included is practical experience with common computer applications. May not be repeated. SC

LMC: GCR: Computer Literacy; DA**COMSC-051 Java for Programmers, Part I**

36 total hours lecture, 54 total hours lab 3 Units

Advisory: COMSC-040 or equivalent; eligibility for ENGL-090

This course is an introduction to Java programming which is used by companies of all sizes as the main programming language to develop various applications and projects worldwide. Students will be introduced to the basic skills needed to write, compile, and run simple Java applications. Topics covered are project designing, object-oriented programming, console applications, graphics applications and many other elements of the Java language. May be repeated twice. SC

LMC: DA**Transfer:** UC, CSU**COMSC-052 Java for Programmers, Part II**

36 total hours lecture, 54 total hours lab 3 Units

Prerequisite: COMSC-051**Advisory:** Eligibility for ENGL-090

Students will learn how write, compile and run Java applications starting with program design, and advancing to writing their own programs. This course will help students acquire the skills needed to be able to use Java in real-world applications such as e-commerce web stores, banking transactions, and credit-card processing. May be repeated twice. SC

LMC: DA**Transfer:** UC, CSU**COMSC-053 Advanced Visual Basic.NET**

54 total hours lecture 3 Units

Advisory: COMSC-041 or equivalent

This course will cover advanced topics in Visual Basic Programming and it is designed for programmers already familiar with the Visual Basic.NET programming language. Advanced topics include: 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 will be covered. May not be repeated. SC

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

54 total hours lecture 3 Units

Advisory: COMSC-040 or equivalent; eligibility for ENGL-090

This course will provide the beginning programmer with a guide to developing structured programming logic including decision structures, repetition, functions, arrays, sorting and searching arrays, and recursion. May not be repeated. SC

LMC: DA**Transfer:** UC, CSU**COMSC-060 Information Technologies**

54 total hours lecture, 54 total hours lab 4 Units

Advisory: COMSC-040; eligibility for ENGL-090

This course presents technology tools and applications essential to fully participate in the contemporary electronic workplace. Students will be introduced to fundamental concepts and basic applications of word processing, electronic worksheets, database management, presentation software, and communications software. The course will also include working with other common technologies such as wireless, virtualization and cloud computing. May be repeated once. SC

LMC: GCR: Computer Literacy; DA**Transfer:** CSU**COMSC-061 Advanced Microcomputer Applications**

54 total hours lecture, 18 total hours lab 3 Units

Advisory: COMSC-060; eligibility for ENGL-090

Advanced Microcomputer Applications is designed to focus primarily on the graphics aspects of a number of popular software applications. Students learn desktop publishing aspects, font management, line drawing, how to deal with graphic elements, and creating page layout. Instruction focuses on creating graphics, text effects, and the integration of images and data from several different popular applications. May not be repeated. SC

LMC: DA**Transfer:** CSU

COMSC-080 A Survey of Operating Systems

36 total hours lecture, 72 total hours lab 3 Units

Advisory: 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 micro-computer. 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)**

36 total hours lecture, 36 total hours lab 3 Units

Advisory: COMSC-040, or 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 Comp TIA A+ Certification exam. Mastering the craft of the PC Technician requires students to learn many details about a number of operating systems, drivers, and configurations. With A+ approved courseware, students will learn how to troubleshoot, upgrade, install, and perform preventive maintenance on Personal Computers (PC) operating systems in both Corporate and Home environments. The course includes the theory, history, best practice routines and hands on experience required of A+ certified technicians or to manage home/office systems more efficiently. May be repeated three times. SC

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

36 total hours lecture, 36 total 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 Comp TIA A+ Certification exams. Mastering the craft of the PC Technician requires the students to learn about a number of operating systems, drivers, and configurations. With A+ approved courseware, students will learn how to troubleshoot, upgrade, install, backup, restore and perform preventive maintenance on Personal Computers (PC) operating systems in both corporate and home environments. The course includes the theory, history, best practice routines and hands on experience required of A+ certified technicians or to manage home/office systems more efficiently. May be repeated three times. SC

LMC: GCR: Computer Literacy; DA**Transfer:** CSU**COMSC-092 PC Repair - A + Prep (A+ Certification)**

18 total hours lecture, 18 total hours lab 1.5 Units

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

The third of three courses (COMSC-090, 091, and 092) designed to prepare students for the Comp TIA A+ Certification Exams. Mastering the craft of the PC Technician requires students to learn many details about a number of operating systems, drivers, and configurations. With A+ approved courseware, students will learn how to troubleshoot, upgrade, install, backup, restore and perform preventive maintenance on Personal Computers (PC) operating systems in both Corporate and Home environments. The course includes the theory, history, best practice routines and hands on experience required of A+ certified technicians or to manage home/office systems more efficiently. May be repeated three times. SC

LMC: DA**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-110 Gaming: An Introduction**

54 total hours lecture, 18 total hour lab 3 Units

Advisory: 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-111 Gaming: Beginning Illustration and Storyboarding

54 total hours lecture, 18 total hours lab 3 Units

Advisory: COMSC-040; eligibility for ENGL-090

An introduction to the array of graphics required for the conceptual stage of game development. Students will learn that creating graphics for a game is like creating a virtual world. Topics include basic game design, game charts, thumbnail sketches, storyboards, level layouts, environmental illustrations, character designs, and the designing of graphical user interfaces. May not be repeated. SC

LMC: DA**Transfer:** CSU**COMSC-112 Gaming: Beginning Game Design**

54 total hours lecture, 18 total hours lab 3 Units

Advisory: COMSC-040; eligibility for ENGL-090

Beginning Game Design opens the door to a fascinating world of creative possibilities for students interested in breaking into the gaming industry. Students will investigate how illustrations are developed and used in games, then create their own game objects while gaining a better understanding of 3D game development. Topics include basic techniques and methods for creating simple game objects. May not be repeated. SC

LMC: DA**Transfer:** CSU**COMSC-120 Introduction to Computer Forensics**

36 total hours lecture, 72 total hours lab 3 Units

Advisory: COMSC-040; eligibility for ENGL-090

This is a foundation course in the theory, skills, and tools of computer forensics. Students will learn techniques on preventing intrusions into network systems, quickly assessing any damage that may occur, initiating and managing various types of investigations, and preparing a comprehensive response plan. May be repeated once. SC

LMC: DA**Transfer:** CSU**COMSC-121 Computer Forensics Investigations and Analysis**

36 total hours lecture, 72 total hours lab 3 Units

Advisory: COMSC-120; COMSC-040; eligibility for ENGL-090

This course will emphasize in-depth analysis of forensics tools, methods, and procedures used for conducting an investigation of computers and mobile devices. Learning techniques of acquiring digital evidence, acquisition collection, securing and recording evidence is critical to prevent data contamination. File systems analysis includes file signature and hash analysis ensuring specialized diagnostic software to retrieve data. This course prepares students for the industry standard certification EnCase (EnCE) Certified Examiner which is required for many Computer Forensic positions. May be repeated three times. SC

LMC: DA**Transfer:** CSU**COMSC-123 Introduction to Computer Ethics**

54 total hours lecture 3 Units

Advisory: COMSC-040; eligibility for ENGL-090

This course that will provide insight into privacy and censorship issues, and security breaches that can occur in organizations at all levels in information technology. Students will investigate cases based upon their legal implications regarding intellectual property, copyrights, trademarks, patents and public domain software. Ethical issues of proper internet usage, controversies, strategies and acceptable use policies will be studied. May not be repeated. SC

LMC: DA**Transfer:** CSU**COMSC-124 Programming Design and Data Structures**

54 total hours lecture, 36 total hours lab 4 Units

Prerequisite: COMSC-048 or COMSC-052**Advisory:** MATH-030; eligibility for ENGL-100

This course covers techniques relevant to program design and selection of data structures for larger programs. Topics covered include design techniques, effective use of recursion, algorithmic efficiency and O-notation, linked lists, binary trees, B-trees, graphs, sorting, and searching techniques. Extensive programming of a variety of data structures is required. May not be repeated. SC

LMC: DA**Transfer:** UC, CSU**COMSC-125 Assembly Language Programming/Computer Organization**

54 total hours lecture, 36 total hours lab 4 Units

Prerequisite: COMSC-048**Advisory:** MATH-030; eligibility for ENGL-100

This course covers the basics of machine architecture, machine language, assembly language, operating system interface, and interfacing with high level languages. Topics include data representation, instruction representation and execution, addressing, indexing, macros, subroutine linkages, storage and time efficiency issues, interrupt handling, virtual memory, cache memory, and dynamic address translation. May not be repeated. SC

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

COMSC-170 Occupational Work Experience Education in Computer Science

60-300 total hours

1-4 Units

Prerequisite: *Approved online application***Advisory:** *Eligibility for ENGL-090*

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**

60-300 total hours

1-4 Units

Prerequisite: *Approved online application and employer placement***Advisory:** *Eligibility for ENGL-090*

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 career technical 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 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

60-300 total hours

1-4 Units

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

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 earn a maximum of sixteen 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**

60-300 total hours

1-4 Units

Prerequisite: *Approved online application***Advisory:** *Eligibility for ENGL-090*

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

60-300 total hours 1-4 Units

Prerequisite: *Approved online application and employer placement***Advisory:** *Eligibility for ENGL-090*

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 career technical 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 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

Counseling

COUNS-030 Orientation to College

18 total 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. SC

LMC: NDA**COUNS-032 Career Development**

9 total hours lecture, 18 total hours lab 1 Unit

This course is 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. 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*

This course enables students to become active participants in planning their continuing education by providing students with information necessary to evaluate universities, plan required coursework, explore housing, financial aid, and to familiarize themselves with programs and services offered at universities. May not be repeated. P/NP

LMC: DA**Transfer:** CSU**COUNS-034 College Success**

18 total hours lecture 1 Unit

This course is designed to help students learn and to develop the critical thinking skills and personal confidence necessary to succeed in their college experiences. Topics will include problem solving techniques, learning styles, time management, goal-setting, study skills and test-taking strategies, and stress management. 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 Multicultural Perspectives within Theatre

54 total hours lecture 3 Units

Advisory: *Eligibility for ENGL-100*

This is an interdisciplinary course that focuses on the relationships of experience, imagination and expression in dramatic art forms, particularly as they pertain to Asian American, African American, Latino American and European American theatre. This course also explores dramatic art as a cultural force in combination with visual arts, music and other art forms in relationship to the plays studied and includes analysis of both the individual and collaborative contributions of the playwright, director, actors and designers as they relate to live theatre productions. 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

54 total hours lecture 3 Units

Advisory: *Eligibility for ENGL-100*

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, explore 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. 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

36 total hours lecture, 54 total hours lab 3 Units

Advisory: *Eligibility for ENGL-090*

This course is an introduction to the history and basic acting techniques of the actor. Emphasis will be given to basic Stanislavski technique, given circumstances, objectives, actions, tactics, relaxation and breathing techniques, imagination development, and dramatic play. Also covered are literary characteristics such as play structure, plot structure and the vocabulary of theatre. May be repeated three times. SC

LMC: DA

Transfer: UC, CSU

DRAMA-021 Principles of Acting II

36 total hours lecture, 54 total hours lab 3 Units

Advisory: DRAMA-020; *eligibility for ENGL-090*

This course expands on Stanislavski technique by including acting techniques by Meisner, Brook, Adler, Mamet, Hagen, Lewis, and Chekhov. Students will explore and apply these acting techniques and styles to scene and monologue work. May be repeated three times. SC

LMC: DA

Transfer: UC, CSU

DRAMA-022 Principles of Voice and Dialects

36 total hours lecture, 54 total hours lab 3 Units

Advisory: *Eligibility for ENGL-090*

This course provides principles, experiences, and foundations of voice for the stage; exploring and understanding the anatomy of the vocal mechanism; relaxation exercises used to release tension and free the voice; a detailed warm up; as well as vocal and breath development; and textual exploration exercises constructed by Kristin Linklater, Patsy Rodenburg, and Cicely Berry. May be repeated three times. SC

LMC: DA

Transfer: UC, CSU

DRAMA-023 Principles of Improvisation and Movement

36 total hours lecture, 54 total hours lab 3 Units

Advisory: *Eligibility for ENGL-090*

This course provides foundations, principles, and exercises designed to aid the actor's creative process for the stage. Actors will work with body alignment in order to create a neutral palate for the actor's work to begin. Control over the body as a whole as well as over specific parts will be explored and work shopped through the use of pantomime, mask, stage combat, clowning, and dramatic play. Techniques explored will range from Viewpoints and undulations to stage combat, mime, and psycho-physical acting. May be repeated three times. SC

LMC: DA

Transfer: UC, CSU

DRAMA-030 Chicano/a Mexican American Cinema: A Critical Analysis

54 total hours lecture 3 Units

Advisory: *ENGL-100*

DRAMA-030 is a critical approach to the study of Chicano/a cinema. It utilizes film screenings, lectures, classroom discussions, and readings to facilitate the study of film as both an artistic form as well as an expression of Chicano/a historical, political and social movements in the United States and to explore the ethical values examined and expressed in Chicano/a movies. May not be repeated. SC

LMC: GCR: Ethnic/Multicultural Studies; DA

Transfer: UC; CSU Gen. Ed. Area C2; IGETC Area 3B.

DRAMA-040 Theatrical Stagecraft

6-18 total hours lecture, 36-108 total hours lab 1-3 Units

Advisory: *Eligibility for ENGL-090*

This course is an introduction and in depth immersion into the art of scenic design and construction. Students will explore various techniques and styles used in popular scenic design, become proficient in the use of scene shop tools and construction, develop basic techniques used in scene painting, and use them to design a production model as well as build a working set for a production. May be repeated three times. SC

LMC: DA

Transfer: UC, CSU

DRAMA-041 Theatrical Design

6-18 total hours lecture, 36-108 total hours lab 1-3 Units

Advisory: *Eligibility for ENGL-090*

This course is an introduction and in depth immersion into the art of light, costume, and make-up design. Students will explore and develop skills used by scenic, light, costume, and make-up designers and apply them to the construction and design of a working production as well as budget and design proposals. May be repeated three times. SC

LMC: DA**Transfer:** UC, CSU**DRAMA-050 Theatrical Production I: Acting for Performance**

54-162 total hours lab 1-3 Units

Advisory: *Enrollment in either DRAMA-040 or 041; eligibility for ENGL-090*

This course is a hands on course where students work with Stanislavski techniques, personal techniques, theatre vocabulary, and taking direction. Students will be immersed in all aspects of the rehearsal process in order to take part in a full theatrical production at a beginning acting level. DRAMA-050 and DRAMA-051 may be repeated for a combined total of one time. SC

LMC: DA**Transfer:** UC, CSU**DRAMA-051 Theatrical Production II: Intermediate Acting for Performance**

54-162 total hours lab 1-3 Units

Advisory: *Prior or concurrent enrollment in either DRAMA-040 or DRAMA-041; eligibility for ENGL-090*

This course is a hands on course where students work with intermediate level acting techniques that include Meisner, Adler, Brook, Hagen, Lewis, Chekhov, movement and team building used for character development. Students will be immersed in all aspects of the rehearsal process in order to take part in a full theatrical production at an intermediate acting level. DRAMA-051 and DRAMA-050 may be repeated for a combined total of one time. SC

LMC: DA**Transfer:** UC, CSU**DRAMA-052 Directing and Collaborative Performance**

18 total hours lecture, 108 total hours lab 3 Units

Advisory: *Prior or concurrent enrollment in DRAMA-040 or DRAMA-041; eligibility for ENGL-090*

In this course students will be involved in every aspect of a full theatrical production. Students will select a script hold auditions, cast, design, construct, direct, market, and star in this collaborative production performed for a live audience. May be repeated three times. SC

LMC: DA**Transfer:** CSU**DRAMA-070 Film as an International Art Form**

54 total hours lecture, 36 total hours lab 3 Units

Advisory: *Eligibility for ENGL-100*

DRAMA-070 is a critical approach to the study of film that integrates both the technical elements of filmmaking with aesthetic and thematic elements through the exploration of various genres which may include but are not limited to suspense and mystery, science fiction/fantasy, survival and adventure, romance and comedies and/or Westerns. The class encompasses films from the early 20th century through the present time and may include films from the Americas, Europe, Australia and/or Asia as it explores the cultural and artistic concerns of a variety of cultures as reflected in motion pictures. Related disciplines such as editing, music scoring, screenwriting, acting for the camera are also discussed in relationship to the films being studied. May not be repeated. LR

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

54 total hours lecture 3 Units

Advisory: *Eligibility for ENGL-100*

ECON-005 provides 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 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. This 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. The completion of ECON-005 partially satisfies the U.S. History, Constitution and American Ideals CSU requirements. 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

54 total hours lecture

3 Units

Prerequisite: MATH-030 or equivalent**Advisory:** Eligibility for ENGL-100

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**

54 total hours lecture

3 Units

Prerequisite: MATH-030 or equivalent**Advisory:** ECON-010

This course is an examination of macroeconomic factors including unemployment, inflation, business cycles, fiscal policy and monetary policy. May not be repeated. SC

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-040 Teaching as a Profession**

36 total hours lecture, 54 total hours lab

3 Units

Advisory: Eligibility for ENGL-090

This course is specifically designed to introduce students to the professional role and responsibilities of teachers and to explore some of the critical issues in American education. The foundations of teaching will focus on the multi-racial, multi-ethnic, and multi-cultural history and philosophies of American education. Additional topics will include the following: expectations of new teachers, purpose of schools, student diversity and job options. Students are required to complete a minimum of 3 hours per week in a classroom with a credentialed teacher. The fieldwork placement of mini-internship is designed for maximum student exposure to the teaching profession. This course satisfies the fieldwork experience for Liberal Studies majors. May be repeated once. SC

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

60-300 total hours

1-4 Units

Prerequisite: Approved online application**Advisory:** Eligibility for ENGL-090

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

60-300 total hours

1-4 Units

Prerequisite: *Approved online application and employer placement***Advisory:** *Eligibility for ENGL-090*

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 career technical 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 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

Electrical / Instrumentation Technology

ETEC-004 Introduction to Electrical Technology

36 total hours lecture, 54 total hours lab

3 Units

Advisory: *MATH-012 or equivalent; eligibility for ENGL-100*

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**

36 total hours lecture, 54 total hours lab

3 Units

Advisory: *MATH-012 or equivalent; eligibility for ENGL-100*

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**

54 total hours lecture, 54 total hours lab

4 Units

Advisory: *MATH-012 ; eligibility for ENGL-100*

This is first semester course in the fundamentals of electricity and electronics. It will provide a good background in direct current circuits including Ohm's law, component identification, and electrical terminology commonly used in the industry. Students will learn how electricity interacts with passive components. Emphasis will be placed upon the calculation, construction, and measurement of direct current circuits. The coordinated laboratory will teach the use of test equipment to measure circuits in order to perform circuit analysis. Students will apply the basic principles of DC circuits to develop troubleshooting techniques. May be repeated three times. SC

LMC: DA**Transfer:** CSU**ETEC-012 Alternating Current Circuits**

54 total hours lecture, 54 total hours lab

4 Units

Prerequisite: ETEC-010**Advisory:** *Eligibility for ENGL-100*

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 concepts 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**

36 total hours lecture, 72 total hours lab

3 Units

Prerequisite: ETEC-012**Advisory:** *MATH-012 or equivalent; eligibility for ENGL-100*

This course is a study of electrical control circuits as they apply to industrial control systems. This course covers control components and their use in control systems as well as the use and development of electrical schematic and wiring diagrams. Lab work includes construction, analysis, testing and calibrating control circuits from a schematic diagram. Systematic troubleshooting techniques will be emphasized and the programming and connection of Programmable Logic Controllers will be addressed. May be repeated three times. SC

LMC: DA**Transfer:** CSU

EETEC-022 Semiconductor Devices

18 total hours lecture, 54 total hours lab 2 Units

Prerequisite: EETEC-012**Advisory:** Eligibility for ENGL-100

This course is 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. Also, included will be coordinated laboratory projects to help reinforce the theoretical and practical understanding of active semiconductor devices. May be repeated three times. SC

LMC: DA**Transfer:** CSU**EETEC-024 Digital Devices**

18 total hours lecture, 54 total hours lab 2 Units

Prerequisite: EETEC-012**Advisory:** EETEC-022; eligibility for ENGL-100

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**

54 total hours lecture 3 Units

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

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**

54 total hours lecture, 54 total hours lab 4 Units

Prerequisite: EETEC-012**Advisory:** EETEC-020; eligibility for ENGL-100; eligibility for MATH-025

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 and Process Measurement**

54 total hours lecture 3 Units

Prerequisite: EETEC-012**Co-requisite:** EETEC-034**Advisory:** PHYS-015; MATH-025; eligibility for ENGL-100

This is a course in the fundamentals of instrumentation measurement and 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 Laboratory**

54 total hours lab 1 Unit

Prerequisite: EETEC-012**Co-requisite:** EETEC-032**Advisory:** PHYS-015; MATH-012; eligibility for ENGL-100

This is a lab course which provides hands on experience to enhance the fundamentals of instrumentation measurement of process control covered in EETEC-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

ETEC-040 National Electric Code

54 total hours lecture 3 Units

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

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 Apprentices Standards Electrical Certification Exam for the State of California. May not be repeated. SC

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

54 total hours lab 1 Unit

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

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**

36 total hours lecture, 54 total hours lab 3 Units

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

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**

36 total hours lecture, 72 total hours lab 3 Units

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

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**

54 total hours lecture 3 Units

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

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**

54 total hours lab 1 Unit

Co-requisite: ETEC-050**Advisory:** ETEC-010, 012, 032, 034, 050; PHYS-015; MATH-012; eligibility for ENGL-100

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**

18 total hours lecture 1 Unit

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

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

18 total hours lecture, 54 total hours lab 2 Units

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

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**

18 total hours lecture, 54 total hours lab 2 Units

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

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**

60-400 total hours 1-4 Units

Prerequisite: Approved online application**Advisory:** Eligibility for ENGL-090

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**

60-300 total hours 1-4 Units

Prerequisite: Approved online application and employer placement**Advisory:** Eligibility for ENGL-090

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 career technical 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 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

54 total hours lecture, 162 total hours lab 6 Units

Prerequisite: *Students must be 18 years of age by the date the course begins*

Advisory: *Eligibility for ENGL-090*

This course provides training and knowledge required of the EMT-B scope of practice for the National Standard and the state of California. It prepares students for certification as an Emergency Medical Technician and to work in an entry-level position as an Ambulance Attendant, Emergency Room Technician, or Firefighter. The course covers topics such as History of EMS systems, Roles and Responsibilities of the Emergency Medical Technician, Infection Control, Pathophysiology of Injuries and Disease Processes, Airway Management, Assessment and Management of Medical Patients, and Assessment and Management of Trauma Patients, including Bleeding Control, Shock Management, C-Spine Immobilization, and Splinting and Bandaging. Successful completion of this course allows the student to take the national registration exam administered by the National Registry of Emergency Medical Technicians. EMT-B certification is the minimum requirement for ambulance attendants and is a prerequisite for paramedic programs. Material lab fee of \$50 required. 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-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

60-300 total hours 1-4 Units

Prerequisite: *Approved online application*

Advisory: *Eligibility for ENGL-090*

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

60-300 total hours 1-4 Units

Prerequisite: *Approved online application and employer placement*

Advisory: *Eligibility for ENGL-090*

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 career technical 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 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

54 total hours lecture, 18 total hours lab 3 Units

Prerequisite: MATH-040 or equivalent

Advisory: Eligibility for ENGL-100

This course introduces the engineering profession. It includes the worldwide history of engineering and its influences on society and reviews the major engineering disciplines and the requirements for becoming an engineer. The course also 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. "An optional materials fee may be required." May not be repeated. LR

LMC: GE: Physical Science; DA

Transfer: UC, CSU

ENGIN-020 Programming with C++ for Engineers and Scientists

54 total hours lecture, 54 total hours lab 4 Units

Prerequisite: MATH-050

Advisory: Eligibility for ENGL-100

This course teaches computer programming using the C++ programming language's syntax, control, and data structures. It includes object oriented programming techniques, introduces numerical techniques for scientific and engineering applications, and emphasizes optimal programming practices. Various aspects of the software life-cycle, including design, documentation, implementation, debugging, testing, and maintenance are introduced. Case studies and software projects are significant parts of the course. May not be repeated. LR

LMC: DA

Transfer: UC, CSU

ENGIN-022 Programming with MATLAB for Engineers and Scientists

54 total hours lecture, 54 total hours lab 4 Units

Co-requisite: MATH-060

Advisory: Eligibility for ENGL-100

This course teaches computer programming using the MATLAB's syntax, control, and data structures. It includes object oriented programming techniques, introduces numerical techniques for scientific and engineering applications, and emphasizes optimal programming practices. Various aspects of the software life-cycle, including design, documentation, implementation, debugging, testing, and maintenance are introduced. 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

36 total hours lecture, 72 total hours lab 3 Units

Advisory: ENGIN-010; eligibility for ENGL-100

This course 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

54 total hours lecture, 54 total hours lab 4 Units

Prerequisite: CHEM-025 and PHYS-040

Advisory: Eligibility for ENGL-100

This is a lecture and lab course that investigates the relationships between microscopic structures and the macroscopic properties of engineering materials--including metals, ceramics, glasses, polymers, and composites. Mechanical, thermal, electrical, magnetic, and optical properties are also examined. Processes for producing and strengthening various materials are introduced. Certain failure mechanisms are also studied. "An optional materials fee may be applied." May not be repeated. LR

LMC: DA

Transfer: UC, CSU

ENGIN-036 Engineering Statics

54 total hours lecture, 18 total hours lab 3 Units

Prerequisite: PHYS-040

Advisory: Eligibility for ENGL-100

This course is an introduction to the application of the concept of mechanical equilibrium to engineering problems. This course covers force systems in the context of supports, two force members and multi-force members, cables, truss structures, frames, and machines; geometrical properties, such as centroids and moments of inertia; friction, the method of virtual work, and sketching shear and bending moment diagrams. Problem solving methods include analytical, graphical, and computer techniques. "An optional materials fee may be applied." May not be repeated. LR

LMC: DA

Transfer: UC, CSU

ENGIN-038 Manufacturing Processes

36 total hours lecture, 54 total hours lab 3 Units

Prerequisite: ENGIN-025**Co-requisite:** Prior or concurrent enrollment in ENGIN-030**Advisory:** Eligibility for ENGL-100

This course is an introduction to manufacturing processes, including: CNC machining, casting, forcible deformation processes, sintering, microfabrication, injection molding, and joining processes. Economic, environmental, and workability issues are examined to determine optimal manufacturing processes. "An optional materials fee may be applied." May not be repeated. LR

LMC: DA**Transfer:** UC, CSU**ENGIN-045 Engineering Circuit Analysis**

54 total hours lecture, 18 total hours lab 3 Units

Prerequisite: PHYS-041**Co-requisite:** Prior or concurrent enrollment in MATH-080**Advisory:** Eligibility for ENGL-100

This is an introduction to electrical circuit analysis. It starts with passive d.c. circuits, includes controlled sources, and progresses to network analysis, including superposition, Thevenin and Norton equivalents, node and mesh analysis techniques. The course also includes analysis of circuits with energy storage elements, along with transient responses that are described by first- and second-order differential equations. The ideal op-amp model is introduced. Alternating current circuit analysis is developed, including the use of phasors, and applications are made to transformers, single phase, and three phase circuits. The course includes computer modeling of circuits. "An optional materials fee may be applied." May not be repeated. LR

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

54 total hours lecture 3 Units

Prerequisite: ENGIN-036**Advisory:** Eligibility for ENGL-100

This course covers dynamics for engineering applications. It 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

60-300 total hours 1-4 Units

Prerequisite: Approved online application**Advisory:** Eligibility for ENGL-090

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**

60-300 total hours 1-4 Units

Prerequisite: Approved online application and employer placement**Advisory:** Eligibility for ENGL-090

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 career technical 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 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-070 Fundamentals of English: Reading, Writing and Thinking

18 total hours lecture, 18 total hours lab, 72 total 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-082 Building a College Vocabulary

54 total hours lecture 3 Units

This course focuses on helping students learn new words in a variety of contexts including short articles and essays. Students will improve skills in using a dictionary and thesaurus, using context clues, understanding connotation and denotation, and recognizing word parts and idioms. May not be repeated. SC

LMC: NDA

ENGL-083 Sentence Skills for College Writing

54 total hours composition 3 Units

Advisory: Eligibility for ENGL-090

This course provides students with the knowledge and skills necessary to understand sentence structure and create grammatically correct, syntactically mature sentences in their written work. Instruction emphasizes sentence mechanics, sentence style, and sentence creation, using sentence-combining techniques and proofreading exercises. Students learn to write sentences with proper punctuation, capitalization, homonym usage, and other sentence-level skills in the writing projects they complete for the class. This course is appropriate for students wanting an introduction to college-level sentence skills or for students enrolled in other English courses who want or need extra sentence-level support. May not be repeated. SC

LMC: DA

ENGL-090 Integrated Reading, Writing and Critical Thinking

18 total hours lecture, 18 total hours lab, 72 total hours composition 5 Units

Prerequisite: 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). 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.

