Contra Costa Community College District

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Custodial Manager ............................................ Barry Edwards
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General Information

2014-2015 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, an institutional accrediting body recognized by the Commission on Recognition of Postsecondary Accreditation and the U.S. Department of Education. www.accjc.org
(415) 506-0234

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.
California State Colleges and Universities
Commission on Peace Officer Standards and Training
Contra Costa County Emergency Medical Services Office
Small Business Administration
State Board of Registered Nursing
State Board of Vocational Nursing
University of California

Telephone

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

Mission Statement

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

Non-Discrimination Policy

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

Alternative Media

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

Instruction Begins ........................................................... May 22
Last day to apply for summer graduation ................................ July 1
Independence Day—Legal Holiday ....................................... July 4
End of Summer Intersession ................................................. Aug 14

Fall Semester 2014

Begin accepting applications for Fall Semester .......................... Feb 15
Course Enrollment .................................................................. See Fall Schedule of Courses
Instruction Begins ............................................................... Aug 15
Last day to add and drop full term classes with eligibility for fee refund or credit .......... Aug 28
Labor Day—Legal Holiday .................................................. Sept 1
Last day to drop for semester-length courses to avoid “W” on transcript if dropping in person ...................... Sept 5
Last day to drop for semester-length courses to avoid “W” on transcript if dropping on WebAdvisor .......................... Sept 7
Last day to petition for pass/no pass option (SC) for semester-length courses ............ Sept 12
Native American Day—Holiday ........................................... Sept 26
Last day to apply for the fall graduation .................................... Oct 1
Veteran’s Day—Legal Holiday ............................................ Nov 10
Last day to drop semester-length courses .................................. Nov 21
Thanksgiving—Legal and Board Holidays ............................. Nov 27 – Nov 30
Last day of instruction and final exams ..................................... Dec 17

Spring Semester 2015

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 19
Last day to add full term classes ............................................. Jan 23
Last day to drop full term classes with eligibility for fee refund or credit .................. Jan 25
Last day to drop for semester-length courses to avoid “W” on transcript if dropping in person ...................... Jan 30
Last day to drop for semester-length courses to avoid “W” on transcript if dropping on WebAdvisor .......................... Feb 1
Last day to petition for pass/no pass option (SC) for semester-length courses ............ Feb 6
Lincoln’s Birthday—Legal Holiday ........................................ Feb 13
Washington’s Birthday—Legal Holiday .................................. Feb 16
Last day to apply for spring graduation ..................................... March 2
Spring Recess ................................................................. March 30 – April 5
Last day to drop for semester-length courses ................................ April 24
Last day of instruction—Graduation ........................................ May 20
Memorial Day—Legal Holiday ............................................. May 25
About the College

Contra Costa Community College District

A Brief History
The Contra Costa Community College District was established by a vote of the people on December 14, 1948. With boundaries roughly equal to those of Contra Costa County, the district covers 686 square miles, making it the eighth largest community college district in California. It serves and is supported by 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  
925-473-7317

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.  
www.accjc.org

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 and 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 the Director of Admissions & Records.
   • Special admit students 14-15 years of age must complete an online orientation and an Age Waiver Form and request approval from the Director of Admissions & Records.
   • 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.
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) 473-7500.

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.
4) Students are required to purchase district medical insurance

International students are required to purchase health insurance. See website for more information. International students must pay a nonresident tuition fee, in addition to enrollment fees.

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

Registration and Course Enrollment

To register and enroll in courses at Los Medanos College, follow these steps. Not only are the steps required, but they will support you in having a successful academic experience.

1) All students new to Los Medanos College, as well as those who have missed two or more consecutive semesters, must complete an application to Admissions using our online application. Applications for the Summer and Fall semesters are accepted beginning February 15 and for the Spring semester beginning October 1.

2) New students applying to Los Medanos College are required to take the college assessment tests, attend an orientation, and develop an Educational Plan. Students can complete their orientation and develop an Educational Plan by attending a “New Student Workshop” which includes a counseling component prior to registration. Students choosing not to complete an assessment, orientation, or Educational Plan will not receive priority registration while enrolled at the college. Students who have taken assessment tests at another college must bring results to the Assessment Center 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).
5) Auditing or "sitting-in" classes is not allowed. All students who attend a class must complete the enrollment process for that class. Grades and/or credit will not be given to students who are not officially enrolled.

Registering Online
All registration takes place 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.

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.

Evening, Weekend and Online 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 Policy
It is the policy of the Contra Costa Community College District and Los Medanos College to provide an educational and employment environment in which no person shall be unlawfully subject to discrimination on the basis of ethnic group identification, national origin, religion, age, sex, sexual orientation, gender, race, color, medical condition, ancestry, marital status or physical or mental disability or based on association with a person or group with one or more of these actual or perceived characteristics. This holds true for all students who are interested in participating in educational programs and/or extracurricular activities. Unlawful harassment, discrimination or denial of access of any employee/student with regard to ethnic group identification, national origin, religion, age, sex, race, color, ancestry, sexual orientation, or physical or mental 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/Complaints on Basis of Disability
Inquiries regarding access, treatment, or employment on the basis of disability, should be directed to the College Section 504/ADA Coordinator, Senior Dean of Student Services, Los Medanos College, 2700 East Leland Rd., Pittsburg, CA 94565, (925) 473-7421, or TDD (925) 439-5709.

Inquiries/Complaint Procedure
Students who have questions about the procedures for filing an unlawful discrimination or harassment complaint should contact the college Title IX Coordinator/Section 504 Coordinator, the Senior Dean of Student Services. The Senior Dean will provide information about Board Policy 2001 and Human Resource Procedure 1040.07 and the student’s right to file a discrimination complaint. Students may follow the informal or formal complaint procedures. The Senior Dean can be reached by calling (925) 473-7421 or email, gnewman@losmedanos.edu.

Informal Procedure
Student-complainants have the option of following the informal complaint procedure, working with the Senior Dean of Student Services. The Senior Dean will meet with the student-complainant, the respondent, and other appropriate college personnel to attempt an informal resolution within 30 calendar days of receiving the complaint. A record of the complaint and resolution will be maintained.

Formal Procedure
Students also have the 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 of Human Resources. Upon receipt of a formal complaint, the District will immediately notify the State Chancellor’s Office. Within 10 calendar days of receipt, the District will 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 State Chancellor’s 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.

Contact: Gail Newman, Senior Dean, Student Services
Email: gnewman@losmedanos.edu
Phone: (925) 473-7421

Requests for the elevation and addition of sports may also be directed to Gail Newman.

Reglamento de no discriminiación
El Distrito de Colegios de la Comunidad de Contra Costa y el Colegio de Los Medanos por ley están comprometidos a ofrecer un ambiente con oportunidades de igualdad en programas educacionales y de empleo. El colegio no discrimina o apoya discriminación fundamentada en identificación de grupo étnico, origen nacional, religión, edad, sexo, orientación sexual, raza, color de piel, condición médica, ancestro, estado marital,
incapacidad física o mental en cualquier nivel basado o asociado con personas y grupos con una o más de estas cualidades. Esto también aplica a todos los estudiantes que están interesados en participar en programas o actividades colegiales y/o actividades extracurriculares. Acoso ilegal, discriminación, denegación de acceso de cualquier empleado o estudiante con referencia a identificación a grupo étnico, origen nacional, religión, edad, sexo, raza, color de piel, ancestro, orientación sexual, Incapacidad física o mental es estrictamente prohibido. La falta de inglés no es impedimento para admisión o participación en los programas educacionales de este colegio.

Investigaciones en referencia sobre el cumplimiento y procedimientos reglamentarios pueden ser dirigidos a Los Medanos College Title IX Officer and Section 504/ADA Coordinador:

Contacto: Gail Newman, Senior Dean, Student Services.
(Decano, de Servicios Estudiantiles.)
Correo electrónico: gnewman@losmedanos.edu
Teléfono: (925)-473-7421

Investigaciones/Cumplimiento del Proceso
Los estudiantes que tengan preguntas o sientan que han sido discriminados pueden completar el procedimiento apropiado de denuncias sobre; reglamento de discriminación ilegal o acoso sexual, deben de notificar al Colegio Titulo IX Coordinador/Sección 504 Coordinador, Al Decano de Servicios Estudiantiles (Senior Dean of Student Services.) El Decano proporcionará información acerca la ley y la póliza del 2001, el procedimiento de Recursos Humanos 1040.07 y los derechos del estudiante en como documentar la queja de discriminación. Los estudiantes pueden seguir el procedimiento de quejas informal o formal. El Decano puede ser localizado por teléfono al (925) 473-7421 o por correo electrónico gnewman@losmedanos.edu.

Proceso Informal
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

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 two consecutive weeks of lab or lecture
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) 473-7554.