ENGL-100 College Composition

54 total hours composition 3 Units

Prerequisite: ENGL-090 or assessment process

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

54 total hours lecture 3 Units

This course allows departure from the usual expository forms and encourages the student to write creatively, experimenting with poetry, short story and dramatic writing, learning to use words and expressions figuratively and literally to create pictures/conceptions that stir the imagination. A focus on good writing habits, journaling and how to read as a writer as well as exploring today's publishing market is also covered. May not be repeated. LR

LMC: DA

Transfer: CSU

ENGL-112 Intermediate Creative Writing

54 total 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**

54 total 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**

54 total hours lecture 3 Units

Advisory: Eligibility for ENGL-100

This course will focus on the mythological themes, folk tales/oral literature, fiction and essays produced by African Americans, Indigenous Peoples of the United States (American Indians), Latino/Chicano and European Americans. Emphasis will be on the similarities and differences in the literature of these ethnic groups and the ways in which the respective literatures reflect 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**

54 total hours lecture 3 Units

Advisory: Eligibility for ENGL-090

This course is an introduction to Asian-American literature. It focuses on particular contexts and theoretical issues that have informed the study of Asian-American literature. Students will read from literature written by authors of various Asian American ethnic groups. They will be introduced to the unique history and thematic concerns of Asian American authors, as well as to the contexts in which this literature has been written. Students will also be introduced to the historical experience of Asian immigrants in the United States, and learn to connect literature to its historical and social context. 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**

54 total hours lecture 3 Units

Advisory: Eligibility for ENGL-100 or 090; or concurrent enrollment in ENGL-090

This course is designed to offer students the opportunity to read widely and deeply in a selection of contemporary African American authors, beginning with the slave narrative, to the Harlem Renaissance, to the Civil Rights Movement, and ultimately to the cultural explosion of African-American Hip Hop Poets and artists of today. Students will be introduced to standard techniques of literary analysis as well as to the unique history and power of African American fiction, poetry, and plays. 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**

54 total hours lecture 3 Units

Advisory: Eligibility for ENGL-100

Selected listening and reading from the myths, tales, stories and novels of imaginative literature to broaden familiarization and to stimulate interests; some analysis of the art form as a metaphor to describe the human condition with links to sociological, historical and psychological perspectives. Genres explored are classical mythology, fantasy, and Gothic/horror. 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**

54 total hours lecture 3 Units

Advisory: Eligibility for ENGL-100

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. 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-205 California Literature**

54 total 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. SC

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

ENGL-220 Critical Analysis and Inquiry

54 total hours lecture 3 Units

Prerequisite: ENGL-100

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. SC

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

54 total hours composition 3 Units

Prerequisite: ENGL-100

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 Thinking and Writing Critically about Literature**

54 total hours composition 3 Units

Prerequisite: ENGL-100

This course continues the development of students' college-level skills in reading, critical thinking, writing, and research which begins in English 100, focusing on the literary genres of poetry, drama, the short story, and the novel. May not be repeated. SC

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

54 total 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. May not be repeated. LR

LMC: GE: Humanities, DA**Transfer:** UC, CSU Gen. Ed. Area C2; IGETC Area 3B**ENGL-900s Selected Topics in English**

DA varies with course content.

English As A Second Language (ESL)

ESL-011 Vocabulary Development I

54 total hours lecture, 18 total hours lab 3 Units

Advisory: One year of formal English as a Second Language instruction, or a level one placement on the ESL placement test. Concurrent enrollment in ESL-021, ESL-031 and/or ESL-041

(Formerly ESL-019) This course is the first level in a sequence that focuses on helping ESL students to develop their reading skills and to develop a useful and personally relevant vocabulary base. Students will learn how to use the dictionary, how to use context clues in reading and to recognize word parts. Students will also learn how to use new vocabulary to help them identify the main ideas in text and to use new vocabulary in writing. May not be repeated. SC

LMC: NDA**ESL-012 Vocabulary Development II**

54 total hours lecture, 18 total hours lab 3 Units

Prerequisite: ESL-011, or a level two placement on the ESL placement test

Advisory: Concurrent enrollment in ESL-022, ESL-032 and/or ESL-042

This course is the second level in a sequence that focuses on helping ESL students to increase their vocabulary base and build their reading skills. Students will continue to use context clues in reading and to recognize word parts. Students will also build their reading skills to become active, thoughtful and confident readers of English. May not be repeated. SC

LMC: NDA

ESL-013 Intermediate Text Skills

54 total hours lecture, 18 total hours lab 3 Units

Prerequisite: *ESL-012 or a level three placement on the ESL placement test; or an ENGL-070 placement on the ESL placement test*

Advisory: *Concurrent enrollment in ESL-023, 033, and/or ESL-043*

ESL-013 is an intermediate level reading and vocabulary skills and strategies development course for English as a Second Language students. ESL-013 uses a process approach to teaching students how to engage a range of cognitive and meta-cognitive linguistic skills to improve their English language reading and vocabulary use abilities. Using theme-based organization and incorporating a variety of non-academic and academic types of texts - including newspaper articles, online texts, magazine articles, textbook articles, tables, charts, timelines, graphs, and reports - students are guided step-by-step through previewing, reading, and post-reading activities. The course makes use of reading, recall, and reinforcement to develop students' ability to process information more quickly and holistically. This intermediate level ESL course also moves students from multiple choice and fill-in-the blank comprehension and vocabulary exercises to activities that require them to summarize and begin to infer information, as well as discuss and write about their own opinions and interpretations. In so doing, this course aims to help students become active readers by personalizing and broadening their understanding of what they read and how they learn. May not be repeated. SC

LMC: NDA

ESL-014 Advanced Text Skills

54 total hours lecture, 18 total hours lab 3 Units

Prerequisite: *ESL-013 or a level four placement on the ESL placement test; or an ENGL-070 placement on the ESL placement test*

Advisory: *Concurrent enrollment in ESL-024, 034, and/or ESL-044*

ESL-014 is a high-intermediate to advanced level reading and vocabulary skills and strategies development course for English as a Second Language students. This course is the second of a two-semester upper-level text skills sequence. ESL-014 approaches reading and vocabulary instruction in an interactive and reciprocal process manner. Like ESL-013, this course teaches students how to engage a wide range of cognitive and meta-cognitive linguistic skills to improve their English language reading and vocabulary use abilities. The course is organized by themes that are approached from different angles via a variety of types of text. High-intermediate to advanced level skills and strategies are initially introduced separately and in a developmental manner. Then these skills are recycled, integrated, and built upon, giving students both a depth and breadth of application opportunities. This course also moves students from multiple choice and fill-in-the blank comprehension and vocabulary exercises to activities that require them to synthesize and infer information, as well as discuss and write about applications to other situations. In so doing, this course aims to help students become active readers by personalizing and broadening their understanding of what they read and how they learn. May not be repeated. SC

LMC: NDA

ESL-021 Grammar for Communication I

72 total hours lecture 4 Units

Advisory: *One year of formal English as a Second Language instruction, or a level one placement on the ESL placement test. Current enrollment in ESL-011, ESL-031 and/or ESL-041*

(Formerly ESL-020) ESL-021 is a grammar course for English language learners at a novice/basic level of English language proficiency. ESL-021 uses a dual integrated skills and communicative approach to teach a selection of level-appropriate grammatical structures. Students learn grammar through listening, reading, speaking, and writing activities that offer opportunities to discover, analyze, practice, and produce a variety of grammar points. Grammar content is taught via social and situational themes and contexts that are relevant to adult students' everyday lives and a variety of interests. The course focuses on developing novice/basic students' language ability through extensive exposure and practice that mainly includes focused and controlled exercises and some progressively more personalized and creative interactions. May not be repeated. SC

LMC: NDA

ESL-022 Grammar for Communication II

72 total hours lecture 4 Units

Prerequisite: *ESL-021 or a level two placement on the ESL placement test*

Advisory: *Concurrent enrollment in ESL-012, ESL-032 and/or ESL-042*

(Formerly ESL-021) ESL-022 is a grammar course for English language learners at a high beginning level of English language proficiency. ESL-022 uses a dual integrated skills and communicative approach to teach a selection of level-appropriate grammatical structures. Students learn grammar through listening, reading, speaking, and writing activities that offer opportunities to discover, analyze, practice, and produce a variety of grammar points. Grammar content is taught via social and situational themes and contexts that are relevant to adult students' everyday lives and a variety of interests. The course focuses on developing high-beginning students' language ability through extensive exposure and practice that mainly includes focused and controlled exercises and some progressively more personalized and creative interactions. May not be repeated. SC

LMC: NDA

ESL-023 Grammar for Communication III

72 total hours lecture 4 Units

Prerequisite: *ESL-022 or a level three placement on the ESL placement test; or an ENGL-070 placement on the ESL placement test***Advisory:** *Concurrent enrollment in ESL-013, 033, and/or ESL-043*

(Formerly ESL-022) ESL-023 is a grammar course for English language learners at an intermediate level of proficiency. ESL-023 uses a dual integrated skills and communicative approach to teach a selection of level-appropriate grammatical structures. Students learn grammar through listening, reading, speaking, and writing activities that offer opportunities to discover, analyze, practice, and produce a variety of grammar points. Grammar content is taught via social and situational themes and contexts that are relevant to adult students' everyday lives and a variety of interests. The course focuses on developing intermediate students' language ability through extensive exposure and practice that includes focused and controlled exercises to progressively more personalized and creative interactions. May not be repeated. SC

LMC: NDA

ESL-024 Grammar for Communication IV

72 total hours lecture 4 Units

Prerequisite: *ESL-023 or a level four placement on the ESL placement test; or an ENGL-070 placement on the ESL placement test***Advisory:** *Concurrent enrollment in ESL-014, 034, and/or ESL-044*

ESL-024 is a grammar course for English language learners at a high-intermediate to advanced level of proficiency. ESL-024 uses a dual integrated skills and communicative approach to teach a selection of level-appropriate grammatical structures. Students learn grammar through listening, reading, speaking, and writing activities that offer opportunities to discover, analyze, practice, and produce a variety of grammar points. Grammar content is taught via social and situational themes and contexts that are relevant to adult students' everyday lives and a variety of interests. The course focuses on developing high-intermediate to advanced students' language ability through extensive exposure and practice that includes focused and controlled exercises to progressively more personalized and creative interactions. May not be repeated. SC

LMC: NDA

ESL-031 Conversation/Pronunciation I

54 total hours lecture, 18 total hours lab 3 Units

Advisory: *One year of formal English as a Second Language instruction, or a level one placement on the ESL placement test. Concurrent enrollment in ESL-011, ESL-021 and/or ESL-041*

(Formerly ESL-030) This is the first of a series of courses which introduces English pronunciation, and conversation for college communication. Emphasis is placed on English sound system and pronunciation improvement, accent reduction and oral communication skills. May not be repeated. SC

LMC: NDA

ESL-032 Conversation/Pronunciation II

54 total hours lecture, 18 total hours lab 3 Units

Prerequisite: *ESL-031, or a level two placement on the ESL placement test***Advisory:** *Concurrent enrollment in ESL-012, ESL-022 and/or ESL-042*

(Formerly ESL-031) This is the second of a series of courses which introduces English pronunciation, and conversation for college communication. Emphasis is placed on further pronunciation development and more advanced oral communication skills. May not be repeated. SC

LMC: NDA

ESL-033 Intermediate Oral Skills

54 total hours lecture, 18 total hours lab 3 Units

Prerequisite: *ESL-032 or a level three placement on the ESL placement test; or an ENGL-070 placement on the ESL placement test***Advisory:** *Concurrent enrollment in ESL-013, 023, and/or ESL-043*

ESL-033 is a speaking, listening, and critical thinking course for English language learners at an intermediate level of language proficiency. ESL-033 uses project based learning and communicative language teaching approaches to teach a selection of level-appropriate oral communication skills and strategies. Students learn these skills and strategies through activities that offer opportunities to build their vocabulary and concept knowledge, demonstrate their comprehension, apply their understanding, internalize and analyze information, synthesize their learning, and evaluate their progress. Oral communication content is taught via social and academic themes that are relevant to adult students' everyday lives and a variety of interests. The course focuses on developing intermediate students' language ability progressively by 1) concentrating initially on receptive language development and then productive language development, and 2) engaging students in activities that are increasingly more sociolinguistically interactive and cognitively challenging. May not be repeated. SC

LMC: NDA

ESL-034 Advanced Oral Skills

54 total hours lecture, 18 total hours lab 3 Units

Prerequisite: *ESL-033, or a level four placement on the ESL placement test; or an ENGL-070 placement on the ESL placement test***Advisory:** *Concurrent enrollment in ESL-014, 024, and/or ESL-044*

ESL-034 is a speaking, listening, and critical thinking course for English language learners at a high-intermediate to advanced level of language proficiency. ESL-034 uses a communicative language teaching approach to teach a selection of level-appropriate oral communication skills and strategies. Students learn these skills and strategies through activities that offer opportunities to build their vocabulary and concept knowledge, demonstrate their comprehension, apply their understanding, internalize and analyze information, synthesize their learning, and evaluate their progress. Oral communication content is taught via social, professional, and academic themes that are relevant to adult students' everyday lives and a variety of interests. The course focuses on developing high-intermediate to advanced students' language ability progressively by 1) concentrating initially on receptive language development and then productive language development, and 2) engaging students in activities that are increasingly more sociolinguistically interactive and cognitively challenging. May not be repeated. SC

LMC: NDA

ESL-041 Writing and Reading I

72 total hours lecture 4 Units

Advisory: *One year of formal English as a Second Language instruction, or a level one placement on the ESL placement test. Concurrent enrollment in ESL-011, ESL-021 and/or ESL-031*

ESL-041 is a writing and reading course for students of English as a second language who currently find themselves at a novice/basic level of English development. Through reading academic and narrative texts on familiar and concrete topics, students are taught to predict, summarize, contrast, and synthesize readings while learning new vocabulary. These skills in turn lead students to develop their writing abilities and to become strong writers by applying correct sentence structure, spelling, and mechanics of English to their writing. ESL-041 utilizes a problem-posing approach where language is acquired through student negotiation as a means to successful second language communication. May not be repeated. SC

LMC: NDA

ESL-042 Writing and Reading II

72 total hours lecture 4 Units

Prerequisite: *ESL-041, or a level two placement on the ESL placement test***Advisory:** *Concurrent enrollment in ESL-012, ESL-022 and/or ESL-032*

ESL-042 is a writing and reading course for students of English as a second language who currently find themselves at a high beginning level of English development. Through reading of personal, professional, academic and literary texts, which may include non-adapted/authentic texts written for native English speakers, students are taught to write one or more paragraphs that have a clear, beginning, middle, and end. Furthermore, students learn how to produce a variety of sentence structures with emerging control over perfect tenses. These skills in turn lead students to develop their writing abilities and to become strong writers by applying correct sentence structure, spelling, and mechanics of English to their writing. ESL-042 utilizes a problem-posing approach where language is acquired through student negotiation as a means to successful second language communication. May not be repeated. SC

LMC: NDA

ESL-043 Writing and Reading III

72 total hours lecture 4 Units

Prerequisite: *ESL-042 or a level three placement on the ESL placement test; or an ENGL-070 placement on the ESL placement test***Advisory:** *Concurrent enrollment in ESL-013, 023, and/or ESL-033*

ESL-043 is a writing and reading course for students of English as a second language who currently find themselves at an intermediate level of English development. Through readings which include both expository and narrative texts, with some level of abstraction, students are taught to write essays with clear thesis statements using various rhetorical modes (350+ words). At the end of the course, students will write well developed essays while integrating a wide range of vocabulary. May not be repeated. SC

LMC: NDA

ESL-044 Writing and Reading IV

72 total hours lecture 4 Units

Prerequisite: *ESL-043 or a level four placement on the ESL placement test; or an ENGL-070 placement on the ESL placement test***Advisory:** *Concurrent enrollment in ESL-014, 024, and/or ESL-034*

ESL-044 is a writing and reading course for students of English as a second language who currently find themselves at a high intermediate/advanced level of English development. Through readings which are predominantly expository, including argumentative, research-based, and abstract ideas, students are taught to write expository essays which reference outside sources, including non-fiction, using a variety of rhetorical strategies (500-750 words.) May not be repeated. SC

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

18 total hour lecture, 54 total 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-010 Introduction to the Environmental Sciences

54 total hours lecture, 54 total 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; CSU 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.

ENVSCI-900s Selected Topics in Environmental Science

DA varies with course content.

Filipino

FILIP-060 Elementary Filipino I

90 total hours lecture 5 Units

Advisory: Eligibility for ENGL-090

A visual/oral/aural approach to understanding, speaking, reading, and writing Filipino as it is used in the Philippines. 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 6

FILIP-061 Elementary Filipino II

90 total hours lecture 5 Units

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

Advisory: Eligibility for ENGL-090

Continuation of the visual/oral/aural approach to understanding, speaking, reading, and writing Filipino. This is the second course of a two semester sequence. Course material emphasizes the Filipino culture. It is highly recommended that FILIP-061 be taken immediately after completion of FILIP-060. May not be repeated. SC

LMC: DA

Transfer: UC; CSU Gen. Ed. Area C2; IGETC Area 3B, 6

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.

FILIP-900s Selected Topics in Filipino

DA varies with course content.

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

54 total 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

54 total 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

54 total hours lecture 3 Units

Advisory: 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 Related to the Fire Service

54 total hours lecture 3 Units

Advisory: FIRE-101 and 103; eligibility for ENGL-090

This course covers fundamentals of building construction as it relates to fire protection. Classification of occupancy and types of construction with an emphasis on fire protection features including building equipment, facilities, and fire resistant materials. This course is required for Public Safety majors at CSUs. May not be repeated. SC

LMC: DA

Transfer: CSU

FIRE-105 Fundamentals of Fire Prevention

54 total hours lecture 3 Units

Advisory: 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

27-54 total hours of activity .5-1 Unit

This course prepares students for the physical demands of a public safety career and prepares them for the entry level physical agility exam. Students are introduced to the tools and proper procedures for the physical requirements public safety positions require including carrying, lifting, climbing, and pulling equipment as well as proper physical rescue techniques. Also included are aerobic workouts designed to improve cardiovascular endurance, strength training and flexibility. May be repeated three times. SC

LMC: GCR: Physical Education; DA

Transfer: CSU

FIRE-107 Fire Fighter Safety and Survival

54 total hours lecture; 12 total hours lab 3 Units

Advisory: Eligibility for ENGL-090

This course is designed for those seeking entry into, as well as those professionally employed in the fire service. This course is required by the California State Fire Marshal; it covers key topics to keep fire fighters safe in the performance of their job. Topics include assessing fire dangers and handling common fire situations in the home and in the work place; risk abatement and personal preparation for unforeseen fire emergencies; and roles and responsibilities in educating the public on fire safety. May not be repeated. LR

LMC: DA**Transfer:** CSU**FIRE-120 Basic Fire Academy**

228 total hours lecture, 132 total hours lab 15 Units

Prerequisite: FIRE-101, 107 and 106 or you may challenge FIRE-106 with a satisfactory score on the Candidate Physical Agility (CPAT) test or equivalent. Student must have successfully completed a medical physical exam within 6 months prior to starting the Fire academy.

Advisory: Eligibility for ENGL-100; EMS-010

The Basic Fire Academy prepares students for entry-level jobs in firefighting and for the California State Firefighter 1 Certification. The California State Firefighter 1 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 basic fire academy is fully accredited by the California State Fire Marshal. California State Board of Fire Services/Firefighter I approved. "Mandatory and optional material fees may be applied." May not be repeated. P/NP

LMC: DA**Transfer:** CSU**FIRE-130 Advanced Fire Academy**

198 total hours lecture, 442 total hours 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**Transfer:** CSU**FIRE-140 Fire Apparatus Driver/Operator 1A: Emergency Vehicle Operations**

18 total hours lecture, 22 total hours lab 1.5 Units

Prerequisite: California Drivers License, Class B, fire fighter restricted (minimum)

Advisory: Fire Fighter I training recommended

This course provides the student with information on driver responsibilities, recognized standards, and related laws for fire apparatus. Topics include basic inspections, documentation, maintenance, and troubleshooting fire apparatus, and techniques on driving and positioning fire apparatus. Each student also has the opportunity to increase his or her driving skills during simulated driving conditions. Optional State Fire Marshal certification fee applies. May be repeated three times. P/NP

LMC: DA**Transfer:** CSU**FIRE-141 Fire Apparatus Driver/Operator 1B: Pump Operations**

18 total hours lecture, 22 total hours lab 1.5 Units

Prerequisite: Drivers License, Class B, fire fighter restricted (minimum)

Advisory: Fire Fighter I training recommended

This course provides the student with information on pump construction and theory of pump operations. Topics include: methods for performing basic hydraulics and techniques of basic inspections, documentation, maintenance, and troubleshooting fire pumps. Each student also has the opportunity to increase his or her pumping skills during simulated pumping conditions. Optional State Fire Marshal certification fee applies. May be repeated three times. P/NP

LMC: DA**Transfer:** CSU**FIRE-170 Occupational Work Experience Education in Fire Technology**

60-300 total hours 1-4 Units

Prerequisite: Approved online application**Advisory:** Eligibility for ENGL-090

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

60-300 total hours 1-4 Units

Prerequisite: *Approved online application and employer placement***Advisory:** *Eligibility for ENGL-090*

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 career technical 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 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-900s Selected Topics in Fire Technology**

DA varies with course content.

French

FRNCH-060 Elementary French I

90 total hours lecture 5 Units

Advisory: *Eligibility for ENGL-090*

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. This course is 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**

90 total hours lecture 5 Units

Prerequisite: FRNCH-060**Advisory:** *Eligibility for ENGL-090*

Continuation of the visual/oral/aural approach to understanding, speaking, reading, and writing French. This is the second course of a four semester sequence. Course material emphasizes the cultures of France and Francophone countries such as Belgium, Switzerland, Monaco, and Canada as well as the various French-influenced cultures of North Africa, Haiti, and Tahiti. It is highly recommended that upon successful completion of FRNCH-060, the section course FRNCH-061 be taken the following semester. May not be repeated. SC

LMC: DA**Transfer:** UC; CSU Gen. Ed. Area C2; IGETC Area 3B, 6**FRNCH-062 Intermediate French I**

90 total hours lecture 5 Units

Prerequisite: FRNCH-061; or 3 years of high school French; or attend first class for Instructor assessment that demonstrates student's fluency in reading and writing French**Advisory:** *Eligibility for ENGL-090*

This course utilizes the communicative approach in the acquisition of French. Students will gain skills in listening and understanding conversation at the intermediate level, writing, and reading. It is the third in a series of four semesters of college level French and emphasizes the literature and culture of France and Francophone countries such as Belgium, Switzerland and Canada as well as the various French-influenced cultures of North Africa, Haiti, and Tahiti. French 62 continues the visual/oral/aural approach to understanding, speaking, reading, and writing French that was undertaken in French 60 and French 61. May not be repeated. SC

LMC: DA**Transfer:** UC; CSU GE Area C2; IGETC Area 3B, 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

54 total hours lecture, 54 total hours lab 4 Units

Advisory: *Eligibility for ENGL-100*

This course provides an introduction to physical geography including: our atmosphere and hydrosphere (weather and climate, oceans), lithosphere (landforms, earth processes), and biosphere (plants and animals, primarily), and emphasizes the fundamental relationships between these spheres. The interactions between the processes at the Earth's surface and human activities will also be examined. May not be repeated. LR

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

GEOG-098 Independent Study in Physical Geography

Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. This course may be repeated for credit. (Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit). May be repeated three times. SC

LMC: Independent Study courses may be DA or transferable depending on specific course. See your counselor.

Transfer: *Independent Study courses may be DA or transferable depending on specific course. See your counselor.*

GEOG-900s Selected Topics in Physical Geography

DA varies with course content.

Geology

GEOL-020 Physical Geology

54 total hours lecture, 54 total 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.*

GEOL-900s Selected Topics in Physical Geology

DA varies with course content.

History

HIST-029 The American World Until 1865: Creating A "New World" America

54 total hours lecture 3 Units

Advisory: *Eligibility for ENGL-100*

(This course replaces HIST-036) An introduction to the early history of America as a developmental, trans-hemispheric emergence of diverse peoples and cultures globally situated. Students will consider the gradually evolving "First New Nation" status of the U.S., attending to patterns, periods and topical themes prominent in its "nationalizing" experience as conditioned by regional and international realities. The American Story has been epochal in its making--epochal in human promise and peril, including the stock of societies recreated and destroyed. The "United States," as a nation now familiar, has historically been cause, consequence, and principal legatee of this transformative dynamic. The completion of HIST-029 partially satisfies the U.S. History, Constitution and American Ideals CSU requirements. May not be repeated. SC

LMC: GE: Social Science; DA

Transfer: *UC; CSU Gen. Ed. Area D6; IGETC Area 4F*

HIST-030 The American World From 1865: Creating a Modern World Hegemony

54 total hours lecture 3 Units

Advisory: *Eligibility for ENGL-100*

(This course replaces HIST-037) An introduction to the modern day history of the United States and its hemispheric neighbors as globally situated. Students will consider recurrent patterns of systemic violence and "frenzied nationalism" experienced by all American polities in their quest for sovereign government, citizen's rights and "peoples" democracy. Explaining how the United States became a world-preeminent embodiment of a "free market," urban-industrial order, both feared and envied, will culminate course discussion. The completion of HIST-030 partially satisfies the U.S. History, Constitution and American Ideals CSU requirements. May not be repeated. SC

LMC: GE: Social Science; DA

Transfer: *UC; CSU Gen. Ed. Area D6; IGETC Area 4F*

HIST-031 California History

54 total hours lecture 3 Units

Advisory: *Eligibility for ENGL-100*

This survey course covers the history of California from its Native California origins to the present (Native California, Spanish, Mexican, and American Periods) with a focus on the unique geography of California, and how that shaped its history. Particular focus will be on the contributions that ethnic and cultural minorities and women have made to the political, social, cultural, and economic development and history of California. May not be repeated. SC

LMC: GE: Social Science; DA

Transfer: *UC; CSU Gen. Ed. Area D6; IGETC Area 4F*

HIST-033 Historians: Their Worlds & Their Craft

54 total hours lecture 3 Units

Advisory: Eligibility for ENGL-100

An introduction to the idea and practice of history as a distinctive mode of human knowledge. Accepting that among nature's organisms only humans have and need history, and that history itself may be regarded as a "true story about the human past," this course will study historians who have contributed significantly to the 2500 year old development of history as an ever-evolving tradition of human self-understanding. The course will proceed chronologically, critically, typologically and comparatively. It will focus on the lived contexts, representative texts and enduring legacies of selected historians. The completion of Historiography 033 will partially satisfy the requirement for a lower division history major. May not be repeated. SC

LMC: GE: Social Science; DA**Transfer:** UC; CSU Gen. Ed. Area D6; IGETC Area 4F**HIST-034 Western Inheritance in Global Perspective: Ancient World History**

54 total hours lecture 3 Units

Advisory: Eligibility for ENGL-100

This course covers major events and cultural trends in the historical evolution of Western Civilization from the inception of Western Civilization to the 16th Century. It analyzes historical events from the perspective of the people in power as well as those on the periphery. Analysis of the evolution of the empires of Egypt, Greece and Rome will be a point of emphasis as well as social movements, philosophy, architecture, and characteristics of the Middle Ages to the Age of Exploration. May not be repeated. SC

LMC: GE: Social Science; DA**Transfer:** UC; CSU Gen. Ed. Area D6; IGETC Area 4F**HIST-035 Western Inheritance in Global Perspective: Modern World History**

54 total hours lecture 3 Units

Advisory: Eligibility for ENGL-100

This course covers major events and cultural trends in the historical evolution of Western Civilization from the 16th century to the 21st century. It analyzes historical events from the perspective of the people in power as well as those on the periphery. Analysis of revolutions, wars, and social movements will be a point of emphasis. Topics will include, but are not limited to: French, Russian, Scientific, and Industrial Revolution; the Protestant Reformation and the Wars of Religion; French Absolutism, English Constitutionalism, War Trade and Empire; Nationalism, Imperial Rivalry, and the World Wars; the fall of communism and modern Europe. May not be repeated. SC

LMC: GE: Social Science; DA**Transfer:** UC; CSU Gen. Ed. Area D6; IGETC Area 4F**HIST-038 Contemporary U.S. History**

54 total hours lecture 3 Units

Advisory: Eligibility for ENGL-100

This course will examine contemporary U.S. History from World War II to the present. From a socially inclusive, trans-cultural and trans-national perspective students will critically evaluate the historical implication of U.S. cultural hegemony and imperial preeminence over other world nations and people. 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? "Cultural Wars," "Global Warming," "Terrorist Rivalries" and Extreme Materialism are the signature issues of late modernity. May not be repeated. SC

LMC: GE: Social Science; DA**Transfer:** UC; CSU Gen. Ed. Area D6; IGETC Area 4F**HIST-039 Ancient World History: Peoples and Their Governance until 1500 C.E.**

54 total hours lecture 3 Units

Advisory: Eligibility for ENGL-100

An introduction to the ancient history of world peoples, beginning with nature's ancestry in a "Big Bang" universe and extending to the fateful era of "Columbian Exchange." Topics covered are periods and patterns of human life as it develops from conditions of resource foraging (Paleolithic Cultures); toward resource cultivation (Agrarian Cultures); and culminating with intensified resource extraction sufficient to sustaining an interlinked "Civilization" way-of-life (Modern urban-Market Cultures). May not be repeated. SC

LMC: GE: Social Science; DA**Transfer:** UC; CSU Gen. Ed. Area D6; IGETC Area 4F**HIST-040 Modern World History: Peoples and Their Governance From 1500 C.E.**

54 total hours lecture 3 Units

Advisory: Eligibility for ENGL-100

An introduction to the modern history of world peoples as it develops from multiple transcontinental and transoceanic encounters between ethnic strangers, and pointing toward the emergence of a 21st century global "Culture-of-humanity." The course will proceed chronologically, comparatively, typologically and critically. At appropriate intervals contrasting and variable forms of human governance will be considered--effective governance regarded as crucial to human resilience when adapting to changing planetary realities. 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 1838)

54 total hours lecture 3 Units

Advisory: Eligibility for ENGL-100

This survey course covers the history of Native American peoples from their origins to the period of removal 1838 by the United States government. The focus of this course will be on the diversity of Native American cultures, socially, geographically, politically, economically, architecturally, and spiritually. Particular focus will be on cultural and religious conversion of Native Americans, often times willingly as a means of survival, but most often forced upon them by European newcomers; Colonization by the Spanish, French and English; autonomy; diplomacy and warfare; trade and exchange networks; the ethical impact of U.S. policy removal, and Native American response and resistance movements; and the historical perspective of the "savage" stereotype and efforts to "Christianize and Civilize" Native Americans. May not be repeated. SC

LMC: GCR: Ethnic/Multicultural Studies; DA**Transfer:** UC; CSU Gen. Ed. Area D3; IGETC Area 4C**HIST-047 History and Cultures of Native Americans in North America (from 1830 to the Present)**

54 total hours lecture 3 Units

Advisory: Eligibility for ENGL-100

This survey course covers the history of Native American Indians with a brief introduction of the removal period and beginning with their fight for western lands in the 1830s to the end of the Twentieth Century and their fight for rights and resources. The focus of this course will be on the continuous struggle and fight for sovereignty by Native American cultures. Particular focus will be on the fight for western lands; adapting to a changing world; civilizing Native Americans through Americanization and the educational assault; the survival and endurance of social, political, cultural, and religious traditions; modern Indian warfare through critical analysis of the second Wounded Knee and the takeover of Alcatraz Island, and the rise of Indian militancy and civil rights with particular attention to AIM; Native American struggle for rights and natural resources; and the challenge of reservation life, poverty, violence, unemployment, and alcohol dependency. 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)**

54 total hours lecture 3 Units

Advisory: Eligibility for ENGL-100

This survey course covers the history of Mexican Americans from 1900 to the present. This course will cover social, cultural, political, economic, and gender issues. There will be a specific focus on the Great Migration and the impact of immigration, labor and union organization, and repatriation; Mexican American women in the labor force and their struggle to balance and challenge patriarchal and cultural traditions; the formation of early Mexican and Mexican American civil rights organizations known as mutualistas; cultural disintegration through Americanization programs; Mexican American Patriotism and nativist sentiments; the formation of Mexican American civil rights organizations such as League of United Latin American Citizens and Mexican American Legal Defense and Education Fund; the Chicano movement; and the fight in the fields - Huelga! 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.

Humanities**HUMAN-019 Ancient Humanities**

54 total hours lecture 3 Units

Advisory: Eligibility for ENGL-100

An integrated, interdisciplinary approach to history, religion, philosophy, literature, art and music as aspects of Western culture and civilization, that focuses on the period from the first civilizations of Mesopotamia and Egypt through the pinnacle of the Roman Empire under the Caesars. In this broad context, students will investigate the intellectual, spiritual, cultural and political foundations of the Modern World. May not be repeated. LR

LMC: GE: Humanities; DA**Transfer:** UC; CSU Gen. Ed Area C2; IGETC Area 3B

HUMAN-020 Medieval and Renaissance Humanities

54 total hours lecture 3 Units

Advisory: *Eligibility for ENGL-100*

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; IGETC Area 3B**HUMAN-021 Modern Humanities**

54 total hours lecture 3 Units

Advisory: *Eligibility for ENGL-100*

An integrated, interdisciplinary approach to history, religion, philosophy, literature, art and music as aspects of Western culture and civilization, that focuses on the period from the Scientific Revolution of the 16th century through the advent of World War in the 20th century. In this broad context, students will investigate the intellectual, spiritual, cultural and political foundations of the Modern World. May not be repeated. LR

LMC: GE: Humanities; DA**Transfer:** UC; CSU Gen. Ed. Area C2; IGETC Area 3B**HUMAN-022 American Humanities**

54 total 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**

54 total 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 kings from Edward III to Richard III, and 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 language, dramaturgy, issues of staging and performance, as well as the political and cultural conditions of England during the period covered by the play as well as 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)**

54 total 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: GE: Humanities, DA**Transfer:** UC; CSU Gen. Ed. Area C2; IGETC Area 3B**HUMAN-040 Opera: The Human Experience in Music, Voice and Drama**

54 total 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

90 total hours lecture 5 Units

Advisory: *Eligibility for ENGL-090*

A visual/oral/aural approach to understanding, speaking, reading, and writing Italian. The content used in learning the language is drawn from the rich varied culture of Italy. This course is equivalent to two years of high school Italian. May not be repeated. SC

LMC: DA

Transfer: UC; CSU Gen. Ed. Area C2; IGETC Area 6

ITAL-061 Elementary Italian II

90 total hours lecture 5 Units

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

Advisory: *Eligibility for ENGL-090*

This is the second course of a two semester sequence and a continuation of the visual/oral/aural approach to understanding, speaking, reading, and writing Italian. The content used in learning the language is drawn from the rich varied culture of Italy. Course material emphasizes the cultures of Italy, and Italian speaking regions throughout the world. This course is equivalent to two years of high school Italian. It is highly recommended that upon successful completion of ITAL-060, the section course ITAL-061 be taken as soon as possible. May not be repeated. SC

LMC: DA

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

ITAL-900s Selected Topics in Italian

DA varies with course content.

Journalism

JOURN-010 Writing for the Media

36 total hours composition, 54 total hours lab 3 Units

Advisory: *Eligibility for ENGL-100*

This course provides an introduction into collecting, evaluating and writing information and news for print, Internet and broadcast media audiences. It also addresses 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

18 total hours composition 1 Unit

Advisory: 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

18 total hours composition 1 Unit

Prerequisite: JOURN-015A

Advisory: 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 focus 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

18 total hours composition 1 Unit

Prerequisite: JOURN-015B

Advisory: 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

18 total hours lecture 1 Unit

Advisory: 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**

18 total hours lecture 1 Unit

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

An applied course in which students 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. May not be repeated. SC

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

18 total hours lecture 1 Unit

Prerequisite: JOURN-015B**Advisory:** 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: Editing and Page Design**

18 total hours lecture, 108 total 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 addresses 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: Editorial Leadership**

18 total hours lecture, 108 total hours lab 3 Units

Advisory: JOURN-010 and 020

Advanced publication production and editorial leadership for students planning careers in the news and information media, and other related fields such as advertising and public relations. The course also addresses 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**

54 total hours lecture 3 Units

Advisory: ENGL-090 or eligibility for ENGL-100

A survey of mass communication in the information age. This course examines the origins, development, role and impact of the major mass media in society - books, newspapers, magazines, radio, television, film and recordings - as well as the influence of the Internet and its connection to convergence. It analyzes the main categories of media messages within the cultural landscape: entertainment, journalism, advertising and public relations. It also explores current and future trends in mass communication, and issues, laws and ethics involved with the mass media and related industries. 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

60-300 total hours

1-4 Units

Prerequisite: *Approved online application***Advisory:** *Eligibility for ENGL-090*

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**

60-300 total hours

1-4 Units

Prerequisite: *Approved online application and employer placement***Advisory:** *Eligibility for ENGL-090*

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 career technical 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 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.

Leadership and Community Involvement

LACI-045 Student Leadership and Governance

18 total hours lecture, 54 total hours lab

2 Units

(formerly HMSRV-045) This course is designed to help student leaders develop the fundamentals of leadership and group interaction in a student governance setting at Los Medanos College. The course content will cover the Los Medanos College governance structure, Robert's Rules of Order (parliamentary procedure) and Brown Act, policies and procedures related to student organizations, as well as skills for running successful organizations and events. May be repeated three times. SC

LMC: DA**Transfer:** CSU**LACI-048 Leadership for Change**

36 total hours lecture

2 Units

Advisory: *Eligibility for ENGL-090*

(formerly HMSRV-048) 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**LACI-049 Social Justice Leadership Seminar**

18 total hours lecture

1 Unit

Advisory: *Eligibility for ENGL-090. This class is designed for students involved in Learning Communities (Puente, Umoja, TPLC, etc.)*

(formerly HMSRV-049) The Social Justice Leadership Seminar is a course focused on student leadership topics and social justice issues. It is designed as an introductory course to social identities, privilege, and oppression and how they are manifested on individual, group, and community levels. The class explores the multiple social identities of individuals (ie. race, gender, class status, etc.), various forms of privilege and oppression related to these identities, and the impact of privilege and oppression on our lives and our society. Students engage in multiple styles of learning experiences (ie. lecture, discussion, activities, and written reflection) to develop an understanding of these barriers and obstacles to social justice for individuals and groups. May not be repeated. SC

LMC: DA**Transfer:** CSU

LACI-098 Independent Study in Human Services

(formerly HMSRV-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.

LACI-170 Occupational Work Experience Education in Human Services

60-300 total hours 1-4 Units

Prerequisite: Approved online application

Advisory: Eligibility for ENGL-090

(formerly HMSRV-170) 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

LACI-170A Internship in Human Services

60-300 total hours 1-4 Units

Prerequisite: Approved online application and employer placement

Advisory: Eligibility for ENGL-090

(formerly HMSRV-170A) 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 career technical 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 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

LACI-170B Cooperative Work Experience Internship in Community Service

60-450 total hours 1-8 Units

Prerequisite: Approved Application/ HMSRV-049 Social Justice Seminar

Advisory: Eligibility for ENGL-090

(formerly HMSRV-170B) This course is for students who have a background and interest in engaging in a community service internship in the Far East Contra Costa County area. This course is designed to serve as an application of the social justice topics, work and individually cultivated ideals presented in the prerequisite course HMSRV-Social Justice Seminar. Students will have an opportunity to work in the community on issues of social justice through internship work with local non-profit organizations. This course will specifically focus on providing social, health and educational support services. Community Service Internships provide students with opportunities to engage in the process of achieving social justice and equity through the direct work with the local community in order to develop a deeper intercultural awareness, competency and understanding of social justice issues on a micro level project. They will also develop marketable skills in preparation for employment or advancement within their current job. To participate in the community service internship students must complete the HMSRV-Social Justice Seminar. Students, with faculty and employer/non-profit supervisor 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 a maximum of sixteen units of general work experience during community college attendance which may be applied as electives toward graduation. SC

LMC: DA

Transfer: CSU

LACI-900s Selected Topics in Human Services

DA varies with course content.

Learning Skills

LRNSK-040 Learning Skills Eligibility Assessment

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

Advisory: Meet with the Disabled Students Program and/or Counselor

This course provides students with assessment for learning disabilities services eligibility. In addition to group and individual testing, students will receive instruction in study skills, academic accommodations, and learning styles. Through both assessment and class exercises, an individual learning profile including learning strengths and weaknesses and recommended compensating strategies will be developed. An optional materials fee may be applied. May not be repeated. P/NP

LMC: NDA

LRNSK-050 Multimodal Strategies for Reading and Spelling

54 total hours lecture, 18 total hours lab 3 Units

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

54 total hours lecture, 18 total hours lab 3 Units

Advisory: LRNSK-050

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

36 total hours lecture, 54 total hours lab 3 Units

Computers and technology have allowed students with disabilities greater access to information and allow for increased communication. This is a beginning course that introduces students with disabilities to adaptive software and hardware. This course is appropriate for students with a basic knowledge of computers. As students progress throughout the course, they will reinforce computer skills learned and explore how the adaptive computer technology can be integrated with those skills. May be repeated three times. SC

LMC: NDA

LRNSK-081 Learning Skills Math Reasoning and Strategies I

27 total hours lecture, 27 total hours lab 2 units

This self-paced math strategies course is designed for students with disabilities which impact math learning and retention. Each student will be assessed at the beginning of the course and will be provided specialized math instruction and individualized strategies based on the results of the assessment. The topics of learning styles, strategies to maximize your personal learning strengths, strategies for learning basic math concepts including whole number skills, addition, subtraction, multiplication, division, and context based arithmetic problems are covered. Students will develop individualized strategies for learning basic math concepts. Learning Skills 81 is the first of two self-paced courses designed for students with disabilities that impacts math learning. May be repeated three times. SC

LMC: NDA

LRNSK-082 Learning Skills Math Reasoning and Strategies II

27 total hours lecture, 27 total hours lab 2 Units

Advisory: LRNSK-081 and/or knowledge of place value, multiplication, and division skills and strategies

This self-paced math strategies course is designed for students with disabilities which impact math learning and retention. Each student will be assessed at the beginning of the course and will be provided specialized math instruction and individualized strategies based on the results of the assessment. The topics of learning styles, strategies to maximize your personal learning strengths, strategies for learning basic math concepts including fractions, decimals, percents, estimating, and context based arithmetic problems are covered. Students will develop individualized strategies for learning basic math concepts. Learning Skills 82 is the second of two self-paced courses designed for students with disabilities which impact math learning. 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: UC, 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**

9 total hours lecture, 27 total hours lab 1 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 be repeated three times. 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

60-300 total hours 1-4 Units

Prerequisite: *Approved online application***Advisory:** *Eligibility for ENGL-090*

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**

60-300 total hours 1-4 Units

Prerequisite: *Approved online application and employer placement***Advisory:** *Eligibility for ENGL-090*

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 career technical 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 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-050 Introduction to Supervision

54 total hours lecture 3 Units

Advisory: Eligibility for ENGL-090

(Formerly MANGT 50A, 50B, 50C) This course presents a practical overview of supervision and management concepts, processes, and techniques covering the role of the front-line manager in complying with human resource issues, obtaining successful employee relations and staff productivity, and contributing to the overall success to the organization. May not be repeated. SC

LMC: DA

Transfer: CSU

MANGT-060 Making Effective Decisions

54 total hours lecture 3 Units

Advisory: MANGT-050 (Formerly MANGT-050A, 050B, 050C); eligibility for ENGL-100

(Formerly MANGT-060A, 060B, 060C) This course encompasses three skill areas of decision-making/problem-solving and their impact: Skills for effective and timely decision-making, skills for obtaining buy-in to implement change, and skills for ensuring organizational performance accountability. Each of these skill areas is approached practically. May not be repeated. SC

LMC: DA

Transfer: CSU

MANGT-065 Mastering Management's Essential Tools

54 total hours lecture 3 Units

Advisory: MANGT-050 (MANGT-050A, 050B, 050C); eligibility for ENGL-090

(Formerly MANGT-065A, 065B, 065C) This course focuses on three distinct aspects of management tools essential in the workplace: Organizational Planning, Total Quality Management, and Time Management. 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. An introduction to the concepts surrounding Total Quality Management including, contrasting traditional management concepts with that of Total Quality Management; Work Teams and the techniques and processes utilized-communication, response, adaptation and coordination in teams. 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 and stress reduction. May not be repeated. SC

LMC: DA

MANGT-070 Relating in Human Terms

54 total hours lecture 3 Units

Advisory: MANGT-050 (formerly MANGT 50A, 50B, 50C); eligibility for ENGL-100

This course analyzes aspects of Human Relations in supervisory positions: Conflict, Team Development, Cultural Diversity, Leadership Development, and Etiquette in the modern workplace. Local and global perspectives are discussed as they relate to the business environment. May not be repeated. SC

LMC: DA

Transfer: CSU

MANGT-075 Managing Human Resources

54 total hours lecture 3 Units

Advisory: MANGT-050 (Formerly MANGT-050A, 050B, 050C); eligibility for ENGL-090

(Formerly MANGT-075A, 075B, 075C) This course encompasses three separate areas of human resources: Federal and California State employment laws relating to discrimination and equal employment, recruiting and interviewing job candidates; and hiring and dismissing employees. Each of these subjects is approached from a practical perspective. 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

60-300 total hours 1-4 Units

Prerequisite: Approved online application

Advisory: Eligibility for ENGL-090

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

60-300 total hours 1-4 Units

Prerequisite: *Approved online application and employer placement***Advisory:** *Eligibility for ENGL-090*

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 career technical 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 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

36 total hours lecture, 72 total hours lab 3 Units

Advisory: *Eligibility for ENGL-070 or higher*

MATH-004 is designed to teach basic arithmetic and improve mathematical thinking. The course will also prepare students for the next level math courses, build study skills and gain math confidence. Math topics include whole numbers, estimation, fractions, decimals, percents and proportions. Study skills topics and effective learning techniques may include reading the math textbook, note making, studying, taking tests, and appropriate use of a basic calculator, interpreting and creating tables, graphs and charts and utilizing a math binder. Additionally, students will develop proficient skills in communication of mathematics and problem solving techniques. MATH-004 is appropriate for all students who desire a review of basic math and is for students with learning disabilities. MATH-004 is part of the LMC Developmental Math Program. May be repeated once. SC

LMC: NDA**MATH-007 Self-Paced Arithmetic Skills**

9-63 total hours lecture, 9-45 total hours lab .5-3.5 Units

MATH-007 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 basic skills review, with applications of whole numbers, fractions, decimals, proportions, percent, basic geometric and statistical ideas, graphs and charts, and measurement. An introduction to prealgebra is also available. This course is repeatable up to three times or a maximum of 3.5 units earned. SC

LMC: NDA**MATH-009 Arithmetic Skills with Applications**

72 total hours lecture, 36 total 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. In MATH-009 students will demonstrate mastery of arithmetic with whole numbers, fractions, decimals, basic proportions and percents. Students will become proficient in the application and use of technology, estimation, arithmetic, proportional reasoning and percents, as well as representations including use of formulas, charts, and graphs. The focus of the course is on simple arithmetic and number sense estimation in the context of applications that are closely related to career technical education. Applications will include topics from geometry, such as measurement, the metric system, perimeter, and area, as well as some topics from personal finance such as calculating interest, tips or sales tax. Also included are applications from career technical courses such as. 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. May not be repeated. SC

LMC: NDA**MATH-011 Bridge to Prealgebra**

27 total hours lecture, 9 total hours lab 1.5 Units

MATH-011 is designed to support students who are enrolled in a learning community for the fall semester. Students study mathematical reasoning and problem solving strategies in an applied arithmetic context, as well as review arithmetic skills. Students learn about contributions to mathematics from multiple cultures. Methods and strategies are presented for reading math texts and taking efficient and complete notes on lectures and texts. Successful students will develop proficient arithmetic skills, strategies for problem-solving, effective learning skills, and a diverse perspective of mathematics. MATH-011 is part of the LMC Developmental Math Program. May not be repeated. P/NP

LMC: DA

MATH-012 Prealgebra

54 total hours lecture, 54 total 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, signed fractions, and signed decimals, with basic proportions and percents, as well as the order of operations, 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 multiple 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 Achievement. May not be repeated. SC

LMC: NDA

MATH-024 Elementary Algebra Student Support

27 total hours lecture, 9 total hours lab 1.5 Units

Prerequisite: MATH-012 with a grade of "C" or better, or completion of coursework at another college that is comparable to MATH-012 with a grade of "C" or better, or demonstration of equivalent prealgebra skills based on our LMC assessment process, or equivalent assessment recommendation from another college.