**Final Grades**

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

**Honors Status**

Students who achieve an overall grade point average of 3.5 or better at the time of graduation are recognized with honors status. All transcripts used in the degree or certificate will be used in the GPA calculation. 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.

**Evaluvative Symbols/Grading Scale**

<table>
<thead>
<tr>
<th>SYMBOL AND DEFINITION</th>
<th>GRADE POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent</td>
</tr>
<tr>
<td>B</td>
<td>Good</td>
</tr>
<tr>
<td>C</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>D</td>
<td>Passing, less than satisfactory</td>
</tr>
<tr>
<td>F</td>
<td>Failing</td>
</tr>
<tr>
<td>P</td>
<td>Passing (at least satisfactory — C or better — units awarded not counted in GPA).</td>
</tr>
<tr>
<td>NP</td>
<td>No Pass (less than satisfactory or failing — units not counted in GPA).</td>
</tr>
</tbody>
</table>

**Pass/No Pass Grade Option**

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

Selected courses have been labeled with “SC” to indicate student choice for the P/NP option. If students do not choose the P/NP option before the deadline, they will be issued a letter grade for the course. 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: Conditions for Assigning an Incomplete:
Academic work that is incomplete for unforeseeable, emergency, and justifiable reasons at the end of a term may result in an “I” symbol being entered in a student’s record.

Procedures for Use of Incomplete: An Incomplete form shall be filed with the Director of Admissions and Records and a copy given to the student by the instructor at the end of the term. This Incomplete form shall contain the condition for removal of the “I” and the grade assigned in lieu of its removal.

A final grade shall be assigned when the work stipulated has been completed and evaluated or when the time limit for completing the work has passed. If the instructor has not changed the grade by the end of the expiration date, the grade will convert automatically.

The incomplete must be made up no later than one year following the end of the term in which it was assigned. The “I” symbol shall be used only in calculating enrolled units for progress probation.

IP In Progress: The “IP” symbol shall be used only in those courses which extend beyond the normal end of the academic term. It indicates that work is “In Progress,” but that assignment of a substantive grade must await completion. The IP symbol shall remain on the student’s permanent record in order to satisfy enrollment documentation. The appropriate valuative grade and unit credit shall be assigned and appear on the student’s record for the term in which the required work of the course is completed. The “IP” symbol shall not be used in calculating units attempted, nor for grade points. If a student enrolled in an “open-entry, open-exit” course is assigned an “IP” at the end of an attendance period and does not re-enroll in that course during the subsequent attendance period, the appropriate faculty will assign a valuative symbol.

RD Report Delayed: Only the Director of Admissions and Records may assign the “RD” symbol. This symbol is to be used when, for reasons beyond the control of the student, there is a delay in reporting the grade of that student. The "RD" is a temporary notation to be replaced by a permanent symbol as soon as possible. The “RD” symbol shall not be used in calculating units attempted, or for grade points.

W Withdrawal: Withdrawal from a course shall be authorized through the last day of the fourteenth week of instruction or 75 percent of the course, whichever is less. No notation (W or other) shall be made on the academic record of the student who withdraws on or before the last business day prior to census.

1. The District may authorize withdrawal from a course in extenuating circumstances after the last day of the fourteenth week or 75 percent of the term, whichever is less, upon petition of the student after consultation with the appropriate faculty. Extenuating circumstances are verified cases of accidents, illnesses or other circumstances beyond the control of the student.

2. A “W” shall not be assigned, or if assigned shall be removed, from a student’s academic record if a determination is made that the student withdrew from the course due to discriminatory treatment or due to retaliation for alleging discriminatory treatment.

3. A “W” shall not be assigned to any student who withdrew from one or more classes, where such withdrawal was necessary due to fire, flood or other extraordinary conditions.

4. A student may petition to take a course a fifth time; however, apportionment may not be claimed for the repeat if another “W” is received. The college must provide intervention in cases of multiple withdrawals.

MW Military Withdrawal occurs when a student who is a member of an active or reserve United States military service receives orders compelling a withdrawal from courses.

1. Upon verification of such orders, a withdrawal symbol may be assigned at any time after the period established by the Governing Board during which no notation is made for withdrawals;

2. Military withdrawals shall not be counted in progress probation and dismissal calculations.

3. “MW” shall not be counted for the permitted number of withdrawals.
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.

Notification of Probation and Dismissal
Students on probation or dismissal are notified, through campus email, as soon as possible but not later than the end of the following term.

Students on Academic or Progress Probation must attend a Probation Workshop and provide the Dean of Counseling & Student Support an “Academic Progress Report”. Students who have obtained an “Academic Progress Report” that indicates that they have made adequate academic progress will be allowed to register for the before next semester. The academic standing of students who do not attend the Probation Workshop and/or do not submit an “Academic Progress Report” that indicates adequate progress, will not be determined until semester grades are posted.

Students on academic or progress dismissal must see a counselor prior to registering.

Reinstatement for Academic or Progress Dismissal
Students will receive a letter of notification by either mail or campus email to notify them that they have been dismissed. Dismissed students must “sit out” for one academic year before being reinstated but should start the reinstatement process in the semester prior to returning. A student may appeal his/her dismissal status by attending a Reinstatement Workshop and following the steps outlined during the workshop. Students may sign up online on the counseling section of the website at www.losmedanos.edu/counseling. The Dean of Counseling & Student Support will review all appeals for possible reinstatement. If reinstated, a student is subject to continued probation and dismissal policies.

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.
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. Transcripts are evaluated when the student makes a counseling appointment or requests an evaluation from Admissions & Records.

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).

The following courses are approved for credit by examination:
1. SPAN-050 Elementary Spanish I
2. SPAN-051 Elementary Spanish II