Co-requisite: MATH-025

MATH-024 is designed to support students enrolled in an intensive version of Elementary Algebra. Methods and strategies are presented for reading algebra texts, taking efficient and complete notes on lectures and texts, and creating study guides for quizzes, tests and exams; metacognitive skills, problem-solving strategies, and writing skills in algebra are developed. Time management, study habits, homework strategies, and educational planning are also covered. Successful students will develop proficient skills in oral and written communication of mathematics, algebra problem-solving and effective learning skills. MATH-024 is part of the LMC Developmental Math Program. May not be repeated. P/NP

LMC: DA

MATH-025 Elementary Algebra

72 total hours lecture, 36 total hours lab, 18 total lab hours by arrangement 5 Units

Prerequisite: MATH-012 with a grade of "C" or better, or completion of coursework at another college that is comparable to Math 12 with a grade of "C" or better, or demonstration of equivalent prealgebra skills based on our LMC assessment process, or equivalent assessment recommendation from another college.

A 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 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 or the quadratic formula, as well as tables and graphs. The following topics are also covered: arithmetic and order of operations with real numbers; laws of exponents with integer exponents; one variable inequalities, proportional reasoning, the Pythagorean Theorem, unit analysis, perimeter, area and volume. Successful students will develop proficient skills in communication of mathematics, problem-solving, use of multiple representations, and effective learning skills. Math 25 is part of the LMC Developmental Math Program. May not be repeated. SC

LMC: DA

MATH-026 Plane Geometry

54 total hours lecture, 36 total hours lab 3 Units

Prerequisite: MATH-025 or equivalent

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, using a compass, straightedge, protractor, and ruler. Students may work in large or small groups with professor assistance and directed discussion using a 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 a first course in geometry, and preparation for study of more advanced math such as pre-calculus and trigonometry. This course satisfies the math requirement for an associate degree. May not be repeated. SC

LMC: GCR: Mathematics; DA

MATH-027 Algebra for Statistics

90 total hours lecture, 54 total hours lab 6 Units

This is an accelerated course that prepares students for transfer-level Statistics. Topics include ratios, rates, and proportional reasoning, arithmetic reasoning using fractions, decimals and percents, evaluating expressions, analyzing algebraic forms to understand statistical measures, functions, use of linear and exponential functions to model bivariate data, use of logarithms, logarithmic scales and semi-log plots, graphical and numerical descriptive statistics for quantitative and categorical data. This course is designed for students who do not plan to major in math, science, computer science, or business. MATH-027 satisfies the prerequisite for MATH-034 only. May not be repeated. SC

LMC: DA

MATH-028 Intermediate Algebra Student Support

27 total hours lecture, 9 total hours lab 1.5 Units

Prerequisite: MATH-025 with a grade of "C" or better, or completion of coursework at another college that is comparable to MATH-025 with a grade of "C" or better, or demonstration of equivalent elementary algebra skills based on our LMC assessment process, or equivalent assessment recommendation from another college, or successful completion of high school Algebra II within the past two years.

Co-requisite: MATH-030

MATH-028 is designed to support students enrolled in an intensive version of Intermediate Algebra. Methods and strategies are presented for reading intermediate algebra texts, taking efficient and complete notes on lectures and texts, and creating study guides for quizzes, tests and exams; metacognitive skills and problem-solving strategies are developed, as well writing skills in intermediate algebra with a focus on mathematical reasoning and justification. Time management, study habits, homework strategies, and educational planning are also covered. Successful students will develop proficient skills in oral and written communication of mathematics, algebra problem-solving, and effective learning skills, towards preparedness for transfer level math courses. MATH-028 is part of the LMC Developmental Math Program. May not be repeated. P/NP

LMC: DA

MATH-030 Intermediate Algebra

72 total hours lecture, 36 total lab hours by arrangement 4 Units

Prerequisite: MATH-025 with a grade of "C" or better, or completion of coursework at another college that is comparable to MATH-025 with a grade of "C" or better, or demonstration of equivalent elementary algebra skills based on our LMC assessment process, or equivalent assessment recommendation from another college, or successful completion of high school Algebra II within the past two years.

MATH-030 is an intermediate algebra course with focus 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. Students will develop proficient skills in communication of mathematics, problem-solving, use of multiple representations, and effective learning skills. MATH-030 is part of the LMC Developmental Math Program. Use of a mathematical software package or graphing calculator is required. May not be repeated. SC

LMC: GCR: Mathematics; DA

MATH-032 Mathematical Concepts for Elementary Teachers: Number Systems

72 total hours lecture, 36 total lab hours by arrangement 4 Units

Prerequisite: MATH-030; MATH-910 or equivalent

MATH-032 is designed for prospective multiple subjects credential candidates. Emphasis is on understanding concepts and operations with whole numbers, fractions, and decimals through multiple representations. Problem solving strategies, numeration systems, and elementary number theory are emphasized in relevant contexts. Relevant state and national math standards are also studied. May not be repeated. SC

LMC: GCR: Mathematics; DA

Transfer: UC, CSU Gen. Ed. Area B4

MATH-034 Introduction to Statistics

72 total hours lecture, 36 total lab hours by arrangement 4 Units

Prerequisite: MATH-030, MATH-027, MATH-910 or equivalent

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

54 total hours lecture, 36 total lab hours by arrangement 3 Units

Prerequisite: MATH-030 or equivalent

Advisory: Eligibility for ENGL-100

An introduction to finite mathematical models used in solving applied problems in business, social science and related fields. Topics include: linear models; matrices; linear programming; probability; Markov chains; decision theory; math 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

72 total hours lecture, 18 total lab hours by arrangement 4 Units

Prerequisite: MATH-030, MATH-910 or equivalent

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

72 total hours lecture, 36 total lab hours by arrangement 4 Units

Prerequisite: MATH-026 and MATH-030 or MATH-910 or equivalent

Co-requisite: MATH-026

MATH-040 is an in depth look at functions and their usefulness in mathematical modeling. Functions are approached numerically, graphically, symbolically, and verbally. Families of functions studied include: linear, quadratic, exponential, logarithmic, trigonometric, power, polynomial, and rational. Additional function topics: rate of change, concavity, domain/range, function transformation/combination, inverse functions, and asymptotic behavior of functions. Algebraic skills are further developed. This course is primarily intended to prepare students for calculus but may also serve as an advanced course for students not intending to continue with calculus. Use of a mathematical software package or graphing calculator is required. 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 I

72 total hours lecture, 36 total lab hours by arrangement 4 Units

Prerequisite: MATH-026 and 040 or equivalent

MATH-050 is an introduction to differential and integral calculus and coordinate geometry. Topics include: functions, limits, and continuity; techniques and applications of differentiation; an introduction to integration; the Fundamental Theorem of Calculus. This course is intended for students in mathematics, science and engineering majors. Use of a mathematical software package or graphing calculator is required. 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 II

72 total hours lecture, 36 total lab hours by arrangement 4 Units

Prerequisite: MATH-050 or equivalent

This course is the second of the three semester calculus sequence. The course extends the ideas of the previous course to further development of the derivative and the antiderivative of a function; realistic applications to various fields; basic differential equations and their solutions; and series approximation of functions. This course is intended for students in mathematics, science and engineering majors. 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-070 Calculus and Analytic Geometry III

72 total hours lecture, 36 total lab hours by arrangement 4 Units

Prerequisite: MATH-060 or equivalent

MATH-070 is an extension of differential and integral calculus and coordinate geometry to functions of more than one variable. Topics include: Vectors in two and three dimensions; analytic geometry of three dimensions; partial differentiation; multiple integrals; line and surface integrals; Green's Theorem, Stokes' Theorem, and applications to various fields. This course

is intended for students in mathematics, science and engineering majors. Use of a mathematical software package or graphing calculator is required. May not be repeated. SC

LMC: GCR: Mathematics; DA

Transfer: UC; CSU Gen. Ed. Area B4; IGETC Area 2

MATH-075 Linear Algebra

54 total hours lecture, 36 total lab hours by arrangement 3 Units

Prerequisite: MATH-060 or equivalent

Advisory: Eligibility for ENGL-090

This is a one-semester introduction to Linear Algebra and its applications. The aim of the course is to study application to various fields while providing a transition from computational mathematics to more theoretical mathematics. Students will read and construct mathematical proofs. The methods and concepts of linear algebra prepare the student for higher math courses and supplies problem-solving methods for many other fields. Use of a mathematical software package or graphing calculator is required. May not be repeated. SC

LMC: GCR: Mathematics; DA

Transfer: UC; CSU Gen. Ed. Area B4; IGETC Area 2

MATH-080 Differential Equations

54 total hours lecture, 36 total lab hours by arrangement 3 Units

Prerequisite: MATH-070 or equivalent

Advisory: Eligibility for ENGL-090

A study of various methods for solution of ordinary differential equations using analytical methods (such as separation of variables, LaPlace transforms, variations of parameters, undetermined coefficients), graphical methods (such as slope fields, directions fields and phase plane analysis) and numerical methods. Use of a mathematical software package or graphing calculator is required. 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 Studio 1 (Pitch / Rhythm)

27 total hours lab .5 Unit

Co-requisite: Concurrent enrollment in any music performance course

Advisory: *Eligibility for ENGL-090*

This course is designed for the music student who needs further development on mechanics of vocalizing or playing an instrument or in the conceptual development in the theory of music as related to musical pitch and rhythm. The material is designed to be used individually or in any sequence. May not be repeated. SC

LMC: DA

Transfer: CSU

MUSIC-002 Music Studio 2 (Tone / Technique)

27 total hours lab .5 Unit

Co-requisite: Concurrent enrollment in any music performance course

Advisory: *MUSIC-001; eligibility for ENGL-090*

Designed for the music student who needs further development on mechanics of vocalizing or playing an instrument or in the conceptual development in the theory of music as related to musical tone and technique beyond the work done in MUSIC-001. The material is designed to be used individually or in any sequence. May not be repeated. SC

LMC: DA

Transfer: CSU

MUSIC-003 Music Studio 3 (Dynamics / Balance)

27 total hours lab .5 Unit

Co-requisite: Concurrent enrollment in any music performance course

Advisory: *MUSIC-002; eligibility for ENGL-090*

Designed for the music student who needs further development on mechanics of vocalizing or playing an instrument or in the conceptual development in the theory of music as related to musical dynamics and balance beyond the work done in MUSIC-001 and MUSIC-002. The material is designed to be used individually or in any sequence. May not be repeated. SC

LMC: DA

Transfer: CSU

MUSIC-005 Recital Class

54 total hours lab 1 Unit

Advisory: *MUSIC-008; or arrangement with a private music instructor*

This course is designed to be taken in conjunction with MUSIC-008 or with private instruction from a qualified off-campus instructor. The student will learn appropriate performance decorum, techniques for concentration, "stage fright" control, performance preparation skills as well as organization and presentation skills for public performance. There will be many opportunities to perform prepared solos in various venues with

differing levels of formality. Two semesters of MUSIC-005 are required for music majors. May be repeated three times. LR

LMC: DA

Transfer: UC, CSU

MUSIC-006 Sophomore Recital Preparation

54 total hours lab 1 Unit

Prerequisite: *MUSIC-005 and placement audition*

Advisory: *MUSIC-008; or arrangement for lessons with a private music instructor*

This course is designed to prepare the music major to successfully perform a Sophomore Recital upon graduating from LMC with an associate degree in music, or upon transferring to a four year school as a music major. The Sophomore Recital is defined as an individual solo recital representing the student's mastery of technical and artistic skills commensurate with upper division entry level expertise, including but not limited to; ability to perform a solo program of at least 30 minutes of playing time; demonstrated performance expertise in music of diverse compositional styles; demonstrated expertise in the technical and interpretive skills required for a high level of performance on that student's instrument or voice; demonstrated mastery of proper stage deportment for varying levels of formality. It is assumed that the student will be taking regular private lessons with an instructor/coach through MUSIC-008 or MUSIC-009 or from a qualified off-campus instructor. May be repeated three times. LR

LMC: DA

Transfer: UC, CSU

MUSIC-008 Private Lessons Practicum

90 total hours lab 1.5 Units

Prerequisite: *Audition*

Advisory: *Prior or concurrent enrollment in MUSIC-005, 006, or in major performance medium; MUSIC-030, 031, 032, 033A or 033B; 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.*

This course is designed for the music major or minor students who will study their performance medium with a private instructor. 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 hours during the semester. Each student must pass an audition. It is strongly recommended that the student be concurrently enrolled in Piano (30, 31 or 32), Recital Class (5, 6, or 7), a music theory course at the student's appropriate level (15, 16, 17, 18 or 81), enrollment in any major performance group or Chamber Ensembles (any section between 50-56). 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

54 total hours lecture 3 Units

Advisory: *Eligibility for ENGL-090*

This is 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 critical skills thought attendance at and evaluation of contemporary exhibits and performances. May not be repeated. SC

LMC: GE: Creative Arts; DA**Transfer:** UC; CSU Gen. Ed. Area C1; IGETC Area 3A**MUSIC-012 Popular Music in American Culture**

54 total hours lecture 3 Units

Advisory: *Eligibility for ENGL-100*

A multicultural study of the evolution of America musical styles, including blues, salsa, samba, rock, jazz, pop, rhythm and blues and country and folks, with emphasis on the African American, Euro American, Latin American origins of these contemporary styles and their historical contexts. May not be repeated. LR

LMC: GE: Creative Arts; DA**Transfer:** UC; CSU Gen. Ed. Area C1; IGETC Area 3B. Also satisfies American Cultures Requirement at UCB**MUSIC-013 Musicianship I**

27 total hours lecture, 36 total hours lab 2 Units

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

This first semester of Musicianship includes ear training, sight singing, interval and chord recognition, rhythm and musical dictation and technical and foreign language musical terms. Required for music majors and should be taken concurrently with MUSIC-016. May be repeated once. LR

LMC: DA**Transfer:** UC, CSU**MUSIC-014 Musicianship II**

27 total hours lecture, 36 total hours lab 2 Units

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

This second semester of Musicianship includes ear training, sight singing, interval and chord recognition, rhythm and musical dictation and technical and foreign language musical terms. Required for music majors and should be taken concurrently with MUSIC-016. May be repeated once. LR

LMC: DA**Transfer:** UC, CSU**MUSIC-015 Basic Music**

54 total hours lecture 3 Units

Advisory: *Eligibility for ENGL-100; prior or concurrent enrollment in MUSIC-030*

This course is an introduction to music reading, functional keyboard, music theory and harmony and includes application of music theory and harmony to basic music compositions. Students will apply music theory and harmony across various styles of music, various cultures and various disciplines. Recommended for students who are not music majors or minors; or for students who are music majors needing reinforcement in basic musical concepts. The need to take this course is dependent upon theory placement exam. May not be repeated. SC

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 Music Theory I**

54 total hours lecture 3 Units

Advisory: *MUSIC-015 and MUSIC-030; prior or concurrent enrollment in MUSIC-013, 031 or 032*

MUSIC-016 is the study of musical notation, scales, keys, intervals, rhythm, musical structure, transposition and harmonization. This course is required for music majors. May not be repeated. LR

LMC: DA**Transfer:** UC, CSU**MUSIC-017 Music Theory II: Tonal Harmony**

54 total hours lecture, 54 total hours lab 4 Units

Advisory: *MUSIC-016, 031 and 013; prior or concurrent enrollment in MUSIC-014, 032 or 033A*

MUSIC-017 is the study of common practice harmony. The focus is on tonal harmony including the realization of figured bass lines, harmonization of melodies and the harmonic and structural analysis of examples of Baroque, Classical and Romantic musical literature. First and second species counterpoint will be introduced. This course is required for music majors and should be taken concurrently with MUSIC-014. May be repeated once. LR

LMC: DA**Transfer:** UC, CSU**MUSIC-018 Music Theory III: Chromatic Harmony and Later Styles**

54 total hours lecture, 54 total hours lab 4 Units

Advisory: *MUSIC-017, 032, 014; prior or concurrent enrollment in MUSIC-033A or 033B*

MUSIC-018 is the study common practice chromatic harmony as well as styles of the 20th and 21st centuries. Elements of modal and tonal counterpoint will also be covered. Activities will include the realization of chromatic and modulating figured bass lines, harmonization of melodies and the harmonic and structural analysis of examples primarily of Romantic musical literature. The later part of the semester will be devoted to analysis and imitation exercises of Impressionism, Twelve Tone and other 20th and 21st century styles. May be repeated once. LR

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

MUSIC-020 Baroque Ensemble

54 total hours lab 1 Unit

Co-requisite: Fundamental skill on a string instrument or wind instrument is recommended

Students play in baroque ensembles of varying size and configuration. Intensive work in ensemble skills such as pitch matching, tone blending, and rhythmic synchronization. Studies in musical interpretation, advanced performance concepts, and critical sight-reading are applied to the baroque repertoire, including, but not limited to works by Bach, Corelli, Händel, Telemann and Vivaldi. There will be several public performances. Fundamental skill on your instrument is recommended. May be repeated three times. LR

LMC: DA**Transfer:** UC, CSU**MUSIC-030 Basic Keyboard Skills**

18 total hours lecture, 36 total hours lab 1.5 Units

This course is designed to develop reading skills in basic music notation in relation to the keyboard. Study of piano technique, ensemble and solo playing, easy repertoire preparation and interpretation will be covered. Does not fulfill piano requirement for music major, however this class provides fundamental skills and a solid foundation for anyone beginning their music study. May not be repeated. 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 though the summer. May not be repeated. LR

LMC: DA**MUSIC-031 Piano I**

18 total hours lecture, 36 total hours lab 1.5 Units

Advisory: Ability to read music at elementary level

This course includes basic keyboard techniques, easy piano repertoire, major and minor scales, diatonic chord progressions, simple transposition and sight reading skills. Course may be repeated one time. This is the first of the required semesters of piano for music majors. May be repeated three times. LR

LMC: DA**Transfer:** UC, CSU**MUSIC-032 Piano II**

18 total hours lecture, 36 total hours lab 1.5 Units

Advisory: MUSIC-031 or equivalent

This course furthers basic keyboard techniques, including second level beginning piano repertoire, major and minor scales, diatonic chord progressions, transposition, and sight reading skills. This is the second of the required semesters of piano for music majors. May be repeated once. LR

LMC: DA**Transfer:** UC, CSU**MUSIC-033A Intermediate Piano**

18 total hours lecture, 36 total hours lab 1.5 Units

Advisory: MUSIC-032 or placement audition

Piano study with an emphasis on stylistic interpretation, preparation, and performance of intermediate level keyboard literature from all historical periods. Ensemble and accompaniment skills will be covered as well as keyboard theory and technical aspect of piano playing. May be repeated three times. LR

LMC: DA**Transfer:** UC, CSU**MUSIC-033B Advanced Piano**

18 total hours lecture, 36 total hours lab 1.5 Units

Advisory: MUSIC-033A or placement audition

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 aspect of piano playing. May be repeated three times. LR

LMC: DA**Transfer:** UC, CSU**MUSIC-034 Jazz/Rock Keyboard**

18 total hours lecture, 36 total hours lab 1.5 Units

Advisory: Some basic piano experience

Investigation of fundamental keyboard skills necessary to perform contemporary jazz and rock music. Improvisatory keyboard styles will be discussed, with emphasis on today's keyboard demands. Content includes the function and voicing 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**

18 total hours lab, 36 total hours lab 1.5 Units

This course is designed for the student with little or no background in playing the guitar. Course content covers basic guitar strums, chords, tuning, and song accompaniments. Students must supply their own guitar. May be repeated three times. LR

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

MUSIC-036 Intermediate Guitar

18 total hours lecture, 36 total hours lab 1.5 Units

Advisory: MUSIC-035

Continuing the content of MUSIC-035, students will study with an emphasis on stylistic interpretation, preparation and performance of intermediate level guitar literature from a variety of historical periods and styles. Both ensemble and solo playing will be investigated along with technique and music theory. May not be repeated. LR

LMC: DA**Transfer:** UC, CSU**MUSIC-036A Intermediate Guitar-The Music of the Beatles**

18 total hours lecture, 36 total hours lab 1 Unit

Advisory: MUSIC-035

Continuing the content of MUSIC-035, students will study with an emphasis on stylistic interpretation, preparation and performance of intermediate level music of the Beatles. Both ensemble and solo playing will be investigated along with technique and music theory. May not be repeated. LR

LMC: DA**Transfer:** CSU**MUSIC-036B Intermediate Guitar-Lead Guitar**

18 total hours lecture, 36 total hours lab 1 Unit

Advisory: MUSIC-035 or consent of instructor

Continuing the content of MUSIC-035, students will study with an emphasis on stylistic interpretation, preparation and performance for playing lead guitar. Both ensemble and solo playing will be investigated along with technique and music theory. May not be repeated. LR

LMC: DA**Transfer:** UC, CSU**MUSIC-037 Advanced Guitar**

18 total hours lecture, 36 total hours lab 1.5 Units

Advisory: MUSIC-036

Continuing the content of MUSIC-036, students will study with an emphasis on stylistic interpretation, preparation and performance of advanced level guitar literature from a variety of historical periods and styles. Both ensemble and solo playing will be investigated along with technique and music theory. May not be repeated. LR

LMC: DA**Transfer:** UC, CSU**MUSIC-040 Concert Band**

108 total hours lab 2 Units

Prerequisite: Fundamental skill on a band instrument; assessed by audition**Advisory:** Eligibility for ENGL-090

Introduction to collegiate level concert band, involving basic studies in musical interpretation, advanced performance concepts, critical sight reading, and extended technical exercises; extensive practice and frequent public performance. May be repeated three times. LR

LMC: DA**Transfer:** UC, CSU**MUSIC-050 Chamber Ensembles : Emphasis - Brass and Percussion**

90 total hours lab 1.5 Units

In this course students play in small ensembles of varying size and configuration with intensive work in ensemble skills such as pitch matching, tone blending, and rhythmic synchronization. Studies in musical interpretation, advanced performance concepts, and critical sight reading are applied to repertoire which may be drawn from every style of Western Art Music from the Renaissance to the present. There will be several public performances. Fundamental skill on your instrument is required. May be repeated three times. LR

LMC: DA**Transfer:** UC, CSU**MUSIC-052 Chamber Ensembles: Emphasis Strings**

54 total hours lab 1 Unit

In this course students play in small ensembles of varying size and configuration with intensive work in ensemble skills such as pitch matching, tone blending, and rhythmic synchronization. Studies in musical interpretation, advanced performance concepts, and critical sight reading are applied to repertoire which may be drawn from every style of Western Art Music from the Renaissance to the present. There will be several public performances. Fundamental skill on your instrument is required. May be repeated three times. LR

LMC: DA**Transfer:** UC, CSU**MUSIC-054 Chamber Ensembles: Emphasis - Woodwind, Vocal and Piano**

90 total hours lab 1.5 Units

In this course students play in small ensembles of varying size and configuration with intensive work in ensemble skills such as pitch matching, tone blending, and rhythmic synchronization. Studies in musical interpretation, advanced performance concepts, and critical sight reading are applied to repertoire which may be drawn from every style of Western Art Music from the Renaissance to the present. There will be several public performances. Fundamental skill on your instrument is required. May be repeated three times. LR

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

MUSIC-060 College Chorus I

108 total hours lab 2 Units

Advisory: *Eligibility for ENGL-090*

This class investigates basic choral group fundamentals. Development of basic vocal techniques through large group activities; extensive practice and frequent public performances. May be repeated three times. LR

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

54 total hours lab 1 Unit

Advisory: *Eligibility for ENGL-090*

This course is an investigation of vocal techniques such as breathing, dictation, vowel production, and tone quality; care of the voice; music reading and vocal interpretation. Singing and basic repertoire include an introductory 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**

90 total hours lab 1.5 Units

Advisory: *Eligibility for ENGL-090*

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 an understanding and skill in complex rhythm structure, phrasing and vocal production and intonation needed for singing Gospel Music. May be repeated three times. LR

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

54 total hours lab 1 Unit

Advisory: *Eligibility for ENGL-090*

This course is designed for anyone who wants to learn more about singing popular forms of music such as blues, jazz, gospel and musical theatre selections. Classroom emphasis will be on various stylistic concepts to achieve the modern vocal sound. May not be repeated. LR

LMC: DA**Transfer:** UC, CSU**MUSIC-070 Jazz Ensemble styles of Duke Ellington and Miles Davis**

108 total hours lab 2 Units

Advisory: *3 or more years rehearsing/performing in a jazz big band on a jazz band instrument*

A course for student musicians with some experience playing in a large jazz ensemble wishing to investigate diverse material in the jazz canon in the styles of Duke Ellington and Miles Davis. There are several public performances per semester. May not be repeated. LR

LMC: DA**Transfer:** UC, CSU**MUSIC-071 Large Jazz Ensemble styles of Count Basie and John Coltrane**

108 total hours lab 2 Units

Advisory: *3 or more years rehearsing/performing in a jazz big band on a jazz band instrument*

A course for student musicians with some experience playing in a large jazz ensemble wishing to investigate diverse material in the jazz canon in the styles of Count Basie and John Coltrane. There are several public performances per semester. May not be repeated. LR

LMC: DA**Transfer:** UC, CSU**MUSIC-072 Large Jazz Ensemble styles of Gil Evans and Dizzy Gillespie**

108 total hours lab 2 Units

Advisory: *3 or more years rehearsing/performing in a jazz big band on a jazz band instrument*

A course for student musicians with some experience playing in a large jazz ensemble wishing to investigate diverse material in the jazz canon in the styles of Gil Evans and Dizzy Gillespie. There are several public performances per semester. May not be repeated. LR

LMC: DA**Transfer:** UC, CSU**MUSIC-073 Large Jazz Ensemble styles of Thad Jones and Maria Schneider**

108 total hours lab 2 Units

Advisory: *3 or more years rehearsing/performing in a jazz big band on a jazz band instrument*

A course for student musicians with some experience playing in a large jazz ensemble wishing to investigate diverse material in the jazz canon in the styles of Thad Jones and Maria Schneider. There are several public performances per semester. May not be repeated. LR