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.
<table>
<thead>
<tr>
<th>EXAMINATION</th>
<th>SCORE</th>
<th>LMC COURSE EQUIVALENTS-SEMESTER UNITS</th>
<th>LMC GE AA/AS DEGREE REQUIREMENTS SATISFIED</th>
<th>SEMESTER UNITS TOWARD CSU GE/BREADTH AREA CERTIFICATION</th>
<th>CSU SEMESTER UNITS FOR TRANSFER</th>
<th>IGETC AREA CREDIT ALLOWED</th>
<th>UC SEMESTER UNITS FOR TRANSFER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art History</td>
<td>3,4,5</td>
<td>No equivalent-N/A</td>
<td>N/A</td>
<td>3 units Area C1 or C2</td>
<td>6</td>
<td>3A or 3B</td>
<td>5.3</td>
</tr>
<tr>
<td>Biology</td>
<td>3,4,5</td>
<td>BIOSC 10 - 4 units</td>
<td>Natural Science</td>
<td>4 units Area B2&amp;B3</td>
<td>6</td>
<td>5B with lab</td>
<td>5.3</td>
</tr>
<tr>
<td>Chemistry</td>
<td>3,4,5</td>
<td>CHEM 25-5 units</td>
<td>N/A</td>
<td>4 units Area B1&amp;B3</td>
<td>6</td>
<td>5A with lab</td>
<td>5.3</td>
</tr>
<tr>
<td>Chinese Language &amp; Culture</td>
<td>3,4,5</td>
<td>No equivalent-N/A</td>
<td>N/A</td>
<td>3 units Area C2</td>
<td>6</td>
<td>3B &amp; 6A</td>
<td>5.3</td>
</tr>
<tr>
<td>Computer Science A</td>
<td>3,4,5</td>
<td>COMSCI 44 or 122 -3 units</td>
<td>N/A</td>
<td>N/A</td>
<td>3**</td>
<td>N/A</td>
<td>1.3</td>
</tr>
<tr>
<td>Computer Science AB</td>
<td>3,4,5</td>
<td>COMSCI 44 + 4B -6 units or COMC 122 + 132 - 6 units</td>
<td>N/A</td>
<td>N/A</td>
<td>6**</td>
<td>N/A</td>
<td>2.7</td>
</tr>
<tr>
<td>Economics: Macro</td>
<td>3,4,5</td>
<td>ECON 11 - 3 units</td>
<td>Social &amp; Behavioral Science</td>
<td>3 units Area D2</td>
<td>3</td>
<td>4B</td>
<td>2.7</td>
</tr>
<tr>
<td>Economics: Micro</td>
<td>3,4,5</td>
<td>ECON 10 - 3 units</td>
<td>Social &amp; Behavioral Science</td>
<td>3 units Area D2</td>
<td>3</td>
<td>4B</td>
<td>2.7</td>
</tr>
<tr>
<td>English: Language &amp; Comp.</td>
<td>3,4,5</td>
<td>ENGL 100 - 3 units</td>
<td>English Composition</td>
<td>3 units Area A2</td>
<td>6</td>
<td>1A</td>
<td>5.3</td>
</tr>
<tr>
<td>English: Literature &amp; Comp.</td>
<td>3,4,5</td>
<td>ENGL 100 - 3 units</td>
<td>English Composition</td>
<td>6 units Area A2&amp;A2&amp;C2</td>
<td>6</td>
<td>1A or 3B</td>
<td>5.3</td>
</tr>
<tr>
<td>Environmental Science</td>
<td>3,4,5</td>
<td>BIOSC 7 - 4 units</td>
<td>Natural Science</td>
<td>4 units Area B1&amp;B3 or 4 units Area B2 &amp; B3</td>
<td>4</td>
<td>5A with lab</td>
<td>2.7</td>
</tr>
<tr>
<td>French Language</td>
<td>3,4,5</td>
<td>No equivalent-N/A</td>
<td>N/A</td>
<td>3 units Area C2</td>
<td>6</td>
<td>3B &amp; 6A</td>
<td>5.3</td>
</tr>
<tr>
<td>French Literature</td>
<td>3,4,5</td>
<td>No equivalent-N/A</td>
<td>N/A</td>
<td>3 units Area C2</td>
<td>6</td>
<td>3B &amp; 6A</td>
<td>5.3</td>
</tr>
<tr>
<td>German Language</td>
<td>3,4,5</td>
<td>No equivalent-N/A</td>
<td>N/A</td>
<td>3 units Area C2</td>
<td>6</td>
<td>3B &amp; 6A</td>
<td>5.3</td>
</tr>
<tr>
<td>Govt. &amp; Politics: U.S.</td>
<td>3,4,5</td>
<td>No equivalent-N/A</td>
<td>N/A</td>
<td>3 units Area D8</td>
<td>3</td>
<td>4H</td>
<td>2.7</td>
</tr>
<tr>
<td>Govt. &amp; Politics: Comparative</td>
<td>3,4,5</td>
<td>No equivalent-N/A</td>
<td>N/A</td>
<td>3 units Area D8</td>
<td>3</td>
<td>4H</td>
<td>2.7</td>
</tr>
<tr>
<td>History: United States</td>
<td>3,4,5</td>
<td>N/A</td>
<td>Social &amp; Behavioral Science</td>
<td>3 units Area D6 or C2</td>
<td>6</td>
<td>3B or 4F</td>
<td>5.3</td>
</tr>
<tr>
<td>History: United States</td>
<td>3,4,5</td>
<td>HIST 29 + 30 - 6 units</td>
<td>Social &amp; Behavioral Science</td>
<td>6***</td>
<td>3B or 4F</td>
<td>5.3</td>
<td>5.3</td>
</tr>
<tr>
<td>History: European</td>
<td>3,4,5</td>
<td>N/A</td>
<td>N/A</td>
<td>3 units Area D6 or C2</td>
<td>6</td>
<td>3B or 4F</td>
<td>5.3</td>
</tr>
<tr>
<td>History: World</td>
<td>3,4,5</td>
<td>HIST 34 + 35 - 6 units</td>
<td>Social &amp; Behavioral Science</td>
<td>6***</td>
<td>3B or 4F</td>
<td>5.3</td>
<td>5.3</td>
</tr>
<tr>
<td>History: World</td>
<td>3,4,5</td>
<td>N/A</td>
<td>N/A</td>
<td>3 units Area D6 or C2</td>
<td>6</td>
<td>3B or 4F</td>
<td>5.3</td>
</tr>
<tr>
<td>Human Geography</td>
<td>3,4,5</td>
<td>No equivalent-N/A</td>
<td>N/A</td>
<td>3 units Area D5</td>
<td>3</td>
<td>4E</td>
<td>2.7</td>
</tr>
<tr>
<td>Italian Language &amp; Culture</td>
<td>3,4,5</td>
<td>No equivalent-N/A</td>
<td>N/A</td>
<td>3 units Area C2</td>
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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 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.
4. If test was taken in Fall 2009 or earlier, credits may apply to either B1 or B3.
5. After Fall 2009, these credits apply only to B1 & B3.
6. ** If more than one exam passed in calculus or computer science, only one exam may be used for transfer.
7. *** If more than one exam passed in physics: maximum of four units for CSU GE; one unit is for CSU transfer.
8. **** Partially fulfill the American History & Institutions requirement. California government requirement can be fulfilled after transfer.
9. ***** If taken prior to Fall 2009.
<table>
<thead>
<tr>
<th>CLEP EXAMINATION</th>
<th>SCORE</th>
<th>LMC COURSE EQUivalents - SEMESTER UNITS</th>
<th>LMC AA/AS DEGREE REQUIREMENTS SATISFIED</th>
<th>SEMESTER UNITS TOWARD CSU GE/BREADTH AREA CERTIFICATION</th>
<th>CSU SEMESTER UNITS FOR TRANSFER</th>
<th>IGETC AREA CREDIT ALLOWED</th>
<th>UC SEMESTER UNITS FOR TRANSFER</th>
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**International Baccalaureate Examination**

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<th>INTERNATIONAL BACCALAUREATE EXAMINATION (IB)</th>
<th>SCORE</th>
<th>LMC COURSE EQUIVALENTS-SEMESTER UNITS</th>
<th>LMC AA/AS DEGREE REQUIREMENTS SATISFIED</th>
<th>SEMESTER UNITS TOWARD CSU GE/BREADTH AREA CERTIFICATION</th>
<th>CSU SEMESTER UNITS FOR TRANSFER</th>
<th>IGETC AREA CREDIT ALLOWED</th>
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<td>4</td>
<td>Elective credit – 6 units</td>
<td>N/A</td>
<td>0 units  N/A</td>
<td>6</td>
<td>N/A</td>
<td>6A</td>
</tr>
<tr>
<td>Language B(French) HL</td>
<td>5,6,7</td>
<td>Elective credit – 6 units</td>
<td>N/A</td>
<td>0 units  N/A</td>
<td>6</td>
<td>N/A</td>
<td>6A</td>
</tr>
<tr>
<td>Language B(Spanish) HL</td>
<td>5,6,7</td>
<td>FRENCH 60 – 5 units</td>
<td>N/A</td>
<td>0 units  N/A</td>
<td>6</td>
<td>N/A</td>
<td>6A</td>
</tr>
<tr>
<td>Mathematics HL</td>
<td>5,6,7</td>
<td>No equivalent – N/A</td>
<td>N/A</td>
<td>3 units  Area B4</td>
<td>6</td>
<td>N/A</td>
<td>2A</td>
</tr>
<tr>
<td>Physics HL</td>
<td>4</td>
<td>PHYS 15 – 4 units</td>
<td>Natural Science</td>
<td>3 units  Area B1</td>
<td>6</td>
<td>5A no lab</td>
<td>5.3</td>
</tr>
<tr>
<td>Psychology HL</td>
<td>5,6,7</td>
<td>PSYCH 11 – 3 units</td>
<td>Social &amp; Behavioral Science</td>
<td>3 units  Area D9</td>
<td>3</td>
<td>4I</td>
<td>5.3</td>
</tr>
<tr>
<td>Theatre HL</td>
<td>4</td>
<td>DRAMA 15 – 3 units</td>
<td>Arts &amp; Humanities</td>
<td>3 units  Area C1</td>
<td>6</td>
<td>N/A</td>
<td>3A</td>
</tr>
</tbody>
</table>

**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 or dropping with a "W".

Students are limited to enrolling in credit classes a maximum of three times. This includes students earning substandard grades or dropping with a "W".

Students earning substandard grades or dropping with a "W" may submit a petition for course repetition. 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.

Courses of similar content will be placed in “families”. Students cannot repeat individual courses within a family and the maximum of enrollments within a family will be 4.

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. More information can be found at the college website.

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 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.

Students requesting an enrollment verification from the Admissions & Records Office will incur a charge, depending on the type of service requested.

If an agency 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.studentclearinghouse.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 audio/video recorder in class.

3) The right to drop the student when he/she is absent during two consecutive weeks of lab or lecture or when students are tardy to the degree that classes and learning opportunities are disrupted.

4) The right to drop a student 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 $208 per unit, in addition to the enrollment fee of $46 per unit. The nonresident fee for non-U.S. citizens is $208 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.

Concurrently enrolled students (high school students enrolled in college classes) who are classified as non-resident students for tuition purposes may be eligible for the SB150 waiver of non-resident tuition while still in high school. Students must be special admit part-time (enrolled in 11 units or less) students who currently reside in California and are attending high school in California. Students wishing to take advantage of this exemption should complete a residency reclassification form and attach a copy of high school transcripts showing current enrollment. Forms and attachments should be submitted to the Admissions and 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 in the amount of $5.00 per semester (Fall and Spring only), 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. Students may request a refund of the fee by submitting the Student Activity Fee Refund Request Form www.losmedanos.edu/admissions/ActivityFeeRefundForm.pdf before the refund deadline.

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 refunds 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 WebAdvisor. 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. The parking decal must be returned to the Cashier’s Office for a refund. 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.

Student Payroll
Paychecks for all student employees are distributed at the payroll window in Business Services after 12:30 p.m. on the tenth of each month and from 9:00 AM to 4:30 PM for the following four business days. 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. All student employees with a bank account are eligible for direct deposit. Direct deposit stubs are mailed the first day after payday.

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:

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

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

At the beginning of each term, the instructor will inform you of the material specification. You may choose to purchase the material on your own or you 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.
General Information

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
925-473-7480

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—1) a California resident, 2) enrolled full-time at LMC, 3) qualify for a Board of Governor fee waiver (BOG A or B), 4) earned less than 70 degree-applicable units, and demonstrate an academic disadvantage (for example, if neither parent earned a 4-year college degree). By partnering with EOPS, students benefit from EOPS by receiving academic and financial support services that is above, beyond, and in addition to services available to all LMC students, such as— priority registration, transportation assistance, transfer application fee waivers, academic and personal counseling, calculator loans, and book vouchers.

COOPERATIVE AGENCIES RESOURCES 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-households that personally receive TANF/CalWORKs or are the parent of a child under 14 that is receiving TANF/CalWORKs services. By partnering with EOPS, CARE students benefit from an additional layer of academic and financial support services such as— automotive assistance, grants, personal life development workshops, meal tickets (for use in LMC’s 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/
925-473-7525

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 or drops below half-time status between the first and second payments.
• 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 homeschool 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.

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. 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/financialaid/apps.asp. Next, click on “BOGW Application.”

BOG Fee Waiver Program
All California residents and AB540 students 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 2014-2015 academic year:

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
General Information

Students who have been suspended from financial aid have the following semester. The student will be suspended from financial aid the Point Average and/or did not complete 67% of their attempted successfully improved their semester and cumulative Grade changes should be minimized, as students who have 150% of the 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. 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 warning 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.

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 extenuating circumstances that have 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.

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 during the refund period. All LMC students receive 100% refund of fees if they drop by the refund period. 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.

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

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
925-473-7500
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.

Mission Statement
The Admissions & Records Office staff strive to provide quality and efficient services to students, faculty and community members. By focusing on student learning and success, we aim to help students build their abilities and competencies as life-long learners.

Program Student Learning Outcomes
1. New students will be able to complete and successfully submit the online application.
2. Upon completion of the college application, new students will understand the next steps leading to course enrollment.
3. LMC students, (faculty and staff) will understand the process and timelines for adding and dropping classes.
4. Students who use the early graduation application process leading up to the last semester of their program will use the early registration appointment to be able to get the classes they need to graduate.

Assessment Center
www.losmedanos.edu/assessment
925-473-7431
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 courses with a prerequisite of English 90 or Math 25 or higher. The assessment process is taken on a computer and is available by appointment during scheduled testing hours.

Bookstore at LMC
www.lmcbookstore.net
925-473-7543
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.

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.
   - 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.

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 10 copies of their postings directly to the Office of Student Life (GA-1) or through campus mail to mailbox #63, 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 Payroll 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/studentservices/career
925-473-7535
Career development and exploration services are available through LMC’s Career Center. Students receive personalized assistance that includes career assessments in their areas of interests, personality, and values. Services also include job search assistance, resume writing and critique, mock interviewing practice, as well as major and career exploration. Workshops on various career-related topics are also offered throughout the year. To meet with Career Center staff, students can visit the center in CC2-224 or make an appointment via the website.

Mission Statement
The mission of the LMC Career Center is to provide comprehensive services and resources to students, enhancing their ability to successfully identify and pursue their academic and career goals.

Program Student Learning Outcomes
1. Students that attend a workshop focused on the job search process will learn techniques for improving their potential of finding employment.
2. Undeclared students that take career assessments and review the results with a career specialist will be able to choose a major and a career path.
3. After attending a resume workshop or after working with a career specialist on how to develop a resume, students will know how to create well-written and effective resumes.

Counseling Services
www.losmedanos.edu/counseling
925-473-7450
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

Mission Statement
The Counseling/Student Services Department embodies a comprehensive, student-centered approach. We believe in fostering the strengths of our diverse student population and working collaboratively with all student services to empower students in
their educational process. We believe in cultivating shared responsibility in navigating the educational system that results in positive student outcomes and personal growth.

**Program Student Learning Outcomes**
1. Students will be able to clarify their educational goals after meeting with a counselor during express counseling.
2. Students will understand how to reach their educational goals after meeting with a counselor to complete the educational plan.

**Disabled Students Program and Services**

www.losmedanos.edu/dsps  
925-473-7471  
TDD- 925-439-5709

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.

**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.

**Mission Statement**

It is the mission of the Disabled Students Programs and Services to facilitate access for students with disabilities to the educational programs, student services, and activities of Los Medanos College.

**Program Student Learning Outcomes**
1. Students attending a DSP&S orientation will demonstrate the ability to successfully use the Web Advisor system.
2. Students who utilize alternate media services will demonstrate a greater understanding of their course content.
3. Students with disabilities will demonstrate the ability to successfully navigate college and community support systems.
4. Students with disabilities will demonstrate the ability to make progress toward their individual educational goals, such as associate degrees, certificates and transfer requirements.

**E.O.P.S. & C.A.R.E.**

**Extended Opportunity Programs and Services**

www.losmedanos.edu/eops  
925-473-7480

The Extended Opportunity Programs and Services (EOPS) is a state-funded program which provides a variety of academic, financial and social support services to assist students in completing their educational goal. Services provided to EOPS students include: grants, book voucher, counseling, child care assistance, and priority registration.

**Mission Statement**

EOPS is a state-funded student support service program established to promote the enrollment, retention, persistence, and success of students from low-income, underrepresented backgrounds in higher education by offering services that are above, beyond, and in addition to services available to all Los Medanos College students.

**Program Student Learning Outcomes**

Students who have participated in EOPS for 2 consecutive semesters will be able to:
1. Demonstrate the ability to develop an educational plan that specifies an educational goal and outlines a sequence of courses needed to achieve the specified goal in six (semesters).
2. Establish student-instructor relationships that promote intellectual development.
3. Develop and increase academic support networks with, both LMC non-instructional staff and agencies external to the college.

**C.A.R.E.**

www.losmedanos.edu/care  
925-473-3480

A component of the EOPS program, Cooperative Agencies and Resources for Education (CARE) assist students who are TANF/CalWORKs (Temporary Assistance to Needy Families/California Work Opportunities and Responsibility to Kids), single head of household, with children under 14 years of age. CARE can assist students in completing college-level educational and training programs, and in becoming more employable and economically self-sufficient. Eligible students may receive Café Tix, auto maintenance, childcare, transportation and financial assistance through an educational grant. Specialized workshops, seminars and courses are offered to CARE students to ensure college success.
CalWORKs
925-473-3482
The LMC CalWORKs program is a state-funded program assisting TANF/ CalWORKs recipient students, and those in transition off of welfare, to achieve long-term self-sufficiency through coordinated student services. CalWORKs offers support services including: work study, job placement, child care, book voucher, counseling, and developmental workshops.

Mission Statement
The mission of the CalWORKS Program is to provide comprehensive academic support services that enable CalWORKS students to transition from welfare to long-term self-sufficiency.

Program Student Learning Outcomes
Students who participate in CalWORKS for two consecutive semesters will be able to:
1. Demonstrate the ability to develop a professional resume.
2. As a potential interviewee, define and demonstrate the techniques of effective interviewing.
3. Demonstrate self-advocacy when accessing external resources.

Financial Aid and Scholarship Program
www.losmedanos.edu/financialaid
925-473-7525
www.losmedanos.edu/scholarship
925-473-7520

Financial Aid
LMC has a comprehensive financial aid program, including grants, and on-campus part-time employment opportunities. Programs available include the Board of Governor’s Fee Waiver, the Federal Supplemental Education Opportunity Grant, Federal Work-Study, Federal Direct Loans (Subsidized and Unsubsidized, and Cal Grant B & C).

Mission Statement
The mission of the Financial Aid Office is to provide quality financial assistance to the maximum pool of eligible students through the coordination of private, state, and federal funding. We strive to provide fast and courteous customer service to all financial aid recipients and the LMC community and to aid our students’ completion of their desired goals.

Program Student Learning Outcomes
1. Students who attend the FAFSA Workshop will understand how to interpret their Student Aid Report (SAR).
2. Students who access the mandatory online video will demonstrate understanding of the Satisfactory Academic Policy (SAP).
3. Students who attend the scholarship workshop will demonstrate understanding of the scholarship application process.
4. Students who attend the Federal Work Study orientation will gain an understanding of eligibility criteria and application procedures for the Federal Work Study (FWS) Program.