LMC: DA**Transfer:** CSU

MUSIC-074 Jazz Studio - from Basie through Coltrane

108 total hours lab 2 Units

Advisory: *Fundamental skill on a jazz band instrument and placement audition by professor*

A course for student musicians of basic to intermediate level. Student musician must have fundamental skill on a jazz band instrument playing in a large jazz ensemble. For the student musician wishing to investigate basic jazz band material in the jazz canon in the styles of Duke Ellington, Count Basie, Charlie Parker, Miles Davis, Thad Jones, Slide Hampton and John Coltrane. There are several public performances per semester. May be repeated three times. LR

LMC: DA**Transfer:** UC, CSU**MUSIC-077 Chamber Chorale**

108 total hours lab 2 Units

This course is 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-081 Introduction to Improvisation**

90 total hours lab 1.5 Units

Advisory: *MUSIC-015 or MUSIC-015 placement exam*

This course is designed to introduce the student to various techniques for improvisation. Included in this will be the improvised and aural traditions comprising the bulk of the music of the Western and non-Western world. The stylistic areas covered will include jazz, funk, blues, rock, African and approaches to improvising. May be repeated three times. LR

LMC: DA**Transfer:** UC, CSU**MUSIC-082 Intermediate Improvisation Jazz Workshop**

108 total hours lab 2 Units

Advisory: *3 or more years on a jazz band instrument*

A course for student musicians with some experience playing and improvising wishing to explore the many styles and varieties of small group jazz playing, from swing to bebop to modal to free to modern mainstream. There are several public performances per semester. May be repeated three times. LR

LMC: DA**Transfer:** UC, CSU**MUSIC-089 Music and Recording Industry Business**

36 total hours lecture 2 Units

Advisory: *Eligibility for ENGL-090*

This course is designed to familiarize the student with the primary business and legal aspects of the Music/Recording Industry. Topics include: An overview of the Music and Recording

Industries, interrelationships among the various career specialties, career planning, business basics for music/recording entrepreneurs, the business of songwriting & composing, copyright, publishing, bands as businesses, artist representation, record labels, the recording studio from a business perspective, marketing, radio, merchandise, distribution and live performance. Meets the LMC Recording Arts Associate Degree and Certificate requirements and Music Certificate. May not be repeated. LR

LMC: DA**Transfer:** CSU**MUSIC-091 Music Technology for Music Majors**

18 total hours lecture, 72 total hours lab 2 Units

Advisory: *Prior or concurrent enrollment in MUSIC-015*

This course is a hands-on introduction to notation and sequencer programs using MIDI (Musical Instrument Digital Interface). Students will be able to produce professional looking music score and lead sheet using current music notation software, and MIDI sequences using current music 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 using multiple MIDI channels and sound modules. Students will record their project onto 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 equipments (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**

18 total hours lecture, 72 total hours lab 2 Units

Advisory: *Prior or concurrent enrollment in MUSIC-015*

This course is 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 a 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 composition, making beats and/or being a producer. May be repeated three times. SC

LMC: DA**Transfer:** CSU

MUSIC-094 Studio Music Production II

18 total hours lecture, 72 total hours lab 2 Units

Advisory: MUSIC-015; concurrent enrollment in MUSIC-016 or MUSIC-028

For students wanting to be music studio producers. Students will be able to learn various roles of music production. Music roles to be explored include the artist, producer, manager, business manager, agent, and songwriter. Discussion will include issues regarding management contracts, partnership/band contracts, agency contracts. Business entities will be explored. Students will learn to compose an intermediate-level original musical work using electronic musical equipment. May be repeated three times. SC

LMC: DA**Transfer:** CSU**MUSIC-095 Studio Music Production III**

18 total hours lecture, 72 total hours lab 2 Units

Advisory: MUSIC-015; concurrent or prior enrollment in MUSIC-016 or MUSIC-028

Students will be able to learn various styles of music production in depth. 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 advanced level operation of electronic musical equipment. The pieces of electronic musical equipment include Midi synthesizers, music workstations, Digital Audio workstations, 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 strong foundation in understanding studio music production. Students will also learn to mix and master a final musical product using a digital audio workstation and learn about the distribution channels of music. May be repeated three times. SC

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-100 Hip Hop and the Music Industry
(Exploring the Formula for Success in Popular Music)**

54 total hours lecture 3 Units

This course is designed to give students an academic look at perspectives in popular music, particularly Hip Hop. Beginning

with an historical component, in an effort to relate successes of the past to those of today. Hip Hop and the Music Industry will seek to discover the attributes that tend to lead to financial security for those with careers in one of America's most popular music, Hip Hop. Moreover, the course will offer practical implementation strategies to help students with short and long term goals. May not be repeated. SC

LMC: DA**Transfer:** CSU**MUSIC-250 Night Jazz Band**

90 total 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 in the styles of Duke Ellington, Don Redman, Dizzy Gillespie, Joe Henderson, Charles Mingus, Kenny Wheeler and John Fedchock. There are frequent public performances. May not be repeated. P/NP

LMC: DA**Transfer:** UC, 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: Eligibility for ENGL-090

This course is designed to give students the knowledge and skills necessary to maintain oxygenation and blood circulation in an adult, child, or infant who is demonstrating the signs of cardiac arrest. It includes basic first aid care and useful information about common medical and environmental injuries and illnesses. It meets the American Heart Association standards for "Heartsaver" certification. "An optional materials fee may be applied". May be repeated three times. P/NP

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

14 total hours lecture, 2 total hours lab 1 Unit

Advisory: Eligibility for ENGL-090

This course meets requirement for Core Content for Child Care Health and Safety Training/Education on Preventive Health Practices for the Department of Social Services Community Care Licensing (Health and Safety Code Section 1596.866) and includes pediatric cardiopulmonary resuscitation, pediatric first aid, recognition, management and prevention of infectious diseases, including immunizations, prevention of childhood injuries and implementing universal precautions in child care programs. "An optional materials fee may be applied". May not be repeated. P/NP

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

4 total hours lecture, 4 total hours lab .3 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. "An optional materials fee may be applied". May be repeated three times. P/NP

LMC: NDA

Nursing - Registered

RNURS-001 Nursing Career Seminar

6 total hours lecture .3 Unit

This seminar introduces students to the nursing profession and discusses current trends related to the profession. Emphasis is placed on introducing the student to the professional standards of practice of the registered nurse and the licensed vocational nurse. The student is provided with an overview of the course requirements needed to qualify for the Los Medanos nursing programs. May not be repeated. P/NP

LMC: NDA

RNURS-020 Transition to the RN Program

6 total hours lecture .3 Unit

Prerequisite: Accepted to the Registered Nursing Transition Program

This RN Transition course is required of nursing students who meet the admission criteria to be accepted into the third semester of the Registered Nursing program as Licensed Vocational Nurses (LVN) or advanced placement students. Emphasis is on RN scope of practice, the Registered Nursing program curriculum plan and expectations, competency in math calculations, and use of campus resources. May not be repeated. P/NP

LMC: NDA

Transfer: CSU

RNURS-022 Fundamentals of Nursing Practice

72 total hours lecture, 297 total hours lab 9.5 Units

Prerequisite: Must be admitted to the Registered Nursing Program

Co-requisite: Concurrent enrollment in RNURS-023 and 024

Concepts that provide the foundation upon which homeostasis is maintained in adults and/or children are covered. Common threads integrated throughout the program are nursing process, nutrition, developmental levels, cultural diversity, therapeutic communication, and the professional role of the Registered Nurse. Concurrent practice in the nursing laboratory and in clinical facilities in the community is included. Mandatory fees associated with this course may include: \$90-\$100 for Background Check and Drug Screening; \$20-\$25 for HealthStream Orientation; \$20-\$45 for Mask Fit Testing; \$250 for Uniform/Shoes/Lab Coat; \$15-\$150 for Stethoscope and a watch with a second hand; \$40-\$60 for Parking at Clinical Sites; \$55-\$75 for CPR Certification; \$250 for Physical Exam, Lab Fees, and Immunizations. May not be repeated. LR

LMC: DA

Transfer: CSU

RNURS-023 Nursing Skills Simulation I

54 total hours lab 1 Unit

Prerequisite: Must be admitted to the Registered Nursing Program

Co-requisite: RNURS-022 and 024

This course includes instructor demonstration and student return demonstration of nursing skills related to Foundations of Nursing Practice. The simulation of patient care situations provide for development of proficiency in preparation for actual patient care in the clinical setting. Basic calculation of drug dosages is also initiated. Mandatory fees associated with the course include: \$60-\$150 per year for Lab Kit. May not be repeated. LR

LMC: DA

Transfer: CSU

RNURS-024 Pharmacology for the RN Program I

18 total hours 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 in the safe administration of medications in the clinical setting. Basic principles of medication administration such as the Six Rights (Right patient, Right Drug, Right Dose, Right Time, Right Route, Right Documentation). Pharmacodynamics of drug absorption, metabolism and distribution through various routes along with other basic principles of pharmacology are introduced. May not be repeated. LR

LMC: DA

Transfer: CSU

RNURS-026 Nursing in Health and Illness I

72 total hours lecture, 297 total hours lab 9.5 Units

Prerequisite: Must have been admitted to the Registered Nursing Program; RNURS-022, 023 and 024 or equivalent

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. Mandatory fees associated with this course include: \$40-\$60 for Parking at Clinical Sites; \$90-\$100 Background Check/Drug Screening (for advanced placement students only). May not be repeated. LR

LMC: DA

Transfer: CSU

RNURS-027 Nursing Skills Simulation II

54 total hours lab 1 Unit

Prerequisite: Admission to the Registered Nursing program and RNURS-022, 023, & 024 or equivalent**Co-requisite:** RNURS-026 and RNURS-028

This course includes professor demonstration and student return demonstration of higher level nursing concepts related to diabetic medical-surgical nursing care, parenteral medication administration, nasogastric tube placement and care, ostomy care, peri-operative assessment and care, 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. Drug dosage calculation practice is continued. Mandatory fees associated with this course include: \$60-\$150 for Lab Kits each year. May not be repeated. LR

LMC: DA**Transfer:** CSU**RNURS-028 Pharmacology for RN Program II**

18 total hours lecture 1 Unit

Prerequisite: Admitted to the Registered Nursing program; RNURS-022, 023 and 024 or equivalent**Co-requisite:** Concurrently enrolled in RNURS-026 and 027

This second semester of pharmacology expands upon the principles and drug administration techniques introduced in the first semester. Specific drug classifications covered include oral contraceptives, tocolytics, uterine stimulants, newborn medications, anesthetics, antibiotics, diuretics, Insulin, oral hypoglycemics, anti-anginals, antihypertensives, prescriptives for the gastrointestinal system and prescriptives used to improve respiratory function. May not be repeated. LR

LMC: DA**Transfer:** CSU**RNURS-030 Leadership/Management and Professionalism in Nursing**

18 total hours 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**

72 total hours lecture, 297 total hours lab 9.5 Units

Prerequisite: Must have been admitted to the Registered Nursing Program; RNURS-026, 027, and 028 or equivalent**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. Mandatory fees associated with this course may include: \$90-\$100 for Background Check and Drug Screening (for advance placement students only); \$20-\$25 for Health-Stream Orientation; \$20-\$45 for Mask Fit Testing; \$60-\$150 for Skills Lab Kit; \$250 for Uniform/Shoes/Lab Coat; \$15-\$150 for Stethoscope; \$40-\$60 for Parking at Clinical Sites; \$55 for CPR Certification; \$250 for Physical Exam, Lab Fees, and Immunizations. May not be repeated. LR

LMC: DA**Transfer:** CSU**RNURS-033 Nursing Skills Simulation III**

54 total hours lab 1 Unit

Prerequisite: Admission to the Registered Nursing program and RNURS-026, 027, & 028 or equivalent**Co-requisite:** RNURS-031 and RNURS-034

This course includes professor 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. The simulation of client care situations provide for development of proficiency in preparation for actual client care in the clinical setting. Drug dosage calculations are continued with introduction of IV calculations. Mandatory fees associated with this course include: \$60-\$150 for Skills Lab Kit per year. May not be repeated. LR

LMC: DA**Transfer:** CSU**RNURS-034 Pharmacology for RN Program III**

18 total hours lecture 1 Unit

Prerequisite: Must have been admitted to the Registered Nursing Program; RNURS-026, 027, and 028 or equivalent**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. May not be repeated. LR

LMC: DA**Transfer:** CSU

RNURS-036 Nursing in Health and Illness III

72 total hours lecture, 297 total hours lab 9.5 Units

Prerequisite: *Must have been admitted to the Registered Nursing program; RNURS-031, 033, and 034 or equivalent***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. Mandatory fees associated with this course may include: \$40-\$60 for Parking at Clinical Sites; \$475 for Licensure; \$90-\$100 Background/Drug screening (for advance placement students only). May not be repeated. LR

LMC: DA**Transfer:** CSU**RNURS-038 Nursing Skills Simulation IV**

54 total hours lab 1 Unit

Prerequisite: *Must have been admitted to the Registered Nursing program and have completed RNURS-031, 033, & 034 or equivalent***Co-requisite:** RNURS-036 and 039

Instructor demonstration and student return demonstration of higher level nursing concepts including but not limited to organ donation, blood transfusions, blood draws, central lines, cardiac arrest and rhythm strip interpretation. Simulation of patient care situations with traditional manikins as well as hi-fidelity manikins provide for development of proficiency in preparation for actual patient care in the clinical setting. Drug dosage calculations are continued to maintain proficiency. Mandatory fees associated with this course include: \$60-\$150 for Skills Lab Kit per year. May not be repeated. LR

LMC: DA**Transfer:** CSU**RNURS-039 Pharmacology for RN Program IV**

18 total hours lecture 1 Unit

Prerequisite: *Must have been admitted to the Registered Nursing program; RNURS-031, 033 and 034 or equivalent***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. 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**

60-300 total hours 1-4 Units

Prerequisite: *Approved online application***Advisory:** *Eligibility for ENGL-090*

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**

60-300 total hours 1-4 Units

Prerequisite: *Approved online application and employer placement***Advisory:** *Eligibility for ENGL-090*

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 career technical 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 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 the Vocational Nursing Program

Co-requisite: Concurrent enrollment in VONUR-005, 006, and 007

This course will present introductory core concepts of pharmacology including drug regulations, pharmacokinetic actions of drugs, effects of medications on older adults and drug dosage calculations. May not be repeated. LR

LMC: DA

VONUR-005 Fundamentals of Vocational Nursing

108 total hours lecture 6 Units

Prerequisite: Admission to the Vocational Nursing Program

Co-requisite: Concurrent enrollment in VONUR-004, 006, and 007

This course provides fundamental instruction on the basic nursing skills that are necessary to create and maintain a hygienic, comfortable and safe patient environment. This course incorporates the concepts of homeostasis, the nursing process, maintaining an optimum level of wellness and care mapping as the foundations for providing safe and comprehensive nursing care. May not be repeated. LR

LMC: DA

VONUR-006 Fundamentals of Vocational Nursing

342 total hours lab 6 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. Mandatory fees associated with the course include: \$90-\$110 for Background Check and Drug Screening; \$20-\$25 for HealthStream Orientation; \$20-\$45 for Mask Fit Testing; \$60-\$150 for Skills Lab Kit; \$250 for Uniform/Shoes/Lab Coat; \$15-\$150 for Stethoscope; \$40-\$60 for Parking at Clinical Sites; \$55 for CPR Certification; \$250 for Physical Exam, Lab Fees, and Immunizations; \$150-\$200 Standardized Testing; \$20 Bandage Scissors and Pen Light. 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

This course introduces the student to role relationships, and the ethical and legal responsibilities of the student nurse. Students will also explore the evolution of the Vocational Nursing practice and roles. May not be repeated. LR

LMC: DA

VONUR-008 Medical Terminology for Healthcare Occupations

18 total hours lecture 1 Unit

Advisory: Eligibility for ENGL-090

This course provides an integrated approach to learning and using medical terminology for the person interested in becoming a healthcare professional or one who works in a healthcare occupation. May not be repeated. LR

LMC: DA

VONUR-010 Intermediate Concepts to Clinical Pharmacology

18 total hours lecture 1 Unit

Prerequisite: Admission to the Vocational Nursing Program.

Co-requisite: Concurrent enrollment in VONUR-011 and 012

This intermediate course presents concepts of clinical pharmacology and drug therapy used in the management of major diseases and disorders affecting the neurological, muscular, respiratory, cardiovascular, gastrointestinal, endocrine, and genitourinary body systems in the adult client. The pharmacology content also includes nursing care of clients, prescribed antibiotics, anti-infectives, cancer medications, and pre and post operative drug therapy of the surgical adult client. May not be repeated. LR

LMC: DA

VONUR-011 Medical Surgical Nursing

90 total hours lecture 5 Units

Prerequisite: VONUR-005; Admission to the Vocational Nursing Program

Co-requisite: Concurrent enrollment in VONUR-010, 012

This course presents the basic causes and symptoms of disease and/or health problems of adults. Introduces nursing principals 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. Materials fee for proctored exam required. May not be repeated. LR

LMC: DA

VONUR-012 Medical-Surgical Nursing Practice

342 total hours lab 6 Units

Prerequisite: VONUR-006; Admission to the Vocational Nursing Program**Co-requisite:** Concurrent enrollment in VONUR-010 and 011

This is the second semester clinical course in the three semester program geared towards final completion and certification for the Vocational Nursing program. Completion of the program prepares students to take the licensure examination. In this course, under instructor supervision, students demonstrate in a clinical environment, nursing skills necessary to care for a variety of patients with various medical surgical diseases create and maintain a hygienic, comfortable and safe patient environment, provide treatments and administer medications. In addition, students are provided the opportunity to practice their skills in the Nursing Skill Lab and various skills are tested for proficiency prior to being used in the clinical environment. The students' clinical experience utilizes the concepts of homeostasis, the nursing process, care mapping and maintaining an optimum level of wellness as the foundation for providing safe and comprehensive nursing care to the medical surgical patient. Mandatory fees associated with the course include: \$40-\$60 for Parking at Clinical Sites; \$150-\$200 Standardized Testing. May not be repeated. LR

LMC: DA

VONUR-015 Advanced Concepts to Clinical Pharmacology

18 total hours lecture 1 Unit

Prerequisite: VONUR-010; Admission to the Vocational Nursing Program**Co-requisite:** Concurrent enrollment in VONUR-016, 017, and 018

This advanced course presents concepts of clinical pharmacology and drug therapy used in the management of major diseases and disorders affecting clients with psychiatric disorders as well as drug therapy used in the management of normal and abnormal conditions related to the expectant mother and the pediatric client. May not be repeated. LR

LMC: DA

VONUR-016 Family Centered Nursing

90 total hours lecture 5 Units

Prerequisite: VONUR-011; Admission to the Vocational Nursing Program**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. May not be repeated. LR

LMC: DA

VONUR-017 Family Centered Nursing Practice

342 total hours lab 6 Units

Prerequisite: VONUR-012; Admission to the Vocational Nursing Program**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. Mandatory fees associated with the course include: \$40-\$60 for Parking at Clinical Sites; \$150-\$200 Standardized Testing; \$20-\$25 for HealthStream Orientation. May not be repeated. LR

LMC: DA

VONUR-018 Professional Issues in Vocational Nursing

18 total hours lecture 1 Unit

Prerequisite: VONUR-007; Admission to the Vocational Nursing Program**Co-requisite:** Concurrent enrollment in VONUR-015, 016, and 017.

Introduces the student to the roles, responsibilities, legal and ethical changes in society affecting nursing practice and nursing employment. 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

60-300 total hours 1-4 Units

Prerequisite: Approved online application**Advisory:** Eligibility for ENGL-090

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 occupa-

tional 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

60-300 total hours 1-4 Units

Prerequisite: *Approved online application and employer placement*

Advisory: *Eligibility for ENGL-090*

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 career technical 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 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

54 total hours lecture 3 Units

Advisory: *ENGL-090*

A study of the basic principles to be utilized for personal and family needs. Topics covered include the significance of food in the life; 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). 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.*

NUTRI-900s Selected Topics in Nutrition

DA varies with course content.

Philosophy

PHIL-002 Contemporary Ethical Issues

54 total hours lecture 3 Units

Prerequisite: *ENGL-100*

This course is 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 globalization. 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 A History of Political Thought: The Problem Of Democracy

54 total hours lecture 3 Units

Advisory: *Eligibility for ENGL-100*

Same as POLSC-033. An introduction to the history & development of a 2,500 year old tradition of political thought & statecraft. Originating in a condition of Athenian democratic dysfunction, this tradition has intermittently reanimated itself with the concern to understand the fragility of Republican-Democratic political systems. While a comparative attempt to study certain non-democratic ideas & practices will be made, the primary goal of this course is to introduce students to the difficulties inherent in sustaining any viable democratic regime, including, notably, the American system of which they are a living part. The course will proceed with an interdisciplinary, cross-cultural & comparative approach which is compatible with the discursive, interpretive nature of the study of primary texts & their authors in historical context. POLSC/PHIL 33 meets Social Science and Humanities requirements. 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

54 total hours lecture 3 Units

Advisory: Eligibility for ENGL-100

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. May not be repeated. SC

LMC: GE: Humanities; DA**Transfer:** UC; CSU Gen. Ed. Area C2; IGETC Area 3B**PHIL-041 Critical Thinking**

54 total hours lecture 3 Units

Advisory: Eligibility for ENGL-100

The purpose of this critical thinking course is to develop skills for constructing sound arguments and evaluating the arguments of others. It provides a sensitivity to the formal components in language and to the requirements of clear and effective communication. Attending to the flaws and fallacies of persuasive arguments, critical thinking provides a defense against irrationality, prejudice, and deceptions, large and small. Utilizing methods of self-reflection the student learns to view his relationship to the world within a broad unifying perspective. May not be repeated. SC

LMC: DA**Transfer:** UC; CSU Gen. Ed. Area A3**PHIL-042 Comparative Religion**

54 total hours lecture 3 Units

Advisory: Eligibility for ENGL-100

Comparison of the world's religions in terms of the way they conceptualize and relate to a supernatural order. Comparisons are drawn from Christianity, Judaism, Islam, Hinduism, Buddhism, mystical and shamanistic traditions. Each is shown to provide for the organization of a social world as well as a means of personal transcendence. 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

27-54 total hours activity .5-1 Unit

This class is an introduction to step aerobics, designed especially for beginning students, but open to those with experience. This is a high energy, low impact class that will provide a complete cardiovascular fitness workout including warm-up, cool-down and stretching exercises. Basic step principles as well as circuit and interval training will be used to improve and maintain cardio fitness levels. May be repeated three times. SC

LMC: DA**Transfer:** UC, CSU**PE-004 Pilates and More**

27-54 total hours activity .5-1 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 basic 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**

27-54 total hours activity .5-1 Unit

Physical Fitness is an aerobic workout designed to improve cardiovascular endurance, muscular endurance, flexibility and strength. Students will learn dynamic stretch and warm up routines, proper body mechanics when using weight exercise machines and free weights. Cardiovascular training may include walking, jogging, cycling, step, circuit and interval training. Students will learn how to attain, monitor and control their target heart rate during exercise. This course helps attain and maintain wellness. PE-006 and ATH-006 may be repeated for a combined total of three times. SC

LMC: DA**Transfer:** UC, CSU**PE-008 Weight Training**

54 total 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. PE-008 and ATH-008 may be repeated for a combined total of three times. SC

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

PE-010 Circuit Training

27-54 total hours activity .5-1 Unit

Circuit training is an aerobic workout designed to improve cardiovascular endurance, muscular endurance, flexibility and strength. Students will learn dynamic stretch and warm up routines, proper body mechanics when using weight exercise machines and the major muscle groups used. Proper mechanics and the use of stationary bikes will be taught. Students will learn how to attain, monitor and control their target heart rate during exercise. This course helps attain and maintain wellness. May be repeated three times. SC

LMC: DA**Transfer:** UC, CSU**PE-011 Super Shape-Up**

27-54 total hours activity .5-1 Unit

Super shape-up provides a total fitness exercise program for the individual interested in developing cardiovascular fitness, muscular strength, endurance, flexibility; nutrition and weight control; and stress management. May be repeated three times. SC

LMC: DA**Transfer:** UC, CSU**PE-012 Power Walk Stretch and Tone**

27-54 total hours activity .5-1 Unit

A cardiovascular exercise class intended to provide a complete fitness program without impact. The class is designed for all levels of fitness regardless of age or ability. The level of activity is based on individual needs. An emphasis will be placed on lifelong fitness and developing flexibility, cardiovascular fitness, muscular toning and weight control. May be repeated three times. SC

LMC: DA**Transfer:** UC, CSU**PE-014 Volleyball**

27-54 total hours activity .5-1 Unit

This course provides students with instruction in the fundamentals of volleyball including serving, blocking, digging, setting and spiking. Emphasis will be placed on knowledge of rules and team strategy. PE-014, ATH-014, and ATH-076 may be repeated for a combined total of three times. SC

LMC: DA**Transfer:** UC, CSU**PE-016 Beginning Swimming**

27-54 total hours activity .5-1 Unit

Beginning Swimming provides students with the opportunity to learn basic water safety skills and sufficient knowledge to make them reasonably safe in an aquatic environment. It introduces students to all of the parts of the freestyle (crawl) stroke, including breathing techniques, backstroke, breaststroke, elementary backstroke and sidestroke. PE-016 and PE-017 may be repeated for a combined total of three times. SC

LMC: DA**Transfer:** UC, CSU**PE-017 Lap Swimming**

27-54 total hours activity .5-1 Unit

Lap Swimming provides students with the opportunity to complete distance workouts, build cardiovascular endurance, work on stroke technique and learn proper lane etiquette. PE-017 and PE-016 may be repeated for a combined total of three times. SC

LMC: DA**Transfer:** UC, CSU**PE-018 Water Fitness**

54 total 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:** UC, CSU**PE-020 Exerjazz for Fitness**

27-54 total hours activity .5-1 Unit

This course is designed for the beginner as an exciting low to high impact aerobic activity that combines exercise and aerobic dance steps to promote lifelong fitness. This course is appropriate for the student with little experience in rhythmic exercise of dance. May be repeated three times. SC

LMC: DA**Transfer:** UC, CSU**PE-022 Beginning Bowling**

27-54 total 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**

27-54 total hours activity .5-1 Unit

This course is designed to introduce students to all the basic elements of the sport of soccer. This course will engage the students in the practice of all the basic skills through individual and group drills and by passing 11 v 11 games. PE-026, ATH-026, and ATH-089 may be repeated for a combined total of three times. SC

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

PE-030 Tennis

27-54 total hours activity .5-1 Unit

This course provides students with instruction in the fundamental strokes 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. May be repeated three times. SC

LMC: DA

Transfer: UC, CSU

PE-033 Cardio Kickboxing

27-54 total 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. This course designed for all fitness levels. May be repeated three times. SC

LMC: DA

Transfer: UC, CSU

PE-042 Golf

27-54 total hours activity .5-1 Unit

This course includes instruction in all aspects of the game of golf. It will emphasize golf stance, grip, swing, chipping, putting, etiquette, scoring, and strategy. May be repeated three times. SC

LMC: DA

Transfer: UC, CSU

PE-046 Basketball

27-54 total hours activity .5-1 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 engage the students in the practice of all the basic skills through individual and group drills. PE-046, ATH-046, ATH-079, and ATH-090 may be repeated for a combined total of three times. SC

LMC: DA

Transfer: UC, CSU

PE-048 Adaptive Physical Education

27-54 total hours activity .5-1 Unit

Advisory: Medical Release Form

Adaptive P.E. is designed to meet the needs of the physically limited student. This course will provide activities in 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

27-54 total hours activity .5-1 Unit

Designed for total body toning through use of hand weights, resistance bands, Pilates exercises for core strength, cardiovascular fitness, and flexibility for lifelong fitness. May be repeated three times. SC

LMC: DA

Transfer: UC, CSU

PE-053 Beginning Jazz Dance

27-54 total 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 to enhance strength, flexibility and form. May be repeated three times. SC

LMC: DA

Transfer: UC, CSU

PE-054 Intermediate Jazz Dance

27-54 total hours activity .5-1 Unit

Advisory: Beginning Jazz Dance is recommended

Designed for the student with training in Ballet or Jazz, Modern, Afro, Hip-Hop, or trend styles of 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

27-54 total hours activity .5-1 Unit

Advisory: Beginning/Intermediate Jazz Dance is recommended

Designed for the student with training in Ballet or Jazz, Modern, Afro, Hip-Hop, or trend styles of dance; this course teaches students advanced dance technique and choreography. May be repeated three times. SC

LMC: DA

Transfer: UC, CSU

PE-056 Dance Production Workshop

27-54 total hours activity .5-1 Unit

Advisory: Students should have taken classes in jazz dance, or ballet, modern or hip hop dance

Dance Production Workshop provides an opportunity for the student that has taken jazz dance, ballet, modern, afro, or hip hop dance to learn to choreograph and perform dances refined in class. This course is designed to transform dance composition into a performance experience. Students may audition for 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

27-81 total hours activity .5-1.5 Units

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. PE-057 and PE-059 may be repeated for a combined total of three times. SC

LMC: DA

Transfer: UC, CSU

PE-059 Flow Yoga

81-108 total hours activity 1.5-2 Units

This course teaches a series of yoga pose flows and emphasizes a mind-body connection from pose to pose. Designed to introduce students to the flow elements of Yoga, including postures, breathing, flexibility, strength, relaxation and mindfulness. PE-059 and PE-057 may be repeated for a combined total of 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-100 Introduction to Kinesiology

54 total hours lecture 3 Units

Advisory: Eligibility for ENGL-090

This is an introductory course that will survey the discipline of Kinesiology/Physical Education including the analysis of the nature and importance of physical activity, the knowledge base of the discipline and careers in physical activity professions. Focus will also be placed on the integrative nature of the discipline. May not be repeated. (C-ID KIN 100) SC

LMC: DA**Transfer:** UC, CSU**PE-170 Occupational Work Experience Education in Physical Education**

60-300 total hours 1-4 Units

Prerequisite: Approved online application**Advisory:** Eligibility for ENGL-090

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**

60-300 total hours 1-4 Units

Prerequisite: Approved online application and employer placement**Advisory:** Eligibility for ENGL-090

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 career technical 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 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

54 total hours lecture, 18 total hours lab 3 Units

Advisory: Eligibility for ENGL-100

This is an introduction to the major disciplines of physical science; physics, chemistry, earth science, and astronomy. Overarching ideas of disciplines will be emphasized, including energy and its transformations, the periodic table, plate tectonics, and the lifecycles of stars. Critical thinking, relationships between the disciplines, and applications to everyday life are also emphasized. 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

54 total hours lecture, 54 total hours lab 4 Units

Prerequisite: MATH-025 or equivalent; or one year high school algebra

Advisory: Eligibility for ENGL-100

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, thermal physics, electromagnetism, wave phenomena, and modern physics. 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. May not be repeated. SC

LMC: GE: Physical Sciences; DA

Transfer: UC; CSU Gen. Ed. Area B1, B3; IGETC Area 5A

PHYS-035 College Physics I

54 total hours lecture, 72 total hours lab 4 Units

Prerequisite: MATH-040 or equivalent

Advisory: PHYS-015

This course is an integrated study of the basic concepts, principles, and laws underlying physical phenomena and processes. Energy will be the unifying theme in treating mechanics, thermodynamics, and oscillations. This is the first semester of a year long course in general college physics. May not be repeated. (C-ID PHYS 105) LR

LMC: DA

Transfer: UC; CSU Gen. Ed. Area B1, B3; IGETC Area 5A

PHYS-036 College Physics II

54 total hours lecture, 72 total hours lab 4 Units

Prerequisite: PHYS-035 or equivalent

This course is a continuation of PHYS-035, covering the areas of electricity and magnetism, geometrical and physical optics, fluids, sound, quantum physics, relativity, and nuclear physics. May not be repeated. (C-ID PHYS 110) LR

LMC: DA

Transfer: UC; CSU Gen. Ed. Area B1, B3; IGETC Area 5A

PHYS-037 General College Physics Calculus Supplement I

9 total hours lecture .5 Unit

Co-requisite: PHYS-035; MATH-037 or MATH-050

This course, taken with PHYS-035, is equivalent to a calculus-based physics course. Students learn how to solve calculus-based physics problems in mechanics and thermodynamics, such as center of mass, moments of inertia, and the work done by a gas undergoing various types of expansion. Students will also learn how to convert from approximate, non-calculus formulas to the exact, calculus-based formulas. May not be repeated. LR

LMC: DA

Transfer: CSU

PHYS-038 General College Physics Calculus Supplement II

9 total hours lecture .5 Unit

Co-requisite: PHYS-036, MATH-060

This course, taken with PHYS-036, is equivalent to a calculus-based physics course. Students learn how to solve calculus-based physics problems in fluid dynamics, wave phenomena, electromagnetism, and modern physics, such as atmospheric pressure variations, determining the electric field and voltage around a particular charge distribution, or determining radiation exposure. Students will also learn how to convert from approximate, non-calculus formulas to the exact, calculus based formulas. May not be repeated. LR

LMC: DA

Transfer: CSU

PHYS-040 Physics for Scientists and Engineers I

54 total hours lecture, 72 total hours lab 4 Units

Prerequisite: Prior or concurrent enrollment in MATH-060

This is 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. (C-ID PHYS 205) LR

LMC: DA

Transfer: UC; CSU Gen. Ed. Area B1, B3; IGETC Area 5A

PHYS-041 Physics for Scientists and Engineers II

54 total hours lecture, 72 total hours lab 4 Units

Prerequisite: PHYS-040 and prior or concurrent enrollment in MATH-070

This course is 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. May not be repeated. (C-ID PHYS 210) LR

LMC: DA

Transfer: UC; CSU Gen. Ed. Area B1, B3; IGETC Area 5A

PHYS-042 Physics for Scientists and Engineers III

54 total hours lecture, 72 total hours lab 4 Units

Prerequisite: PHYS-040 and prior or concurrent enrollment in MATH-070

This course is an introduction to fluids, waves, sound, heat and thermodynamics, geometrical and physical optics and quantum physics. May not be repeated. (C-ID PHYS 215) 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

54 total hours lecture 3 Units

Advisory: Eligibility for ENGL-100

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 U.S. History, Constitution and American Ideals CSU requirements. 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

54 total hours lecture 3 Units

Advisory: ENGL-100

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 POLSC-020 partially satisfies the U.S. History, Constitution and American Ideals CSU requirements. May not be repeated. SC

LMC: GE: American Institutions & Ideals; DA

Transfer: UC; CSU Gen. Ed. Area D8; IGETC Area 4H

POLSC-033 A History of Political Thought: The Problem Of Democracy

54 total hours lecture 3 Units

Advisory: Eligibility for ENGL-100

Same as PHIL-033. An introduction to the history & development of a 2,500 year old tradition of political thought & statecraft. Originating in a condition of Athenian democratic dysfunction, this tradition has intermittently reanimated itself with the concern to understand the fragility of Republican-Democratic political systems. While a comparative attempt to study certain non-democratic ideas & practices will be made, the primary goal of this course is to introduce students to the difficulties inherent in sustaining any viable democratic regime, including, notably, the American system of which they are a living part. The course will proceed with an interdisciplinary, cross-cultural & comparative approach which is compatible with the discursive, interpretive nature of the study of primary texts & their authors in historical context. POLSC/PHIL 33 meets Social Science and Humanities requirements. May not be repeated. SC

LMC: GE: Social Science; DA

Transfer: UC; CSU Gen. Ed. Area C2, D8; IGETC Area 3B, 4A

POLSC-043 International Relations

54 total hours lecture 3 Units

Advisory: POLSC-010 and ENGL-100

This course introduces students to the study of political, economic and cultural relations among states, international organizations and nonstate actors, focusing on the interdependence of nations and cultures in the modern world. The course features an interdisciplinary perspective, with contributions from geography, history, sociology and economics. Emphasis will be placed on the links between local and international communities in an era of economic and cultural globalization. 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-004 Process Technology (PTEC) Career Exploration

18 total hours lecture 1 Unit

This career exploration course provides students with a clear overview of the everyday activities of a petrochemical process technician, also called a plant operator. The course is designed to help students decide if a career as a plant operator is right for them. The students will learn what an operator does on a day to day basis and many of the terms used by operators. The essential abilities to work well with teams of diverse people, to foster a good work attitude, and to balance work life with home life will be explored. May not be repeated. SC

LMC: DA

Transfer: CSU

PTEC-007 Industrial Technology Career Skills

18 total hours lecture 1 Unit

Advisory: Eligibility for ENGL-090

This highly interactive course gives students awareness and know-how to succeed in the industrial technology environment. The student will learn about personal and interpersonal interactions including self motivation, communication, teamwork, work/life balance, shift operations behavior, personal vision, confidence, initiative, attitude, personal appearance and positive behavior. The student will learn about working in the industrial technology environment and acquire these skills through a series of interactions with the instructor and other students utilizing a variety of learning media. May not be repeated. SC

LMC: DA

Transfer: CSU

PTEC-010 Introduction to Process Technology

54 total hours lecture 3 Units

Prerequisite: MATH-025 or equivalent or may be taken as a co-requisite

Advisory: Eligibility for ENGL-100

This introductory course will provide a clear overview of everyday life in the Process Technology 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 class includes labs and field trips to typical chemical and petroleum manufacturing plants. 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

18 total hours 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

45 total hours lecture, 27 total hours lab 3 Units

Advisory: PHYS-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

54 total hours lecture 3 Units

Advisory: PHYS-015; MATH-030; PTEC-010, 012; eligibility for ENGL-100

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

9 total hours lecture, 27 total hours lab 1 Unit

Prerequisite: CHEM-006 or CHEM-007

Co-requisite: 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 be repeated three times. SC

LMC: DA

Transfer: CSU

PTEC-035 Process Technology II - Systems

54 total hours lecture 3 Units

Advisory: PTEC-012, 025, 027; CHEM-006 or 007; 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

54 total hours lab 1 Unit

Prerequisite: PTEC-035**Advisory:** PTEC-045, 048; eligibility for ENGL-100

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**

45 total hours lecture, 27 total 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**

54 total hours lecture 3 Units

Prerequisite: PTEC-035**Advisory:** PTEC-044, 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-060 Industrial Technology Career Preparation**

18 total hours lecture 1 Unit

Advisory: Eligibility for ENGL-090

In this course, the student will learn about the phases of pre-employment including resume and application writing, pre-employment testing, and the all important interview. The student will learn about critical interviewing skills such as actions to take before the interview, how to dress, promptness, typical industry-type interviews, conduct during the interview, typical questions one might be asked, the STAR question process, industrial technology subject categories, questions to ask and not to ask during the interview, and interview follow up. The student will learn how to obtain a Transportation Workers Identification Credential (TWIC Card) and apply for BAT Safety Training certification and why these credentials are important in obtaining employment. Each student will participate in a mock interview similar to the interviews given by industrial technology companies. 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

60-300 total hours 1-4 Units

Prerequisite: Approved online application**Advisory:** Eligibility for ENGL-090

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

60-300 total hours 1-4 Units

Prerequisite: *Approved online application and employer placement***Advisory:** *Eligibility for ENGL-090*

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 career technical 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 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**PTEC-900s Selected Topics in Process Technology**

DA varies with course content.

Psychology

PSYCH-010 Individual and Social Processes

54 total hours lecture 3 Units

Advisory: *Eligibility for ENGL-090*

This 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. 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**

54 total hours lecture 3 Units

Advisory: *Eligibility for ENGL-090*

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. (C-ID PSY 110) SC

LMC: GE: Behavioral Science; DA**Transfer:** UC; CSU Gen. Ed. Area D9; IGETC Area 4I**PSYCH-012 Marriage and Family**

54 total hours lecture 3 Units

Advisory: *Eligibility for ENGL-090*

This class is designed to help students better understand family system dynamics and appreciate the variety and diversity among families today. Students will be introduced to: the components of functional and dysfunctional family systems, theoretical perspectives pertaining to family stress and crises, family violence, and factors that can help families meet crises creatively and effectively. May not be repeated. SC

LMC: DA**Transfer:** CSU Gen. Ed. Area E**PSYCH-014 Psychology of Human Sexuality**

54 total hours lecture 3 Units

Advisory: *Eligibility for ENGL-090*

This class is designed to help students better understand the subject of human sexuality as it relates to sexual intimacy from both an emotional and physical point of view. The subject of sexuality will be addressed from the disciplines of psychology, sociology, biology and physiology. The practical application of the course material will have an emphasis on the cognitive /behavioral approach to intimacy. The major focus of the class will be on the topic of intimacy, which will include self, emotional and sexual. Other topics that will be examined include sexual anatomy and physiology, gender issues, sexual orientation, sexual minorities, sexual assault, domestic violence, and sexually transmitted infections. May not be repeated. SC

LMC: DA**Transfer:** UC; CSU Gen. Ed. Area D4, D9, E; IGETC Area 4D, 4I**PSYCH-017 Introduction to Research**

54 total hours lecture 3 Units

Advisory: *Eligibility for ENGL-100*

This Introduction to Research course serves as a preparation for further study in the field of Behavioral Sciences. The course is designed to study research and research methodology. Emphasis will be placed on providing students with the tools they need for understanding social research methods both inside and outside the classroom. The course content will include the study of theoretical paradigms, logical systems, various modes of inquiry and developing research proposals. May not be repeated. SC

LMC: DA**Transfer:** UC, CSU Gen. Ed. Area D9; IGETC Area 4I

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

60-300 total hours 1-4 Units

Prerequisite: Approved online application

Advisory: Eligibility for ENGL-090

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

60-300 total hours 1-4 Units

Prerequisite: Approved online application and employer placement

Advisory: Eligibility for ENGL-090

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 career technical 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 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

54 total hours lecture 3 Units

Advisory: Eligibility for ENGL-100

This course is designed for students preparing to enter the real estate business. It is the basic foundation course which includes an overview of real and personal property, acquisition & ownership and estates in real property. The student will be introduced to finance and appraisal concepts, learn about ethics, agency, fair housing issues and mandatory disclosures, study taxation, zoning and escrow procedures and understand the requirements needed to obtain a real estate license. May not be repeated. SC

LMC: DA

Transfer: CSU

REAL-020 Real Estate Practice

54 total hours lecture 3 Units

Advisory: REAL-005; eligibility for ENGL-100

This course is designed for students preparing to enter the real estate business. It will prepare the student to select a broker-employer, develop his/her business plan, understand the importance of ethics and the fiduciary relationship, prospect for clients, show and market property and prepare listing and sales agreements. The student will also learn the mandatory disclosures, fair housing laws and government taxation of real property. The course is required by the California Department of Real Estate to obtain the 4-year salesperson's license. May not be repeated. LR

LMC: DA

Transfer: CSU

REAL-025 Real Estate Finance

54 total hours lecture 3 Units

Advisory: REAL-005; eligibility for ENGL-100

This course is designed for students preparing to enter or are currently employed in the real estate business and related fields. The course qualifies as one of several electives necessary to obtain the State of California salesperson's license and is mandatory to obtain the state's broker's license. It is an advanced course which includes a history of finance, types of financing, the factors influencing the real estate cycle, lending regulations, consumer protection, an explanation of the loan process, qualifying for a loan, and real estate math. May not be repeated. LR

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

60-300 total hours 1-4 Units

Prerequisite: *Approved online application*

Advisory: *Eligibility for ENGL-090*

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

60-300 total hours 1-4 Units

Prerequisite: *Approved online application and employer placement*

Advisory: *Eligibility for ENGL-090*

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 career technical 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 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 Introduction to Recording Arts

36 total hours lecture, 72 total hours lab 3 Units

Advisory: *Eligibility for ENGL-090*

This course is designed for the general student or the student entering the Recording Arts Program and includes an introduction to the terminology and practices within Recording Arts. The emphasis is on broad general concepts and practical methods. The content includes audio procedures, microphone techniques, overdubbing and basic mixing. The multi track recorder and mixing console are used for demonstration. May be repeated once. LR

LMC: DA

Transfer: CSU

RA-012 Sound Reinforcement

36 total hours lecture, 54 total 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

54 total hours lecture 3 Units

Advisory: *ENGL-090*

This course is a basic music course addressing the specific needs of Recording Arts Students by providing the specialized musical vocabulary and concepts needed to interact with artists in studio situations. This course also covers the basic technical aspects of music making. May not be repeated. LR

LMC: DA

Transfer: CSU

RA-020 Recording Arts II

36 total hours lecture, 72 total hours lab 3 Units

Prerequisite: RA-010

This course is the second semester course in the Recording Arts sequence and is 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, system interconnection, microphones, microphone technique and mixing consoles. Meets the LMC Recording Arts Associate Degree and Certificate requirements. May be repeated once. LR

LMC: DA**Transfer:** CSU**RA-021 The Role of the Producer (Basic Session Producing)**

36 total hours lecture, 36 total hours lab 2 Units

Advisory: ENGL-090

This course is designed to develop strong competencies in the field of producing audio projects. The content includes detailed information on the work of producers through all three phases of production, evaluation of material, working with talent, budget analysis, legal issues, scheduling, negotiating with record labels and recording studios, managing session workflow, overseeing the mastering process and other trends in the field. May be repeated twice. LR

LMC: DA**Transfer:** CSU**RA-025 Basic Tracking Sessions**

36 total hours lecture, 54 total hours lab 3 Units

Prerequisite: Prior or concurrent enrollment in RA-010**Advisory:** ENGL-090

This course is designed for students in the early stages of the Recording Arts program. Students will receive basic training in the use of LMC's high-end recording equipment, located in Studio B, and gain hands-on experience through involvement in recording sessions. 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, multi-track recording formats, the purpose of basic tracks, documentation, session setup, microphone technique, signal flow through the console and configuring the control room equipment for tracking sessions. May be repeated twice. SC

LMC: DA**Transfer:** CSU**RA-030 Recording Arts III**

36 total hours lecture, 72 total 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 establishing a career in the recording industry. The course includes an in-depth study of the history of recording from acoustic recording to present-day digital audio technology. The fundamentals of digital audio theory are covered. Additionally, an overview of issues related to

computer-based recording systems, that includes information on configuring hardware, operating systems and application software is presented. Material related to configuring DAW hardware focuses on the Digidesign Pro ToolsHD Accel 3 digital recording system. May be repeated once. LR

LMC: DA**Transfer:** CSU**RA-032 Recording Arts Workshop**

54 total hours lab 1 Unit

Advisory: RA-010 and 020; eligibility for ENGL-090

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, and basic console and deck setup. Second year R.A. students will be teamed up with first year students to work as engineering teams to simulate professional recording studio procedures. Required for the LMC Recording Arts Associate Degree and Certificate requirements. May be repeated three times. LR

LMC: DA**Transfer:** CSU**RA-033 Summer Recording Workshop**

36 total hours lecture, 36 total hours lab 2.5 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, hardware and software signal processors, time code and synchronized recording systems, automated mixing, digital editing, and preparing the final product. May be repeated three times. SC

LMC: DA**Transfer:** CSU**RA-035 ProTools Production and Editing**

54 total hours lecture 3 Units

Advisory: RA-010 and 020

Audio Production for radio, television and compact disc release utilizing the Pro Tools systems. Required for the LMC Recording Arts Associate Degree requirements. May not be repeated. LR

LMC: DA**Transfer:** CSU

RA-040 Recording Arts IV

36 total hours lecture, 72 total hours lab 3 Units

Prerequisite: RA-030**Advisory:** Eligibility for ENGL-090

This is the fourth course in the Recording Arts sequence. This course focuses on five primary areas of study: audio post-production for film/video, signal processors, analog storage, mixing and mastering. The details of post-production audio for film are examined with an emphasis on synchronization techniques, time code and digital audio editing. An overview of signal processors is presented. Information from previous courses in the sequence is applied when studying mixing. Course concludes with a description of the mastering process. Required for 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-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

60-300 total hours 1-4 Units

Prerequisite: Approved online application**Advisory:** Eligibility for ENGL-090

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**

60-300 total hours 1-4 Units

Prerequisite: Approved online application and employer placement**Advisory:** Eligibility for ENGL-090

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 career technical 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 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.