Scholarship Program
Applying for scholarships is easier than you think! Find out about the latest scholarship opportunities on our website.

Food Service
925-473-7898
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 on the second floor of the college complex 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 cashier’s office.

Health Services Referral
Information on a variety of topics, including but not limited to, counseling, crisis intervention, family counseling, alcohol and drug abuse, and mental health, may be obtained from or the LMC Counseling Center at 925-473-7450.

It is the student’s responsibility to assume all expenses involving injury or illness.

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, 925-473-7332.

InSite and InSite Mail (Student Email)
www.4cd.edu/webadvisor

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)

Outreach, Information Center & Welcome Center Services

Mission Statement
The Student Outreach Office assists prospective and current students by introducing them to information, processes and resources that will increase their awareness of the college experience, inform them of educational options, and provide steps to help them reach their educational goals. The Office will provide the leadership to create and enhance outreach programs and efforts that focus on underrepresented and under prepared students.

Program Student Learning Outcomes
1. Prospective high school students that participate in the outreach college workshops will be able to complete the college application, English and math assessment, and the new student orientation.
2. Students that attend the new student orientations will enroll in the college and develop a first semester educational plan.
3. Students who access the Information Center for enrollment questions will acquire the knowledge about the matriculation process: Assessment, enrollment workshop and course registration.
4. Students who access the Information Center will learn to navigate the college online services.
5. Prospective Spanish-speaking students (and parents) that receive services from the Welcome Center will learn the enrollment process.

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
925-473-7332
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
925-473-7861
Q*Spot, LMC’s LGBT 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 LGBT people, biographies of famous LGBT people, and books addressing LGBT history, the coming out-process, religion and LGBT people, LGBT civil rights, and other issues. We also have a selection of LGBT-themed films available for check-out. In addition, Q*Spot provides referral information for outside resources, including counseling and support groups for LGBT 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 LGBT people to meet at LMC.

* LGBT: Lesbian, Gay, Bisexual, Transgender

Student Life
Student Life Building, GA-1
www.losmedanos.edu/studentlife
925-473-7555
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:
Mission Statement
The Office of Student Life provides leadership opportunities that support students in becoming agents of positive social change and responsible members of a diverse and global society.

Program Student Learning Outcomes
Students who participate in LMCAS (student government) will:
1. Be able to effectively use the LMCAS Bylaws and Parliamentary procedure during senate meetings.
2. Be able to actively engage in the shared governance process, through committee involvement.

Students who participate in IMPACT (the student leadership retreat) will:
1. Develop an understanding of their own leadership style and how it relates to others.
2. Learn skills and strategies for being effective leaders in their programs, clubs, and organizations.

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.

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 Student Senate holds open public meetings every week and members of the student government are regularly available for consultation in the Office of Student Life.

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!

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.

Transfer Center
www.losmedanos.edu/transfer
925-473-7444
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 advising appointments with these representatives. Workshops are provided on topics such as completing UC, CSU, and private university admissions applications, general transfer information, writing for application essays and scholarships, and financial aid resources. The Transfer Center also coordinates tours of various transfer universities each semester.

The LMC Transfer Center also 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.

Additionally, LMC coordinates many programs designed to facilitate the transfer process. Some examples are Transfer Admission Guarantees (TAG’s), Concurrent Enrollment programs, “On-the-Spot” Admissions, and the LMC Transfer Academy.

The LMC Transfer Academy provides a dynamic academic experience with strong supports in and outside of the classroom, like academic counseling, academic support, workshops, leadership development, and campus tours. Benefits of the academy include blocked General Education (GE) classes with other Transfer Academy students, mentoring and academic counseling.

Mission Statement
The mission of the Los Medanos College Transfer Center is to continually increase student transfer rates from LMC to four-year colleges/universities. It is the Transfer Center’s primary function to ensure that all students have access to necessary transfer information and provide programs and services needed for a successful transition. The Transfer Center works to inform students through
outreach, programs, and services to increase their awareness of
the opportunities and resources available to achieve student suc-
cess and transfer, and to assist students in successfully completing
their transfer goals.

Program Student Learning Outcomes

Students who participate in an application workshop will:

1. Increase their knowledge of the university (CSU/UC/Private)
   transfer admissions application process.
2. Be able to define the minimum eligibility requirements for
   transfer to the UC and CSU systems.

Students who participate in university tours will:

1. Increase their knowledge of the application process, their major
   and the campus culture of the universities they visit.
2. Be able to make a decision about whether or not to apply to
   the universities they visit.

Instructional Services

Athletics
www.losmedanos.edu/athletics
925-473-7605

Los Medanos College has a proud tradition of winning teams
and successful athletes, who have followed their dreams of
college graduation, transfer to four year colleges and
career success.

The Athletic Program 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 students
should contact the appropriate coach or the Athletic Director
before the practice season begins.

Biology Learning Center
Science Building, SC-103
www.losmedanos.edu/BLC
925-473-7695

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.

Child Care Services
www.losmedanos.edu/childcare
925-473-7640

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

- Full-day and half-day child care for Infants, toddler, preschool,
  pre-kindergarten and kindergarten children. Children aged 0
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.
- A Parenting class is being offered and weekly participation
  of 1.5 hours is required for all students wishing to apply for
  partial scholarship options.
- For up-to-date information on schedules and cost, see the
  Child Care Center webpage: www.losmedanos.edu/childcare.

Center for Academic Support
Core Building, CO-300
www.losmedanos.edu/cas
925-473-7590

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. Our outstanding tutors provide general
tutoring and subject specific tutoring 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
www.losmedanos.edu/cwee
925-473-7415
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/computerscience/
925-473-7582
The Drop-In Computer Lab provides computers and networking resources for students, faculty and staff. Students have the opportunity to sharpen their computer skills, apply theory and complete assignments in most disciplines. The lab is staffed by technicians, student assistants, instructors and tutors. Lab equipment is constantly updated to reflect the ongoing changes in today’s technology.

Honors Program
www.losmedanos.edu/honors
925-473-7600
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.

- Research conference presentation opportunities at UC Berkeley and Stanford University

- 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
925-473-7585
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)
- 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: 925-473-7570
Reference Desk: 925-473-7575

The Los Medanos College Library strives to impact the success of all LMC students by teaching information literacy skills and offering the guidance and encouragement to support students in their quest towards their academic goals. The Library provides the entire LMC community with access to a place and information resources designed to support academic inquiry.

The library accomplishes its mission by providing materials, services and instruction to all students and faculty on campus, online and at the Brentwood Center. Current students, faculty and staff may borrow materials from the library or through interlibrary loan and use the electronic databases and eBooks both on and off campus. Members of the community may also use materials in the library.

The library currently holds over 21,000 print titles and has an additional 72,500+ eBook titles, with more than 45,000 titles added to the collection in 2012-13. The library subscribes to 98 print journals and 53 electronic databases, which include access to thousands of full-text journals and newspapers. Additionally, the library holds 2,676 videos, DVDs and CDs along with the equipment needed to utilize these items.

Two reserve textbook collections are available for limited check out and onsite use during normal operating hours. The largest reserve collection is housed at the Circulation Desk in the main Pittsburg campus library and there are additional reserve textbooks located at the Brentwood Center. 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.

LMC Librarians assist patrons with their research needs in various ways, including research consultation appointments, drop-in research help at the reference desk, email reference, IM chat, Google+ Hangouts video conferencing and phone reference. The library provides custom library instruction workshops at the request of faculty members.

Highlights of the Library building include:

- computer stations for student and public use
- children’s book collection and reading area
- 5 group study rooms
- Seating for 200
- Wireless coverage, including printing from laptops
- full-color and black & white printers
- 2 self-checkout stations
- 2 copy machines

Math Lab
Math Building, MA-102
www.losmedanos.edu/mathlab
925-473-7665
925-473-6925- 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 room and testing center offers a noise-free space for students to work (no tutoring occurs in here as a courtesy to other students) and take mastery quizzes and exams. 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
925-473-7685

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
925-473-7685

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/journalism
925-473-7827

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 experience the excitement of a working newsroom while honing practical skills as reporters, artists, photographers, videographers and editors. Groups and organizations with news items should contact the “Experience”
by noon on the Monday before each Friday’s issue. The newspaper is also available online at lmcexperience.com.

Umoja Scholars
www.losmedanos.edu/umoja
925-473-7603

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.

Freedom to teach and freedom to learn is shared by all members of the academic community. Los Medanos College has a duty to 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 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

Freedom of Inquiry and Expression
It is the policy of the district and LMC to allow and protect reasonable and legal expressions, speeches and actions according to federal and state laws and Education Code section 76120.

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 large community that in their public expressions or demonstrations, students or student organizations speak only for themselves.

2) Students have the right to exercise free expression, including the use of bulletin boards, the distribution of printed materials or petitions, and the wearing of buttons, badges or other insignia. The policy excludes expression which is obscene, libelous or slanderous according to current legal standards or that incites students to create a clear and present danger or to commit unlawful acts on community college premises or damage to persons or property. Inciting students to riot, or the violation of lawful community college regulations or the substantial disruption of the orderly operation of the community college, is also prohibited. Copies of the district and college policies are available at the Student Life Office and online at www.losmedanos.edu.

3) Students will be allowed to invite and to hear any person 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.
speakers does not necessarily imply approval or endorse-
ment of the views 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 accep-
tance 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 course-
work 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, GA-1, 925-473-7555
• Office of Instruction, 925-473-7397/925-473-7398
• Information Center, 925-473-7434
• Counseling Center, 925-473-7450

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

Student Code of Conduct &
Expectations for Student Behavior
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, and in accordance with the Student Code of Conduct.
Student Code of Conduct (CCCD Student Services Procedure 3027)

I. INTRODUCTION
The Student Code of Conduct is a statement of the Contra Costa Community College District’s expectations regarding student standards of conduct, both academic and nonacademic. Students are expected to obey all laws and District policies and regulations. Students shall be subject to discipline for violation of these laws, policies, and regulations. Student misconduct may also be subject to other regulations of the District, including but not limited to regulations regarding complaints of harassment and discrimination.

II. DEFINITIONS
For the purpose of these Rules and Regulations, the following words and terms are defined as follows:

A. “Student” shall mean all persons enrolled in any courses at the colleges in the district, regardless of where courses are taught, whether they are enrolled full-time or part-time, for credit or non-credit or not-for credit or contract education, and whether or not s/he is planning to earn a degree, certificate of achievement or other certification. Persons who are enrolled in online or hybrid courses are also considered ‘students’. Persons who are not officially enrolled for a particular term, but who have been admitted to the college and enroll in courses from time to time, and have a continuing relationship with the college are considered ‘students’.

B. “Governing Board” shall mean the Governing Board of the Contra Costa Community College District.

C. “District” shall mean the Contra Costa Community College District, including but not limited to its administrative staff and each of its colleges.

D. “College” shall mean a college operated and maintained by the District.

E. “Member of the College Community” shall mean the District Trustees, the academic, support staff, and administrative personnel of the District, the students of the District and any other person while on District or college property or at a District or college function or activity.

F. “Day” shall refer to a college instructional day unless otherwise noted.

G. “Good Cause” includes, but is not limited to the following offenses:

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 of 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. Use, sale, or possession on campus of, or presence on campus under the influence of any controlled substance, 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. Other behavior that has grounds for disciplinary action.

III. GROUNDS FOR DISCIPLINARY ACTION
A. Students shall conduct themselves consistent with the Student Code of Conduct while on campus or participating off campus in online or hybrid courses, or at college sponsored events or programs, including but not limited to field trips, student conferences, debate competitions, athletic contests, club-sponsored events, and international study programs, regardless of location. Students shall also conduct themselves consistent with the Student Code of Conduct in any matter related to school activity or attendance. Students shall be suspended or expelled only for good cause.

B. Misconduct that constitutes grounds for disciplinary action includes, but is not limited to:

1. Acts of academic dishonesty, including, but not limited to, cheating, tampering, fabrication, plagiarism, or assisting others in an act of academic dishonesty. Cheating is defined as unauthorized copying or collaboration on a test or assignment, or the use or attempted use of unauthorized materials. Tampering is defined as altering or interfering with evaluation instruments or documents. Fabrication is defined as falsifying experimental data or results, inventing research or laboratory data or results for work not done, or falsely claiming sources not used. Plagiarism is defined as representing someone else’s words, idea, artistry, or data as one’s own, including copying another person’s work (including published and unpublished material, and material from the internet) without appropriate referencing, presenting someone else’s opinions and theories as one’s own, or working jointly on a project, then submitting it as one’s own. Assisting is defined as assisting another person in an act of academic dishonesty, such as taking a test or doing an assignment for someone else, changing someone’s grades or academic records, or inappropriately distributing exams to other students;

2. Other forms of dishonesty, such as lying, knowingly furnishing false information, or reporting a false emergency to any college official, faculty or staff member or office or to the District;
3. Forgery, alteration, misappropriation or theft, misuse of any District or college document, record, key, electronic device, or identification including, but not limited to, unauthorized grade changes and forged signatures on official college forms;

4. Misrepresentation of oneself or of an organization to be an agent of the District;

5. Obstruction or disruption of teaching or of the District’s educational process, administrative process, disciplinary procedures, or other District functions and activities, on or off District property;

6. Disruptive or abusive behavior, such as verbal harassment, habitual profanity or vulgarity, physical abuse, intimidation, hazing, or stalking of any member of the college community;

7. Vandalism, graffiti, or other willful misconduct which results in cutting, defacing, or other damages to any real or personal property owned by the District or a member of the college community;

8. Assault, battery, violence or threat of violence, or any willful misconduct which results in an injury or death of a student or District personnel or behavior that threatens the health and safety of any member of the college community;

9. Theft of District property, or property in the possession of, or owned by, a member of the college community;

10. Violation of District or college policies or regulations including but not limited to those concerning the formation and registration of student organizations, the use of college facilities or the time, place, and manner of public expression or the distribution of leaflets, pamphlets, or other materials;

11. Failure to comply with the directions of the District or college officials acting in the performance of their duties and/or failure to identify oneself to these persons when requested to do so;

12. The use, sale, distribution, or possession on campus of, or presence on campus under the influence of, any controlled substances, or any poison classified as such by Schedule D section 4160 of the Business and Professions Code or other California laws on District property or at any District-sponsored event. This regulation does not apply when the person named on the prescription possesses the drugs or narcotics or when the drugs or narcotics are permitted for and are being used in research, instruction, or analysis;

13. Possession, consumption, sale, distribution or delivery of any alcoholic beverage in college buildings or on college grounds, or at college-sponsored or supervised activities, regardless of their location, unless authorized by college officials.

14. Possession or use of explosives, dangerous chemicals, or deadly weapons on District property or at a campus function, without prior authorization of the College President;

15. Engaging in lewd, indecent, or obscene behavior on District-owned or controlled property or at a District-sponsored or supervised function;

16. Rape, date rape, sexual harassment, sexual assault, or threat of an assault upon a student or member of the college community on District property, or at a college or District-sponsored or supervised function;

17. Unauthorized use of, or misuse of District property, including, but not limited to, unauthorized possession, duplication or use of District keys and/or unauthorized entry into District property;

18. Willful or persistent smoking in any area where smoking has been prohibited by law or by regulation of the Governing Board or College;

19. Knowingly assisting another person in the commission of a violation of the Student Code of Conduct;

20. Misuse of computers and networks which includes but is not limited to utilizing an unauthorized account, password, campus network, interfering with normal computer operations, circumventing data protection schemes or uncovering security loopholes, or violating terms of the software agreements.

21. Willful disruption of the orderly operation of the campus.

22. Leading or inciting others to disrupt scheduled and/or normal authorized activities.

23. Obstruction of the free flow of pedestrian or vehicular traffic on College premises or at college sponsored or supervised events.

24. Unauthorized use of electronic or other devices to make an audio or video record of any person while on college premises without his/her prior knowledge, or without his/her effective consent when such a recording is likely to cause injury or distress. This includes, but is not limited to, surreptitiously taking pictures of another person in a gym locker room or a restroom.

25. Any other cause identified as good cause by Education Code section 76033, not identified above; or any applicable Penal Code sections, or other applicable local, state, or federal laws.

26. Any other ground constituting good cause.

C. Violation of parking laws, regulations, or rules shall not be cause for the removal, suspension, or expulsion of a student (Ed. Code § 76036).

D. Nothing in these procedures shall preclude a student with a disability from receiving appropriate accommodations as indentified by Disability Support Services.
IV. TYPES OF DISCIPLINARY ACTION
The following discipline may be imposed, individually or in various combinations, on any student found to have violated the Student Code of Conduct.

WARNING: A warning is a written or oral notice to the student that continuation or repetition of certain conduct may be result in further disciplinary action.

RESTITUTION: Restitution is reimbursement by the student for damage to, loss of or misappropriation of property. Reimbursement may take the form of appropriate service by the student to repair property or otherwise compensate for damage.

PROJECTS AND ASSIGNMENTS: Projects and assignments may include educational projects, service to the college, and other related discretionary assignments.

DISCIPLINARY PROBATION: Probation is a status imposed for a specific period of time in which a student must demonstrate his or her conduct conforms to District standards of conduct as set forth in these regulations. Conditions may be imposed at the discretion of the District or the President’s designee. Misconduct during the probationary period or violation of any conditions of the probation may result in more serious disciplinary action, such as loss of privileges, suspension, or expulsion.