Sign Language

SIGN-065 American Sign Language I

54 total hours lecture 3 Units

Advisory: Eligibility for ENGL-090

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. May not be repeated. SC

LMC: DA**Transfer:** UC; CSU Gen. Ed. Area C2; IGETC Area 6**SIGN-066 American Sign Language II**

54 total hours lecture 3 Units

Prerequisite: SIGN-065**Advisory:** Eligibility for ENGL-090

This intensive course is designed for persons wanting to learn communication skills in American Sign Language at Level II. This is a more advanced course from ASL Level I and focuses on recognizing expanding the depth of meanings of the different signs for both receptive and expressive communication. Understanding deaf culture is integrated throughout the course. May not be repeated. SC

LMC: DA**Transfer:** UC; CSU Gen. Ed. Area C2; IGETC Area 3B, 6

SIGN-067 American Sign Language III

54 total hours lecture 3 Units

Prerequisite: SIGN-066**Advisory:** Eligibility for ENGL-090

This intensive course is designed for persons wanting to focus on teaching and practice in expressive skills. ASL III is a continuation of ASL II, with increased emphasis on students' expressive skills, idiomatic expression nuance. Deeper of cultural and historical awareness within the Deaf community through appropriate cultural contexts is the premise of classroom exercises and fieldwork. May not be repeated. SC

LMC: DA**Transfer:** UC; CSU Gen. Ed. Area C2; IGETC Area 3B, 6**SIGN-068 American Sign Language IV**

54 total hours lecture 3 Units

Prerequisite: SIGN-067**Advisory:** Eligibility for ENGL-090

An intensive course designed for persons wanting to focus on teaching and practicing in expressive skills. ASL IV is a continuation of ASL III, with emphasis on grammatical accuracy, literacy interpretation, intensive idiomatic expression, and storytelling techniques. Depth of cultural awareness within the Deaf community through appropriate cultural contexts is the premise of classroom exercises and fieldwork. May not be repeated. SC

LMC: DA**Transfer:** UC; CSU Gen. Ed. Area C2; IGETC Area 3B, 6**SIGN-070 Fingerspelling I**

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

Prerequisite: SIGN-065 or equivalent**Advisory:** Eligibility for ENGL-090

This course provides an introduction to the concentrated instruction in the expressive and receptive practice of beginning fingerspelling. This course is a requirement for the completion of a college skills certificate in American Sign Language. 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**Advisory:** Eligibility for ENGL-090

This course is a continuation of the concentrated instruction in the expressive and receptive practice of advanced fingerspelling. This course is a requirement for the completion of a college skills certificate in American Sign Language. May be repeated once. SC

LMC: DA**Transfer:** CSU**SIGN-072 Deaf Culture**

54 total hours lecture 3 Units

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

This course provides an introduction to the deaf culture as it applies to the historical, cultural and social experiences of our deaf community. Course will introduce issues directly related to the deaf including education and assimilation in bilingual/bicultural settings. Course taught in American Sign Language. 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

54 total hours lecture 3 Units

Advisory: Eligibility for ENGL-100

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 African Americans 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; IGETC Area 4C

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

60-300 total hours 1-4 Units

Prerequisite: Approved online application

Advisory: Eligibility for ENGL-090

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

60-300 total hours 1-4 Units

Prerequisite: Approved online application and employer placement

Advisory: Eligibility for ENGL-090

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 career technical 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 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-012 Marriage and Family

54 total hours lecture

3 Units

Advisory: Eligibility for ENGL-090

This class is designed to help students better understand family system dynamics and appreciate the variety and diversity among families today. Students will be introduced to: the components of functional and dysfunctional family systems, theoretical perspectives pertaining to family stress and crises, family violence, and factors that can help families meet crises creatively and effectively. May not be repeated. SC

LMC: DA

Transfer: CSU Gen. Ed. Area E

SOCIO-015 Introduction to Sociology

54 total hours lecture

3 Units

Advisory: Eligibility for ENGL-090

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. (C-ID SOCI 110) SC

LMC: GE: Behavioral Science; DA

Transfer: UC; CSU Gen. Ed. Area D10; IGETC Area 4J

SOCIO-016 Introduction to Social Problems

54 total hours lecture

3 Units

Advisory: Eligibility for ENGL-090

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. (C-ID SOCI 115) SC

LMC: GE: Behavioral Science; DA

Transfer: UC; CSU Gen. Ed. Area D10; IGETC Area 4J

SOCIO-017 Introduction to Research

54 total hours lecture 3 Units

Advisory: Eligibility for ENGL-100

This Introduction to Research course serves as a preparation for further study in the field of Behavioral Sciences. The course is designed to study research and research methodology. Emphasis will be placed on providing students with the tools they need for understanding social research methods both inside and outside the classroom. The course content will include the study of theoretical paradigms, logical systems, various modes of inquiry and developing research proposals. May not be repeated. (C-ID SOCI 120) SC

LMC: DA**Transfer:** UC, CSU Gen. Ed. Area D9; IGETC Area 4I**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-040 Spanish for Health Services I

18 total hours lecture 1 Unit

Advisory: Eligibility for ENGL-090

(Formerly SPAN-047) This course is one of three part series that trains students in the use of Spanish in the health care field. Grammar and vocabulary related to parts of the body, common illnesses and food and nutrition will be covered. Students will also learn grammatical structures necessary for asking and answering questions relevant to the patient's medical situation. May not be repeated. SC

LMC: DA**SPAN-041 Spanish for Health Services II**

18 total hours lecture 1 Unit

Advisory: SPAN-040; eligibility for ENGL-090

This course is one of three courses that trains students in the use of Spanish in the health care field. Grammar and vocabulary related to hospital terms, emergency situations, drugs and alcohol and pregnancy will be covered. Students will also learn grammatical structures necessary to give simple commands, and engage the patient and dialogue about their health and needs. May not be repeated. SC

LMC: DA**Transfer:** CSU**SPAN-042 Spanish for Health Services III**

18 total hours lecture 1 Unit

Advisory: SPAN-040 or 041; eligibility for ENGL-090

This course is one of three courses that trains students in the use of Spanish in the health care field. Grammar and vocabulary related to pediatrics, cancer, dentistry and optometry will be covered. Students will also learn grammatical structures necessary to explain medical procedures, follow up out-patient instructions, and logistical details for future visits as necessary. May not be repeated. SC

LMC: DA**Transfer:** CSU**SPAN-044 Conversational Spanish I**

54 total hours lecture 3 Units

Advisory: Eligibility for ENGL-090

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**

54 total hours lecture 3 Units

Advisory: SPAN-044; eligibility for ENGL-090

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-049 Conversational Latino Cinema

54 total hours lecture 3 Units

Prerequisite: SPAN-051; or 3 years of high school Spanish; or native fluency in reading and writing of Spanish; or WEB CAPE Placement Test Score of 403 and above

Advisory: Eligibility for ENGL-090

This course uses conversational Spanish to explore classic and contemporary Latin American film that examines a wide variety of themes, genres and cultural experiences. Students analyze Spanish films that explore how culture has changed in Spanish speaking countries and in the United States and how globalization has influenced that change. 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

90 total hours lecture 5 Units

Advisory: Eligibility for ENGL-090

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 is 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

90 total 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

Continuation of the visual/oral/aural approach to understanding, speaking, reading, and writing Spanish. This is the second of a four semester sequence. Course material emphasizes the cultures of Mexico, Central/South America, the Caribbean, Spain, and the Chicano of the Southwestern United States. It is highly recommended that upon successful completion of SPAN-050, the second course SPAN-051 be taken the following semester. This course is equivalent to two years of high school Spanish. May not be repeated. SC

LMC: DA

Transfer: UC; CSU Gen. Ed. Area C2; IGETC Area 3B, 6A

SPAN-052 Intermediate Spanish I

90 total 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 346-403

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, 6

SPAN-053 Intermediate Spanish II

90 total 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 403 and above.

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 fourth 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, 6

SPAN-057 Spanish for Spanish Speakers I

54 total 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. This course meets the UC foreign language transfer requirement. May not be repeated. SC

LMC: DA

Transfer: UC, CSU

SPAN-060 Exploring Latino Cinema: A Critical Analysis

54 total hours lecture 3 Units

Prerequisite: SPAN-052 or if you do not meet the prerequisite, and are a fluent speaker, ask for a prerequisite challenge in Admissions.

Advisory: Eligibility for ENGL-090

This course uses Intermediate Spanish to explore classic and contemporary Latin American film that examines a wide variety of themes, genres and cultural experiences. Students analyze Spanish films (both with and without subtitles) that explore how culture has changed in Spanish speaking countries and in the United States and how memory and oblivion, marginalization of individuals and groups, immigration and globalization have influenced that change. Students screen film works from the United States, Mexico, the Caribbean, Central and South America and Spain and provide both oral and written analysis in Spanish of the films. May not be repeated. SC

LMC: DA

Transfer: UC; CSU Gen. Ed. Area C1

SPAN-080 Elementary Spanish Grammar I

27 total hours lecture 1.5 Units

Advisory: Eligibility for ENGL-090

A course in basic Spanish grammar and syntax designed for bilingual and non-native speakers of Spanish. This course will enhance and improve existing skills in the understanding and application of practical and useful grammatical structures at the elementary level. May not be repeated. SC

LMC: DA**SPAN-081 Elementary Spanish Grammar II**

27 total hours lecture 1.5 Units

Advisory: Eligibility for ENGL-090

A course in intermediate Spanish grammar and syntax designed for bilingual and non-native speakers of Spanish. This course will enhance and improve existing skills in the understanding and application of practical and useful grammatical structures at the elementary level. May not be repeated. SC

LMC: DA**SPAN-082 Elementary Spanish Grammar III**

27 total hours lecture 1.5 Units

Advisory: Eligibility for ENGL-090

A course in advanced Spanish grammar and syntax designed for bilingual and non-native speakers of Spanish. This course will enhance and improve existing skills in the understanding and application of practical and useful grammatical structures at the elementary level. 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-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-110 Speech Communication

54 total hours lecture 3 Units

Advisory: Eligibility for ENGL-100

This course in oral communication covers the fundamentals of public speaking with an emphasis on: selection and research of subjects; organization and support of ideas; and development and delivery of various forms of speeches. Did you know that employers routinely rate good communication skills at the top of their list of desirable qualities in employees? Gain the confidence and polish you need to excel in your studies and in the workplace. May not be repeated. LR

LMC: GE: Communication/Critical Thinking; DA**Transfer:** UC; CSU Gen. Ed. Area A1; IGETC Area 1C**SPCH-120 Argumentation and Debate**

54 total hours lecture 3 Units

Advisory: Eligibility for ENGL 100

This course studies the principles of argumentation theory through lecture and in class debate performances. Issues covered include the analysis of propositions, current events, evidence, advocacy, formal traditions in public policy, and critical reasoning skills. Students will perform in class debates centered around philosophical, ethical, and/or current event issues. May not be repeated. SC

LMC: GE: Communication/Critical Thinking; DA**Transfer:** UC, CSU Gen. Ed. Area A1, A3; IGETC Area 1C**SPCH-130 Interpersonal Communication**

54 total hours lecture 3 Units

Advisory: Eligibility for ENGL-100

(formerly SPCH-038) This course provides the student an opportunity to learn and apply, in daily life, practical principles of interpersonal communication. Content will stress psychological, social, and cultural factors which affect human interaction. It is designed to assist students in improving their own interpersonal communication skills. Attention will be given to perception, interpersonal dynamics, listening, conflict resolution, relationship development and stages, and verbal and nonverbal communication. May not be repeated. SC

LMC: GE: Communication/Critical Thinking; DA**Transfer:** UC, CSU Gen. Ed. Area D7; IGETC Area 4G

SPCH-150 Intercultural Communication

54 total hours lecture 3 Units

Advisory: *Eligibility for ENGL 100*

This course explores the principles of intercultural communication through lecture, group, and writing assignments. Some of the issues covered include: the elements of a culture, intercultural competence as a learned skill, tolerance, norms, co-cultures, the role of language in communication, historical conflicts, and global social inequities. Content and lectures will come from a multicultural perspective and require original research and readings on cultural traditions and norms. May not be repeated. SC

LMC: GE: Communication/Critical Thinking; GCR: Ethnic/Multicultural Studies; DA**Transfer:** UC, CSU Gen. Ed. Area D3, D7; IGETC Area 4C**SPCH-160 Debate Practicum**

90 total hours lab 1.5 Units

Advisory: *Eligibility for ENGL 100*

In this course students will learn and practice the theory, format and structure of Parliamentary Debate. Students will complete research assignments, practice, and compete in weekend travel to compete as a member of the Los Medanos Debate Team. Team members will meet at scheduled times with Faculty during the week to research, prepare, deliver, and analyze formal argumentation in competitive debates. May be repeated three times. SC

LMC: DA**Transfer:** CSU**SPCH-900s Selected Topics in Speech**

DA varies with course content.

Travel

TRAVL-072 Introduction to Travel

54 total hours lecture 3 Units

Advisory: *Eligibility for ENGL-090*

An introductory course designed to give students an overview of the travel industry and its various components. This course familiarizes students with terminology and basic concepts of each component of the travel industry, which includes the airline industry, the ground transportation industry, the hotel industry, the cruise industry and the tour industry. It will also provide the basic online skills needed to research basic travel questions. May not be repeated. SC

LMC: DA**Transfer:** CSU**TRAVL-074 North American Destination Specialist**

54 total hours lecture 3 Units

Advisory: *Eligibility for ENGL-090*

A course on travel geography and tourism within North America, including familiarization with places of tourist interest, itinerary planning, tour companies and sources of reference. Includes a study of each of the 50 states and all Canadian provinces. May not be repeated. SC

LMC: DA**Transfer:** CSU**TRAVL-075 Europe Destination Specialist**

54 total hours lecture 3 Units

Advisory: *Eligibility for ENGL-090*

This course will provide an overview of the geography, sightseeing options, activities, resort areas and accommodations for each major region of Europe. This knowledge will be applied to traveler scenarios. Internet resources for more in-depth information will also be studied. May not be repeated. SC

LMC: DA**Transfer:** CSU**TRAVL-076 Travel Sales and Marketing**

54 total hours lecture 3 Units

Advisory: *Eligibility for ENGL-090*

This course will help the travel and tourism student prepare for a successful career selling travel. It will introduce the student to effective techniques and skills for service-oriented sales to succeed in the competitive environment of the travel industry. In an increasingly competitive marketplace, travel professionals will need an understanding of the broader sales environment. This course will incorporate coverage of basic marketing principles and discuss customer service as an integral part of the selling process. May not be repeated. SC

LMC: DA**Transfer:** CSU**TRAVL-077 Customized Vacation Planning**

36 total hours lecture 2 Units

Advisory: *Eligibility for ENGL-090*

This course will introduce students to the process of creating and customizing tours for individual travelers or for groups. Particular emphasis will be placed on 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**

54 total hours lecture 3 Units

Advisory: *Eligibility for ENGL-090*

The course will introduce students to 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 in 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

Advisory: *Eligibility for ENGL-090*

This course includes a discussion of geography, tourist attractions and activities, resort areas and accommodations for each of the major islands of Hawaii. Particular emphasis on each island's unique appeal. Resources for more in-depth research are also covered. May not be repeated. SC

LMC: DA**Transfer:** CSU**TRAVL-084 Caribbean Destination Specialist**

27 total hours lecture 1.5 Units

Advisory: *Eligibility for ENGL-090*

This course provides an overview of the geography, major tourist sights and activities, resort areas and accommodations for all of the major islands/destinations 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

Advisory: *Eligibility for ENGL-090*

The course covers the South Pacific region, including: 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-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**

54 total hours lecture 3 Units

Advisory: *TRAVEL-072; eligibility for ENGL-090*

This course is intended for students who already have a solid foundation regarding travel terms and concepts. Emphasis is placed on practical application of knowledge and skills. Topics include exploring and evaluating web-based tools for researching and booking travel, evaluating and recommending options based on client needs, interpreting terms and conditions, marketing and promoting a travel business, networking with other travel professionals, including guest participants from the travel industry. Completion of an individual course project is required. May not be repeated. SC

LMC: DA**Transfer:** CSU**TRAVL-096 Alaska Destination Specialist**

27 total hours lecture 1.5 Units

Advisory: *Eligibility for ENGL-090*

This course will provide an overview of the geography, sightseeing options, activities, resort areas and accommodations for each major region of Alaska. This knowledge will be applied to traveler scenarios. Internet resources for more in-depth information will also be studied. 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

Advisory: *Eligibility for ENGL-090*

This course covers the components to establishing a new home-based travel business including name selection, professional image, niche specialties and the use of technology. A focus will be on how to create and successfully market a new travel business. May not be repeated. SC

LMC: DA**Transfer:** CSU**TRAVL-103 Marketing and Promoting a Home-Based Travel Business**

9 total hours lecture .5 Unit

Advisory: *Eligibility for ENGL-090*

Students will develop, budget and implement a marketing plan for a home-based business. Students will determine which marketing approach would work best for their business. This step-by-step course teaches students how to grow a business by attracting the right clients and spending advertising dollars wisely. May not be repeated. SC

LMC: DA**Transfer:** CSU**TRAVL-104 Resources for the Home-Based Travel Professional**

9 total hours lecture .5 Unit

Advisory: *Eligibility for ENGL-090*

Students will learn about the various resources available to the travel professional. They will develop a preferred supplier list for a home-based business. They will determine which tour and cruise companies would be most suited to their business. They will learn how to select companies that will best support their business niche. May not be repeated. SC

LMC: DA**Transfer:** CSU**TRAVL-105 Business and Financial Plans for Home-Based Travel**

9 total hours lecture .5 Unit

Advisory: *Eligibility for ENGL-090*

Many people have difficulty running a successful travel business, because they lack a proper business plan and end up spending too much money and time pursuing revenues not consistent with their objectives. By developing a business plan, starting and maintaining a business will be relatively easy. Equally important is the second step, which is to finance the strategy and then manage the money, earned by the business. This class will enable students to determine their objectives and write a formal business plan. May not be repeated. SC

LMC: DA**Transfer:** CSU**TRAVL-106 Home-Based Travel and the Law**

9 total hours lecture .5 Unit

Advisory: *Eligibility for ENGL-090*

Students will learn about the legal responsibilities of the travel professional. Every successful travel counselor must recognize the legal issues that must be addressed in a home-based travel business. This course introduces the student to various legal concerns and what to be aware of when creating a home-based business. The course will discuss errors and omissions insurance, general liability insurance, the California Seller of Travel law and Restitution Fund, and the independent contractor agreement. May not be repeated. SC

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

60-300 total hours 1-4 Units

Prerequisite: *Approved online application***Advisory:** *Eligibility for ENGL-090*

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**

60-300 total hours 1-4 Units

Prerequisite: *Approved online application and employer placement***Advisory:** *Eligibility for ENGL-090*

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 career technical 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 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

Advisory: Student must be referred by a counselor or instructor per Title 5, 58170(e)

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

54 total hours lecture

3 Units

Advisory: Concurrent enrollment in WELD-011

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: American Iron and Steel Institute (AISI), American Society for Testing and Materials (ASTM), Society of Automotive Engineers (SAE) classification, flame cutting, welding symbols, control of distortion, and welding application. May not be repeated. SC

LMC: DA

Transfer: CSU

WELD-011 Basic Shielded Arc Welding Practice

54-162 total hours lab

1-3 Units

Advisory: WELD-010 or concurrent enrollment; eligibility for ENGL-090

This lab course is required for all beginning arc welding students. Students will practice plate welding in all positions as well as flame cutting, gouging and AIR ARC gouging to cover the minimum welding test requirements. May be repeated three times. SC

LMC: DA

Transfer: CSU

WELD-015 Basic Oxyacetylene Welding

18 total hours lecture, 54 total hours lab

2 Units

Advisory: Eligibility for ENGL-090

This course covers oxy-fuel gas welding of steel sheet, tubes and pipes in all positions; braze welding of steel and cast iron, silver brazing of ferrous and non-ferrous metals, and fusion welding of cast iron. It also includes safe operating and proper welding procedures, filler rod selection, various fuel gasses, fluxes and control of distortion. May be repeated three times. SC

LMC: DA

Transfer: CSU

WELD-016 Advanced Oxyacetylene Welding

54 total hours lab

1 Unit

Prerequisite: WELD-015

In this course students will learn advanced welding procedures required in the metal work industry. The oxyacetylene welding process will be used to weld both ferrous and non-ferrous metals, plates, sheet metal, tube and pipe. Students will gain additional proficiency in flame cutting operations using manual and machine torches. May be repeated three times. SC

LMC: DA

Transfer: CSU

WELD-021 Advanced Arc Welding Practice

54-162 total hours lab

1-3 Units

Advisory: WELD-010 and WELD-011; concurrent enrollment in WELD-040 or previous welding experience; eligibility for ENGL-090

This course is designed for intermediate to advanced welding students. This course covers layout, fitting tacking, and welding in all positions for place welding on a vee-groove configuration with a back-up bar, which will pass the visual inspection and the bend or x-ray test. May be repeated three times. SC

LMC: DA

Transfer: CSU

WELD-031 TIG, MIG and FCA Welding Practice

54-162 total hours lab

1-3 Units

Advisory: WELD-010 or concurrent enrollment; eligibility of ENGL-090

This course is designed to develop welding skills using the GTAW, GMAW and FCAW processes required for entry into the trade. It includes welding steel, stainless steel, and aluminum in light gauge metals in all positions. This course will cover setting up, calibrating, adjusting, operating and shutting down the equipment. May be repeated three times. SC

LMC: DA

Transfer: CSU

WELD-035 Blueprint Reading for Welders

54 total hours lecture 3 Units

Advisory: WELD-010, MATH-007; eligibility for ENGL-090

This course is designed for both beginning welding students or experienced welders who need blueprint reading skill. It covers basic orthographic principles of three-view projections, dimensioning, sections, and freehand sketching. Emphasis placed on plate and structural fabrication, print reading, interpretation of the American Welding Society (AWS) Welding Symbols, and cost estimating of materials for fabrication. May not be repeated. SC

LMC: DA**Transfer:** CSU**WELD-040 TIG, MIG and FCA Welding Theory**

54 total hours lecture 3 Units

Advisory: WELD-010; eligibility for ENGL-090

This course covers welding processes on gas tungsten arc, gas metal arc, and flux cored processes. Also included is a content about filler wires, gases for ferrous and non-ferrous metals, hard facing, welding design, welding codes, nondestructive, and how to make up a resume for employment in the welding trade. May not be repeated. SC

LMC: DA**Transfer:** CSU**WELD-041 Pipe Welding Practice**

54-162 total hours lab 1-3 Units

Advisory: WELD-011 or concurrent enrollment; WELD-021 and WELD-031 or welding experience; eligibility for ENGL-090

This is an advanced welding course that includes plate welding in all positions (flat, horizontal, vertical, skew with 45 degree angle, and overhead). Students use the 1G, 2G, 5G, 6G, and 6GR positions. Students will focus on one process of welding per semester of SMAW, GMAW, GTAW, and FCAW. May be repeated three times. SC

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**

60-300 total hours 1-4 Units

Prerequisite: Approved online application**Advisory:** Eligibility for ENGL-090

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**

60-300 total hours 1-4 Units

Prerequisite: Approved online application and employer placement**Advisory:** Eligibility for ENGL-090

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 career technical 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 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 |
| Cutler, Bruce | Vice President, Administrative Services |
| 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 |

Los Medanos Faculty Emeriti

| | |
|--------------------------|---------------------------|
| Arenivar, Olga | Speech |
| Bachmann, Nancy | Music |
| Bank, Judith | English |
| Boisvert, Kate | Astronomy |
| Bolds, Edwin H. | Librarian |
| Boschetti, Van | Physical Education |
| Boucher, Gail | Anthropology |
| Brown, Brendan | Mathematics |
| Cameron, Jasper C. | English |
| Campis, Carmen | Business |
| Castillo, Sandra | Nursing |
| 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 |
| Fisher, Dorothy | Counseling |
| Frates, Jeffrey | Computer Science |
| Gallup, Terry | Nursing |
| Garfield, Leo | Administration of Justice |
| Glennon, James | Administration of Justice |
| Goldstein, Barry | Business |
| Gonzales, Pablo | English |
| Gottlieb, Phillip | Counseling |
| Hagelin, Christine | Biology |
| Hansen, Paul | Biology |
| Harmon, Lorne | Administration of Justice |
| Hunnicut, Dora B. (Jane) | Geography |
| Janes, Donal | Computer Science |
| Jacobs, Stan J. | Language Arts |
| Johnson, Sharon | Nursing |
| Jorgensen, Diane | Administration of Justice |
| Juarez, Angel | Chemistry |
| Kishi, Thais | Psychology |
| Leung, Shirley | Business |

| | |
|-------------------|---|
| Knott, Veronica | Senior Dean of Occupational Education |
| Maynes, Lindy | Executive Director, LMC Foundation |
| McDonald, Diana | Dean of Occupational Education |
| McKeown, Joseph | Assistant Dean of Administration of Justice |
| McNulty, James | Buildings & Grounds Manager |
| Medlinsky, David | Senior Dean of Instructional Technology |
| Rodriguez, Gil | Dean of Liberal Arts and Sciences |
| Skeen, Esther | Police Services Lieutenant |
| Taylor, Jim | Buildings & Grounds Manager |
| Torres, Felipe | Director of Special Programs |
| Williams, Carlton | Dean of Social and Economic Studies |
| Wilson, Glenn | Custodial Manager |

| | |
|-----------------------|--------------------------------|
| 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 |
| McCaughey, Cathy | Nursing |
| McCluskey, William F. | Business |
| McDaniel, Nancy | Nursing |
| McKnight, Don | Computer Science |
| Miller, Michael J. | Automotive & Engine Technology |
| Moore, Harold | Management |
| Murray, Eva | Nursing |
| Nakaji, Dave | Physics |
| Nuxoll, Mary Jo | Nursing |
| Ochoa, Andres | Welding |
| Olsen, Janet | Business |
| Potter, Wayne | Welding |
| Puccioni, Madeline | English |
| Rodriguez, Carmen | Social Science |
| Sansen, Oliver | Administration of Justice |
| Shaffer, Harriet K. | Child Development |
| Siino, Hope J. | Business |
| Simpson, Linda | Librarian |
| Smith, Erma | Psychology |
| 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 |
| Willett, Kathleen | Biology |
| 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 | |
| Armendariz, Rosa | Humanistic Studies |
| 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; Ph.D., University for Integrative Learning | |
| 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 | |
| Becker, Michael | Technology Systems Manager |
| B.A., Occidental College; B.S., California Institute of Technology; M.S., Univ of Cal, Berkeley | |
| Belman, David | Academic/Student Services Manager |
| B.A., M.A., Univ of the Pacific | |
| Benford, Jeffrey | Academic/Student Services Manager-EOP&S |
| B.A., Morehouse College; M. Div., Interdenominational Theological Center | |
| 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 | |
| Bonner, Jeanne | Physics |
| B.S., Univ Cal, Davis | |
| Cabral, Scott | Astronomy |
| B.A., Univ Cal, Berkeley; M.S., Cal State Univ, San Francisco | |
| Caldwell, Tselane | English |
| B.A., M.A., Univ Cal, Berkeley | |
| Canto-Williams, Loretta | Director of Financial Aid |
| B.A., Cal State Univ, East Bay | |
| Cea, Jorge | Academic/Student Services Manager-Outreach |
| 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 | Engineering/Physics |
| B.S., Massachusetts Institute of Technology (MIT); M.S., Ph.D, Univ Cal, San Diego | |
| Cruz, William | Manufacturing Technology |
| B.E., The Cooper Union School of Engineering; M.E., University of Virginia | |
| Davi, Estelle, R. | Psychology |
| B.A., M.A., Cal State Univ, San Francisco | |
| 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., US Sports Academy | |
| Doob, Peter | Mathematics |
| B.A, Knox College; M.S., Northwestern Univ | |