LOSS OF PRIVILEGES: Loss of privileges is the denial of extracurricular activities or other special privileges for a designated period of time. Violation of any conditions or campus regulations during the period of sanction may result in far more serious disciplinary action, such as suspension or expulsion.

REMOVAL: Removal of a student from class by an instructor or with the assistance of Police Services, if necessary.

SUSPENSION: Suspension is a separation from the District for a designated period of time after which the student will be eligible to return. A suspension may consist of (a) a period of time from one or more classes for a period up to ten (10) days of instruction; (b) from one or more classes for the remainder of the school term; and (c) from all classes or activities of the college for one or more terms for up to three years.

EXPULSION: Expulsion is the permanent termination of student status by the Governing Board for good cause when other means of correction fail to bring about proper conduct or when the presence of the student causes a continuing danger to the physical safety of the student or others. A student who is expelled is prohibited from participating in any college activities or programs and from entering District premises.

REVOCATION OF DEGREE OR CERTIFICATION: A degree or certificate awarded from the college may be revoked for fraud, misrepresentation, or other violation of College standards in obtaining a degree or certification, or for other serious violations committed by a student prior to graduation.

V. RECIPROCITY OF SANCTIONS
During a period of suspension or expulsion, a student shall not be enrolled in any other college within the District. Disciplinary actions or sanctions shall apply to the student at all District colleges.

VI. CONDUCT RELATED TO COLLEGE
After a hearing the President’s Designee may impose an immediate suspension on a student when such action is required in order to protect property, safety, and to ensure the maintenance of order on the campus or at a campus function.

No student may be removed, suspended, or expelled unless the conduct for which the student is disciplined is related to college activity or college attendance.

VII. RECORD OF DISCIPLINARY ACTION
In accordance with Education Code section 76220, Community College Districts shall establish, maintain and destroy student records according to regulations adopted by the Board of Governors of the California Community Colleges. The president’s designee will create a record of disciplinary actions, along with relevant supporting documents and evidence. Consistent with the Family Educational Rights and Privacy Act and District Student Services Procedure 3009, this record shall be maintained as a confidential student education record and may not be released without the permission of the student, except as permitted by law and policy. The student shall have a right to inspect the record and to challenge the contents. Disciplinary records shall be retained in a manner consistent with state law, and will be destroyed following the third college year after the college year in which it originated.

In accordance with Education Code section 76234, whenever there is included in any student record information concerning any disciplinary action taken by the college or District in connection with any alleged sexual assault or physical abuse or any conduct that threatens the health and safety of the alleged victim, the alleged victim of the sexual assault or physical abuse shall be informed within three (3) days of the results of any disciplinary action by the college and the results of any appeal.

VIII. REMOVAL BY INSTRUCTOR
An instructor, for good cause, may remove a student from his or her class for the day of the removal and the next class meeting. (Ed. Code § 76032 and 76033.)

A. Procedures Before The Removal.
1. The instructor shall notify the student of the instructor’s consideration of the removal from class and the reasons for the proposed removal.
2. The instructor may remove the student from the classroom immediately. Under normal conditions, the instructor should permit the student an opportunity to present a rebuttal to the accusation or otherwise offer relevant comment on the proposed removal. There need be no delay between the time notice is given to the student and the time of such a review.
3. The instructor shall decide whether or not to proceed with the proposed removal after hearing the student’s explanation and considering all of the information relative to the issue. There need be no delay between the time notice is given to the student and the removal.

4. The decision may be given to the student either orally or in writing.

5. The instructor’s decision is final and may not be appealed.

B. Procedures After The Removal.

1. Immediately following the removal, the instructor must notify the College President or President’s Designee of the removal.

2. If the student removed is a minor, the College President or President’s Designee shall ask the parent or guardian of the student to attend a parent conference regarding the removal as soon as possible. If the instructor or the parent or guardian so requests, a college administrator shall attend the conference.

3. The instructor may request that the student meet with the College President or President’s Designee, within three (3) days of removal, prior to returning to class.

4. During the period of removal, the student shall not be returned to the class without the concurrence of the instructor.

IX. PRELIMINARY PROCEDURES FOR SUSPENSION BY PRESIDENT’S DESIGNEE

The following procedures shall be taken before suspension except in the event that an emergency/interim suspension is made as set forth in Section XIV.

A. Administration. The President’s Designee shall administer these procedures and take appropriate action, subject to the approval of the College President and the Governing Board if required herein or otherwise by law.

B. Disciplinary Action Which May Be Imposed. The President’s Designee may suspend or impose a lesser sanction on a student. A suspension may consist of a period of time as follows:

1. From one or more classes for a period up to ten (10) days of instruction;

2. From one or more classes for the remainder of the school term;

3. From all classes and activities of the college for one or more terms. A suspension shall not exceed three (3) years.

C. Reporting Of Conduct. Alleged student misconduct shall be reported to the President’s Designee. The President’s Designee shall be the Vice President of Academic and Student Affairs or the Senior Dean of Student Services at Contra Costa College, the Dean of Student Life at Diablo Valley College, and the Senior Dean of Student Services at Los Medanos College. Other officials may be designated as the President’s Designee, whenever necessary for the efficient operation of the District.

D. Investigation. Upon receiving a report of alleged student misconduct, the President’s Designee shall initiate an investigation.

E. Notice. Before imposing discipline, the President’s Designee shall give or make reasonable efforts to give the student oral or written notice of the reason for the proposed disciplinary action. If the student is a minor, the President’s Designee shall also notify the parent or guardian of the investigation and charges.

F. Preliminary Hearing. Within a reasonable period of time (normally within five (5) days following the delivery to the student of the notice referred to above), the President’s Designee shall offer the student an opportunity to attend a meeting ("Preliminary Hearing") at which time the student may present a rebuttal to the accusation or otherwise offer relevant comment on the proposed discipline. There need be no delay between the time of the notice given to the student and the time of the meeting. If the student fails to arrange a preliminary hearing (or if he/she fails to appear for a preliminary hearing he/she has arranged), the decision of the President’s Designee will be final and not subject to a further Appeal Hearing.

G. Determination After Preliminary Hearing. Based on the evidence presented, the President’s Designee shall decide whether or not to proceed with the proposed suspension and/or to recommend expulsion after hearing the student’s explanation and considering all of the information. If the decision is to suspend for up to five (5) days, the President’s Designee may inform the student of the decision and send a written confirmation to the student’s last known address within five (5) working days. The confirmation shall include a statement that the decision to impose a suspension for five (5) days or less, or a lesser sanction, is not appealable. If the decision is to suspend for more than five (5) school days or to recommend expulsion, the President’s Designee shall send the student a written notice via personal delivery or certified mail to the student’s last known address as set forth below.

H. Notice To The College President. The President’s Designee shall report any disciplinary action imposed to the College President.

I. Notification After A Suspension Of More Than Five (5) Days. If the President’s Designee imposes a suspension of more than five (5) days, the President’s Designee shall promptly send the student a letter of notification that is hand delivered or sent via certified mail to the student’s last known address. The notification shall include:

1. A statement of the charges, the reason for the suspension or recommended expulsion offer, and a description of facts related to the misconduct, including the evidence against the student, the date of the incident(s), time of the incident(s), and location of the offense(s).

3. An explanation that a student who has been suspended for more than five (5) days is entitled to appeal the decision and has a right to a further hearing (“Appeal Hearing”). The notification shall also state that a request for an Appeal Hearing shall be filed within five (5) business days of the service or mailing of the notification, whichever is earlier. The written request for an appeal hearing must be submitted to the President’s Designee, and must cite the specific ground(s) for the appeal (from those listed below), and provides information which substantiates the ground(s) on which the appeal is being made.

4. Grounds for appeal - A student may appeal the decision of the President’s Designee on grounds that:
   (a.) Fair consideration was not provided to the student (i.e., there was evidence that some aspect of the hearing was prejudicial, arbitrary, or capricious);
   (b.) New and significant information, not reasonably available at the time of the initial hearing, has become available;
   (c.) The sanction or remedy imposed is not in due proportion to the nature and seriousness of the offense. Any evidence supporting these grounds must be included in the request for an appeal hearing.

5. A statement that the student has the right to be accompanied at an “Appeal Hearing” by an on-campus advisor of his or her choice. If the student decides to be accompanied by an advisor, the name and address of that advisor must be submitted to the President’s Designee at the time the appeal is filed.

6. The President’s Designee may note that he or she will consider no evidence other than that evidence received at the hearing. Hearsay evidence may be used for the purpose of supplementing or explaining other evidence, but shall not be sufficient in itself, to support a finding.

7. The Notification shall include the date, time, and location of an Appeal Hearing if requested by the student.

J. Student Right To Appeal A Suspension Of More Than Five (5) Days. The student may accept a suspension in excess of five (5) days without admitting the conduct charged. In such a case, the decision of the President’s Designee will be final and not subject to a further Appeal Hearing. Should the student not accept a suspension in excess of five (5) days, the student has a right to appeal. A suspension appeal must be filed by the student no later than five (5) days from the date the notification letter is personally served or mailed.