Faculty and Staff

| | |
|---|---------------------------------------|
| Dorritie, Frank | Recording Arts |
| B.A., Manhattan College | |
| Estrada, Robert | Bookstore Manager |
| B.A., Univ Cal, Berkeley | |
| Edwards, Barry | Custodial Manager |
| Fracisco, William | Counselor |
| A.A., Contra Costa College; B.A., M.S.W., Cal State Univ, San Francisco | |
| Garcia, Nicholas | Drama |
| B.A., Adams State College; M.F.A., Univ of Iowa | |
| Gardner, Kasey | Speech Communication |
| B.A., Western Kentucky Univ; M.A., Univ of the Pacific | |
| Giambattista, Louie | Computer Science |
| A.A., City College of S.F.; B.A., Univ Cal, Berkeley; MBA, Southern Methodist University | |
| 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; M.A., St. Mary's College | |
| Gravert, Dennis | Chemistry |
| B.S., Santa Clara Univ; Ph.D., Stanford Univ | |
| Grillo, A. Michael | Fire Technology |
| B.S., Cal State Univ, Long Beach | |
| Gunder, Paula | ESL |
| B.A., Univ of Washington; M.A., Monterey Institute of International Studies; Ph.D., Univ of Arizona | |
| Guerrero, Blas | Dean of Student Development |
| B.A., UC San Diego; M.A., Ph.D., Univ Cal, Berkeley | |
| Gutierrez, Ana | English |
| B.A., Univ Cal, Berkeley; M.S., National University | |
| Hailey, Anthony | Administration of Justice |
| B.A., Univ of the State of New York; M.A., San Jose State Univ. | |
| Henderson, Silvester | Music |
| B.A., M.A., Cal State Univ, San Francisco | |
| Hernandez, Carol | MESA Program Director |
| B.A., Emory University; M.N.S., Univ of Idaho | |
| 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 | |
| Holt, Russell | Buildings and Grounds Manager |
| A.A., Diablo Valley College | |
| Holtmann, Erich | Mathematics |
| B.S., M.S., Ph.D., Univ Cal, Berkeley | |
| Horan, Kevin | Executive Dean, Brentwood |
| B.A., St. Mary's College; M.S., Western Illinois Univ; Ed.D, St. Mary's College | |
| Hsieh, Durwynne | Biological Science |
| B.S., Mass Institute of Technology; Ph.D., Univ Cal, Berkeley | |
| Huddleston, Ryan | Lieutenant, College Police and Safety |
| 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 | |
| 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 | Counselor/STEM Counselor |
| B.A., New York Univ; M.A., Cal State Univ, East Bay | |
| Kratochvil, Robert | President |
| B.A., M.A., Univ of Southern California | |
| Landers, Mara | Mathematics |
| B.A., Swarthmore College; M.A., Ph.D., Univ Cal, Berkeley | |

| | |
|---|--|
| Lewis, Mark | Biological Science |
| B.A., Ph.D., Univ Cal, Berkeley | |
| Liubicich, Danielle | Biological Science |
| B.S., Fairfield Univ; B.S., Univ of Queensland, Australia; M.S., Univ of Chicago; Ph.D., Univ Cal, Berkeley | |
| Livingston, Richard | Dean |
| A.A., Sierra College; B.A., 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.N., Univ Cal, 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 | |
| Meyer, Joseph | Welding |
| A.S., College of San Mateo; B.A., Cal Poly State Univ, San Luis Obispo | |
| 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.; Ed.D., St. Mary's College | |
| Moriel, Daniel | Philosophy |
| A.A., Southwestern College; B.A., Cal State Univ, San Diego; M.A., Ph.D., Univ Cal, San Diego | |
| Moy, Frances | Transfer Counselor |
| B.A., M.A., Cal State Univ, San Francisco | |
| Nakaji, Karen | English |
| B.A., Cal State Univ, East Bay; M.A., Holy Names College | |
| Nash, Bradford | Business |
| B.A., Cal State Univ, Fresno; M.S., Cal State Univ, Chico | |
| Nasworthy, Cecil | Electromechanical Technology |
| B.S., Georgia Southern College | |
| Newman, Gail | Senior Dean, Student Services |
| 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; M.S., Cal State Univ, East Bay | |
| Norris, Michael | Mathematics |
| B.S., US Air Force Academy; M.S., Univ of Arizona; M.A., Graduate Theological Union | |
| Ortiz, Earl | Automotive |
| A.S., Los Medanos College | |
| Padilla-Wilson, Liana | Anthropology |
| B.A., St. Mary's College; M.A., Arizona State University | |
| Park, Christine | Technical Services Librarian |
| B.A., Benoit College; M.L.I.S., San Jose State Univ | |
| Pearman, Elizabeth | Business |
| B.S., State College at Framingham, Massachusetts | |
| Pedersen, Ryan | Mathematics |
| B.A./B.S., Univ of the Pacific; M.S., Univ of Colorado | |
| 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 | |
| Ralston, Coleen | Physical Education |
| B.S., Cal State Univ, San Francisco; M.S., Cal State Univ, East Bay | |
| Ramirez, Sophia | Counselor/DSP&S Counselor |
| B.A., M.S., Cal State Univ, San Francisco; Ed.D. University of San Francisco | |
| Richards, Virginia | DSP&S Coordinator/Learning Disabilities Specialist |
| B.A. Univ Cal Irvine; M.A., Chapman Univ | |
| Rickman, Jancy | Biological Science |
| B.S., Emerson College; M.A., Cal State Univ, San Francisco | |
| 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 | |

Faculty and Staff

| | |
|---|--|
| Sample III, Alexander | Sociology |
| B.A., Ohio State Univ; M.A., Cal State Univ, San Francisco | |
| Schweickert, Mitch | Chemistry |
| B.A., Univ Cal, Santa Barbara; M.S., Univ Cal, Davis | |
| Shrieve, Elizabeth | Nursing |
| B.F.A., Tufts Univ; B.S.N., Univ San Francisco; M.S., Univ Cal, San Francisco | |
| Smith, Clayton | Computer Science |
| B.A., Univ Cal, Berkeley | |
| Smith, Sandra | Director of Business Services |
| B.A., San Jose State Univ; M.A., Fairleigh Dickinson Univ | |
| Snell, Myra | Mathematics |
| B.A., Univ Texas-Austin; M.A., Univ Cal, Berkeley | |
| Snow, Lucy | Art |
| B.S., Tufts 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 | |
| Stricker, Matthew | Mathematics |
| B.S., Univ of the Pacific; M.A., Texas A&M Univ | |
| Subia, Laura | EOP&S Counselor |
| B.A., Univ Cal, Berkeley; M.S., Cal State Univ, San Francisco | |
| Toruno-Conley, Sara | English |
| B.A., Cal State Univ, San Marcos; M.F.A., Univ of Cal, Riverside | |
| Townsend, Janice | Child Development |
| B.A., M.A., Univ Cal, Santa Barbara | |
| Tuttle, Maria | English/Puente |
| B.F.A. Art Academy of Cincinnati; M.A., 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; M.A., Cal State Univ, San Francisco | |
| Wagener, J. Pat | Mathematics |
| B.S., St. Edward's Univ; M.S., Univ of Wisconsin-Superior | |
| Wellbrook, Sharon | Biological Science |
| B.A., Univ Cal, Santa Cruz; D.C., Palmer College of Chiropractic | |
| Wentworth, Kimberly | Librarian, Electronic/Technical Services |
| B.S., Clemson Univ; 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 | |
| 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., HanzhouUniv - 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 | |

Adjunct professors are listed online at www.losmedanos.edu/adjunct.

Staff

| | |
|--|--|
| Acevedo, Claudia | Scholarship Program Coordinator |
| A.A., Skyline College; 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 | |
| Archaga, Teresea | Career Development Services Coordinator |
| A.A., Los Medanos College; B.A. Cal State University, East Bay; M.A., John F. Kennedy Univ | |
| Asher, Don | Laboratory Equipment Technician II |
| A.A., Los Medanos College | |
| Benzler, Camme | Senior Administrative Assistant |
| Benzler, Sylvia | Administrative Assistant |
| A.A., Los Medanos College; A.A.S, Nassau Community College | |
| Betz, Carole | Counselor Assistant |
| Biggs, Glen | Grounds Worker/Gardener II |
| Bransford, Michael | Equipment Maintenance Worker |
| Bridges, John | Custodian II |
| Carlson, Allison | Math Laboratory Coordinator |
| A.S., Los Medanos College; B.S., Cal State Univ, East Bay | |
| Chapman, Eloine | Senior Web Administrator |
| A.A., Los Medanos College | |
| Chen, San Mei | Custodian II |
| Cuara, Juan | Inventory and Receiving Clerk |
| Cullar, Katherine | Administrative Assistant |
| Davies, Daniel | Custodian II |
| A.S., Los Medanos College | |
| Ellsworth, Ellen | Customer Services Clerk |
| Fantuzzi, Angela | Family Life Education Specialist |
| B.A., Pontifical Catholic Univ of Chile; M.A., Cal State Univ, East Bay | |
| Fay, Jenifer | Science Laboratory Technician II |
| B.A., Cal State Univ, Sonoma | |
| Ferguson, Diane | Senior Admissions/Records Assistant |
| Flaggs, Yasmine | Admissions/Records Assistant I |
| Flores Zelaya, Reynaldo | Custodian II |
| Fonseca, Catherine | Student Services and Instructional Support Coordinator |
| B.A., Cal State Univ, San Jose | |
| Garcia, Jennifer | Instructional Assistant |
| A.A., Los Medanos College | |
| Goldenberg, Steven | Science Laboratory Technician II |
| B.S., M.S., Ph.D., State Univ of New York | |
| Gomez, Leticia | Instructional Assistant |
| A.A., Los Medanos College | |
| Gonzalez, Gustavo | Campus Facilities Assistant |
| Gonzalez, Leticia | Instructional Assistant |
| Greene, Letta | Student Services and Instructional Support Coordinator–Brentwood |
| B.A., Univ Cal, Riverside | |
| Griffin, Kathleen | College Human Resources Assistant |
| A.S., Alameda College | |
| Hall, Rikki | Admissions/Records Assistant II |
| A.A., Diablo Valley College | |
| Hampton, Janelle | Equipment Maintenance Worker |
| Harrison, Robin | Student Services and Instructional Support Coordinator |
| Hertstein, Margaret | Administrative Assistant |
| A.A., Los Medanos College | |
| Holiday, Melissa | Custodian II |
| Hotton, Michael | Senior Parking Services Officer |
| Jackson, Melissa | Student Services and Instructional Support Coordinator |
| A.S., Cerro Coso Community College; B.A., Pacific Oaks College | |
| Kohler, Linda | Senior Accountant |
| A.A., Diablo Valley College | |

Faculty and Staff

| | |
|--|--|
| Kolthoff, James | Alternative Media Specialist |
| A.A., A.S., Los Medanos College; B.A., Cal State Univ, East Bay | |
| Lares, Imelda | Admissions/Records Assistant II |
| A.A., Diablo Valley College | |
| Lawrence, Demetria | Student Services and Instructional Support Coordinator |
| A.A., Los Medanos College; B.A., 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 Laboratory Coordinator - Brentwood |
| A.A., Diablo Valley College; B.A. Cal State Univ, East Bay | |
| Macias, Antonio | Building Maintenance Worker |
| Maniscalco, Linda | Senior Account Clerk- Cashier |
| 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 | |
| McAlpin, Rashaad | Electronics Technician |
| A.A.S., ITT Technical Institute | |
| McDermott, John | Athletic Equipment Manager II |
| B.A., Sonoma State Univ; M.S.S., U.S. Sports Academy | |
| 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 | |
| McQuaid, Michelle | Bookstore Supply Buyer |
| A.A., Lake Tahoe Community College; A.A., Los Medanos College | |
| Mills, Jr., George | EOP&S Assistant |
| A.A., Los Medanos College; B.A., Cal State Univ, East Bay | |
| Mills, Jody | Senior Computer and 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 |
| Mora, Guadalupe | Lead Custodian |
| Muniz, Noel | Custodian II |
| Nelson, George | Maintenance Mechanic |
| Nogarr, Justin | Offset Technician II |
| 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 | |
| Oleski, David | Police Services Officer |
| Oleson, Mary | Senior Administrative Secretary |
| A.A., Los Medanos College | |
| Olgin, Anthony | Custodian II |
| Origunwa, Adeirawo | Administrative Assistant |
| B.A., Univ Cal, Los Angeles | |
| Ornelas, Janine | Police Services Assistant/Dispatcher |
| A.S., Los Medanos College | |
| Ortiz, Elaine | Computer and Network Specialist |
| A.S., Heald College, School of Technology | |
| 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 and Receiving Clerk |
| A.S., Heald College | |
| Raumer, Rodney | Computer and Network Specialist |
| A.A., A.S., Contra Costa College | |
| Robertson, Leetha | Senior Payroll Clerk |
| B.S., Grambling State Univ | |
| Rock-Brosius, Mary | Science Laboratory Coordinator |
| A.A., Solano Community College; B.S., Univ Cal, Davis | |

| | |
|---|--|
| Rodrigues, Leticia | Senior Administrative Secretary |
| Rodriguez, Faidra | Financial Aid Assistant II |
| Rogers, Carole | Counselor Assistant |
| A.A., Los Medanos College; B.A., Univ of Cal, Berkeley | |
| Sanchez, Eric | Instructional Assistant |
| B.F.A., Cal State Univ, East Bay; M.F.A., San Francisco State Univ | |
| Sanders, Tara Dale | Transfer Center Coordinator |
| B.A., University of Redlands | |
| Sano, David | Police Services Officer |
| Saw, Eng | Web Applications Specialist |
| B.S., Loma Linda Univ; B.S., Cal State Univ, San Bernadino; M.S., Cal State Univ, Fullerton | |
| Schall, John | Media Design Specialist |
| B.A., Cal State Univ, San Jose; B.F.A., California College of the Arts | |
| 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 | Admissions/Records Assistant II |
| B.A., Cal State Univ, San Jose | |
| Spagnol, James | Computer Center Technician II |
| A.A., Los Medanos College | |
| Stanton, Karen | Computer Center Technician II |
| B.S., M.S., Univ of Phoenix | |
| Starkie, Ann | Lead Account Clerk |
| Stewart, Jamila | PBX Operator-Receptionist |
| Terstegge, Ted | Police Services Officer |
| Tiscareno, Spring | Custodian II |
| Tolleson, Constance | Administrative Assistant |
| A.S., Honolulu Community College, B.S., Cal State Poly Univ | |
| Turner, Reginald | Employment Development Services Specialist |
| A.A. Wilkes Community College | |
| Tutt, Arvella | Book Buyer |
| A.A., Los Medanos College; B.A., San Francisco State Univ | |
| Valdez, Michael | Math Laboratory Coordinator |
| B.S., Univ of San Francisco; M.S., Univ Cal, Irvine | |
| Valencia, Steven | Custodian II |
| Villegas, Grace | Scheduling Specialist |
| Vu, Johnny | Custodian II |
| Wagner, Gilbert | Custodian II |
| Weikum, Sherry | Senior Library Assistant |
| A.A., A.S., Los Medanos College | |
| West, Michael | Reprographics Production Coordinator |
| White, Andre | Grounds Worker/Gardener II |
| 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 |
|---|-----------------------|
| Admissions & Records Office..... | 7500 |
| Assessment Center..... | 3252 |
| Athletic Programs..... | 3332 |
| AV/Media Services..... | 3454 |
| Bookstore..... | 3143 or 439-2056 |
| Brentwood Center..... | 513-1625 |
| C.A.R.E. Program..... | 3138/3114 |
| Career Center..... | 3252 |
| Center for Academic Support..... | 3176 |
| Child Study Center..... | 3197/3198 |
| Counseling Appointments..... | 3334 |
| Disabled Students High-Tech Center..... | 3279 |
| Disabled Support Services • Learning/Physical (TDD)..... | 3133/3353 439-5709 |
| EOP&S Extended Opportunity Programs & Services..... | 3138/3117/3114 |
| Financial Aid..... | 3139/3902/3291/3292 |
| Fire/EMS..... | Fire 3274 EMS 3352 |
| Foundation Office..... | 3215 |
| Information Center..... | 3422 |
| Instructional Deans' Offices..... | 3105 |
| Library Services/Learning Resource Center/General Computer Use..... | 3320/3275 |
| Lost and Found..... | 3228 |
| Marketing/Public Relations..... | 3242 |
| Matriculation Services—College Orientations..... | 3317 |
| Nursing Programs/Allied Health (CPR)..... | 3286 |
| Music and Recording Arts..... | 439-0200 |
| Police Services/Lost and Found..... | 3228 |
| Cashier's Office..... | 3111 |
| Scholarship Information..... | 3130 |
| Student Government/Activities..... | 3266/3199 |
| Student Outreach..... | 3383 |
| Transfer Center..... | 3124 |
| Veterans Benefits..... | 3129 |

Instructional Labs

| | |
|--------------------|-----------|
| Appliance..... | 3341 |
| Art..... | 3384 |
| Biology..... | 3410 |
| Business..... | 3202 |
| English-LAB..... | 3263 |
| ETEC..... | 3457 |
| Journalism..... | 3125/3359 |
| Math Tutorial..... | 3326 |
| MIDI (Music)..... | 3385 |
| PTEC..... | 3775 |

Instructional Deans' Offices

| | |
|------------------------------|-----------|
| Liberal Arts & Sciences..... | 3105/3272 |
| Occupational Education..... | 3105/3272 |

Student Services Deans' Offices

| | |
|--|------|
| Student Development/Matriculation..... | 3317 |
| Student Services (General)..... | 3364 |

Individual instructors may be contacted at their campus phone extensions.

Glossary of Terms

A.A. Degree

Associate of 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 of 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 11.

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.

Pass/No Pass (P/NP)

Some courses are designated with P/NP, which indicates that students may earn a passing grade (P = satisfactory or better) or no pass (NP = less than satisfactory) grade. No letter grade will be awarded in these courses.

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 "P", "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 ("NP", "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 pass/no pass (P/NP) 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.

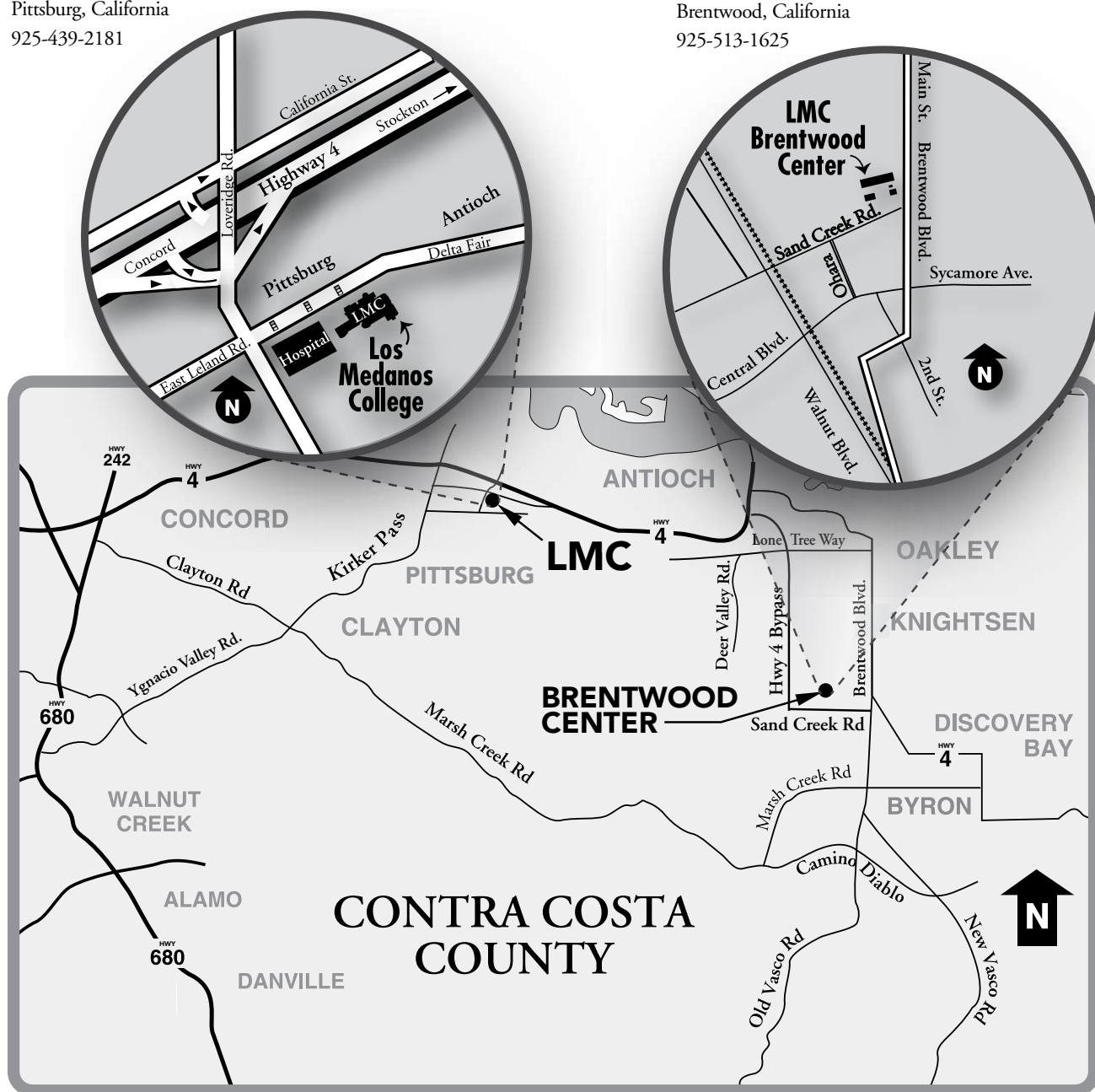
Directions to Los Medanos College

LOS MEDANOS COLLEGE

2700 East Leland Road
Pittsburg, California
925-439-2181

BRENTWOOD CENTER

101A Sand Creek Road
Brentwood, California
925-513-1625



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www.losmedanos.edu



Use this QR code to access
the maps link using your
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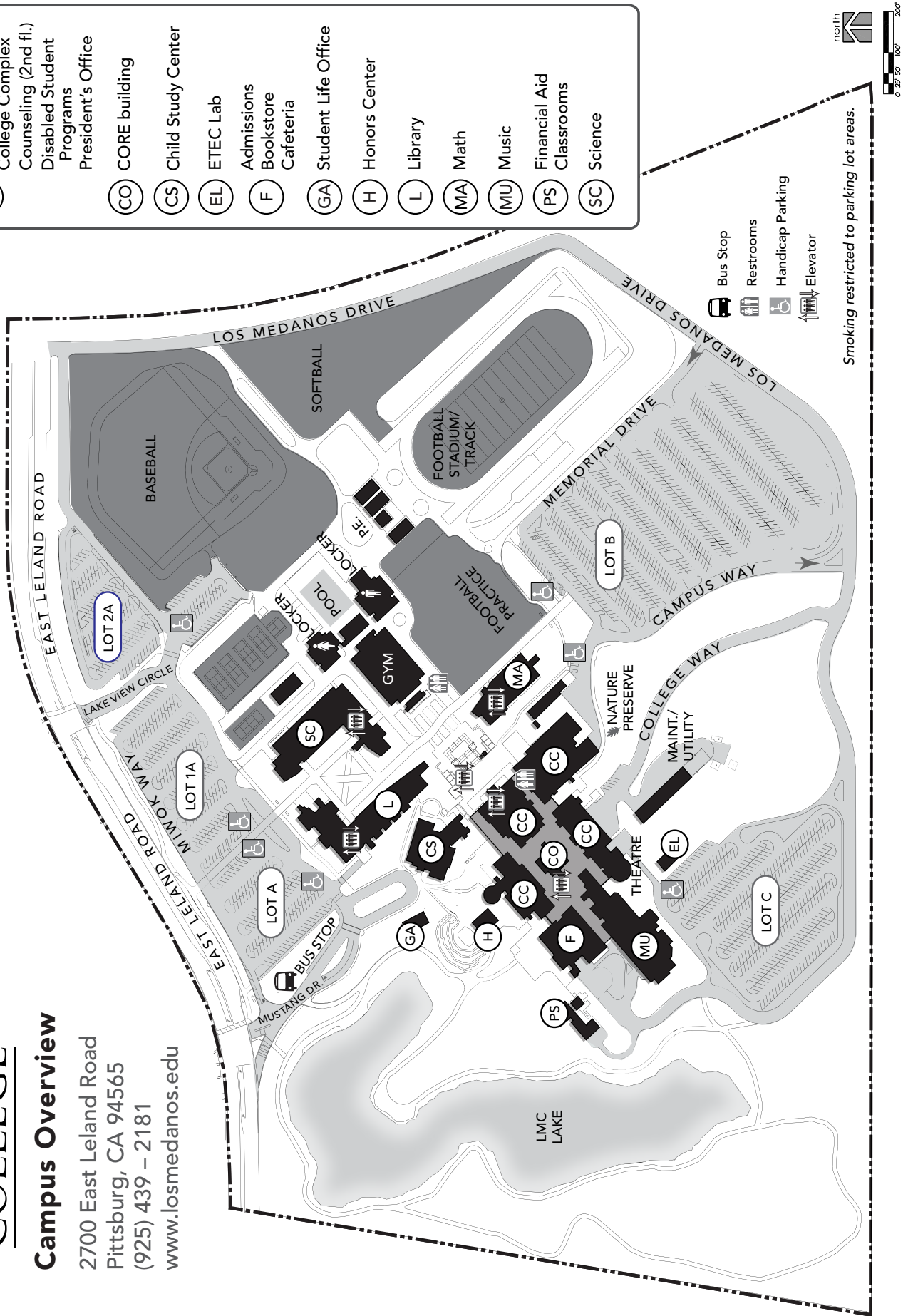
LOS MEDANOS COLLEGE

Campus Overview

2700 East Leland Road
Pittsburg, CA 94565
(925) 439 – 2181
www.losmedanos.edu

Building Legend

- (CC) Business Office
College Complex
Counseling (2nd fl.)
Disabled Student Programs
President's Office
- (CO) CORE building
- (CS) Child Study Center
- (EL) ETEC Lab
- (F) Admissions
Bookstore
Cafeteria
- (GA) Student Life Office
- (H) Honors Center
- (L) Library
- (MA) Math
- (MU) Music
- (PS) Financial Aid
Classrooms
- (SC) Science





LOS MEDANOS
COLLEGE

LET LMC SUPPORT



Brentwood Math Lab Library MATH LAB Center For Academic Support
Drop-in Computer Lab LIBRARY Math Lab DROP-IN COMPUTER LAB MATH LAB
Academic Support MATH LAB Center For Academic Support LIBRARY Biology Lab
OD MATH LAB DROP-IN COMPUTER LAB Drop-in Computer Lab BIOLOGY LAB Drop-in Computer Lab
Biology Lab MATH LAB CENTER FOR ACADEMIC SUPPORT BRENTWOOD MATH LAB
CENTER FOR ACADEMIC SUPPORT LIBRARY Math Lab
Computer Lab Brentwood Math Lab MATH LAB Center For Academic Support Brentwood Math Lab LIBRARY
Biology Lab BRENTWOOD MATH LAB Center For Academic Support
H LAB Drop-in Computer Lab CENTER FOR ACADEMIC SUPPORT Biology Lab
Drop-in Computer Lab Math Lab Drop-in Computer Lab MATH LAB
LIBRARY
Center For Academic Support



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CATALOG

Degrees of Success



**LOS MEDANOS
COLLEGE**

MAIN CAMPUS

2700 East Leland Road, Pittsburg, CA 94565
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BRENTWOOD CENTER

101A Sand Creek Road, Brentwood, CA 94513
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