K. Schedule Of Hearing. The President’s Designee shall schedule an Appeal Hearing no later than ten (10) working days from the date of the suspension.

X. HEARING AUTHORITY FOR APPEAL HEARING

A. The College President will assign either an Administrative Hearing Officer or may utilize a Student Discipline Committee (“Committee”) to conduct Appeal Hearings at the college (“Hearing Authority”).

B. An Administrative Hearing Officer shall be a college official.

C. A Committee shall include: one faculty member, one administrator or manager, and one student. The selection process for the Committee, if any, will normally occur at the beginning of each academic school year.

1. The Academic Senate will select a faculty representative and alternate(s). Vacancies will be filled by an action of the Academic Senate.

2. The Associated Student Body will select a student representative and alternate(s). Vacancies of student members shall be filled by an action of the Associated Student Body.

3. The College President will select the administrative or management representative and alternate(s). The administrative or management representative will serve as the Committee Chair.

The student or the college staff member shall notify the Committee if he or she has a conflict of interest because he or she is involved in the discipline matter and, therefore, is unable to serve as a neutral party.

4. Alternate faculty, administrative, and student members shall be appointed to ensure that a standing committee can always be convened promptly.

XI. APPEAL HEARING PROCEDURES

A. The President’s Designee shall submit to the Hearing Authority: a description of the charges, notices, evidence, and a copy of the proposed decision. The President’s Designee shall present relevant evidence regarding the alleged misconduct. The accused student may then present any relevant evidence. Each party may call, examine, and cross-examine witnesses. Written statements, if any, shall be submitted under penalty of perjury. The Hearing Authority may also question witnesses. Opening and closing statements shall be limited to five (5) minutes. The President’s Designee shall speak first, followed by the student.

B. The Hearing Authority shall rule on all questions of procedure and admission of evidence.

C. Hearings need not be conducted in accordance with strict rules of evidence or formality of a court hearing.

D. The Hearing Authority shall consider no evidence other than that evidence received at the hearing. Hearsay evidence may be used for the purpose of supplementing or explaining other evidence, but shall not be sufficient in itself, to support a finding.

E. A student may be accompanied by an advisor of his or her choosing, at the student’s request. The role of the advisor is passive in this procedure. The advisor may be present at the hearing and may counsel the student. The advisor may not address the Hearing Authority and shall not be permitted to participate in any way during the hearing except to offer counsel to the student. If the student decides to be accompanied by an attorney, the name and address of that
attorney must be submitted to the President’s Designee at the time the request for hearing is filed.

F. The Appeal Hearing shall be closed to protect the privacy and confidentiality of everyone involved unless the student and District agree in writing to have a public hearing at least five (5) days in advance of the hearing. A closed hearing will be closed to everyone except the following:

1. The student charged.
2. The Hearing Authority.
3. An advisor for the student charged, if so desired.
4. The President’s Designee.
5. A witness, while presenting evidence.
6. An on-campus advisor for a witness while presenting evidence.

G. An official audiotape recording of the hearing shall be kept. The record shall be the property of the District. The student charged may listen to the tape at a mutually agreeable location at the college. An accused student may, upon request, be provided a copy at his or her own expense.

XII. HEARING AUTHORITY’S CONSIDERATION AND RECOMMENDATION

Following presentation of the evidence, the Hearing Authority shall privately consider the evidence with all persons excluded. The Hearing Authority shall send a written report to the College President within five (5) working days of the termination of the hearing. The report shall contain the following information:

A. A summary of factual findings and a determination that the accused student did or did not commit the act(s) charged.
B. A finding that the student’s act(s) did or did not constitute a violation of the Student Code of Conduct.
C. A recommendation for upholding or modifying the proposed discipline. The Hearing Authority may also recommend further investigation.

XIII. COLLEGE PRESIDENT’S DECISION

A. The College President shall reach a decision after reviewing the report submitted by the Hearing Authority. The College President may refer the matter back to the Committee or hearing officer for further clarification on details of the case, such as evidence and findings of fact. The College President may uphold the suspension, uphold the recommendation by the Hearing Authority, or adopt a lesser sanction, if appropriate. A written statement of the decision shall be sent via certified or registered mail to the student’s last known address within three (3) working days of the College President’s receiving the Hearing Authority’s recommendation.

B. The decision of the College President to suspend or impose a lesser sanction shall be final and not subject to further appeal.

C. The College President shall report a disciplinary suspension of any student to the Governing Board at its next regular meeting after the suspension has been imposed. A copy of the suspension determination, including the reasons for the suspension, shall be placed in the student’s permanent disciplinary record (not the transcript).

D. If the College President determines that a student should be expelled, he or she will forward that recommendation through the Chancellor, to the Board of Trustees for determination.

E. In the event that a College President is or will be unavailable for the making of a prompt decision, the College President may appoint an unbiased designee to act on the appeal.

XIV. EMERGENCY INTERIM SUSPENSION

A. An emergency/summary suspension is an immediate suspension imposed upon a student for good cause. (Ed. Code § 66017.)

B. Notwithstanding the foregoing, the College President or the President’s Designee may impose an emergency/summary suspension. It is an extraordinary measure and shall be utilized when necessary to protect lives or property and to ensure the maintenance of order pending a hearing.

C. A preliminary hearing shall be provided within ten (10) calendar days of an emergency/summary suspension. (Ed. Code § 66017.) The procedures set forth in Sections IX and X shall apply to the preliminary hearing and any appeal hearing.

D. An emergency/summary suspension shall be reported to the Governing Board at its next regular meeting after such suspension has been imposed. A copy of the suspension may be placed in the student’s permanent record at the discretion of the College President.

XV. NOTIFICATION

The College President or President’s Designee shall, upon suspension or expulsion of any student, notify the appropriate law enforcement authorities of the county or city in which the school is situated of any acts of the student which may be in violation of section 245 of the Penal Code. (Ed. Code § 76035.)

XVI. EXTENSIONS OF TIME

Calendar restraints may be extended with the agreement of both parties.

XVII. EXPULSION

The Governing Board has the sole authority to expel a student. If the College President determines that a student should be expelled, he or she shall send the recommendation through the Chancellor to the Governing Board.

A. Within 30 instructional days of the receipt of the recommendation from the College President, and with the agreement of the Chancellor, the Governing Board shall conduct an appeal hearing in closed session with the accused student and the College President (or the President’s Designee).

1. The hearing shall be closed to protect the privacy and confidentiality of everyone involved, unless (a) the accused student requests an open hearing, in writing,
within 48 hours of being notified of the hearing, and (b) it is determined that holding the hearing in open session would not lead to the giving out of information concerning students which would be in violation of state or federal law regarding the privacy of student records.

2. A closed hearing will be closed to everyone except the following:
   a. The student charged.
   b. An advisor/advocate for the student charged, if so desired. If the student chooses to be accompanied by an attorney, the student must notify the District in writing of his/her intent to bring an attorney at least five (5) business days prior to the hearing. Failure to notify the District will result in a waiver of the right to be accompanied by an attorney, or a one month postponement of the hearing.
   c. The College President and/or President’s Designee.
   d. The Governing Board
   e. The Chancellor and/or District Legal Advisor
   f. The student’s parent(s) or guardian, if the student is a minor.

B. The accused student shall be notified in writing of the date and time of the hearing, and shall be provided with a copy of this policy. The notice shall be mailed via certified or registered mail, or served personally, if the student is a minor.

C. The hearing shall be conducted in accordance with the following procedures:
   1. The President of the Governing Board will serve as chair of the hearing, and will rule on all questions of procedure and admission of evidence.
   2. Hearings need not be conducted in accordance with strict rules of evidence or formality of a court hearing.
   3. Before commencement of the hearing, the Governing Board shall review a description of the charges, notices, evidence, findings, and a copy of the proposed decision from the college-level disciplinary appeal hearing. The Governing Board shall consider no evidence other than that evidence received in the hearing process.
   4. The College President (or the President’s Designee) shall make a brief statement to the Governing Board, referring to relevant evidence regarding the alleged misconduct.
   5. The accused student may then make a brief statement to the Governing Board and present any relevant evidence.
   6. The statements shall be limited to five (5) minutes.
   7. Upon completion of these statements, the Governing Board will have an opportunity to ask questions of both the student and the College President (or President’s Designee).
   8. The Governing Board will conclude the hearing, dismiss the parties, and privately deliberate as to a decision.
   9. The Governing Board shall issue a statement of decision including findings of fact and a determination that the accused student did or did not commit the act(s) charged, a finding that the student’s act(s) did or did not constitute a violation of the Student Code of Conduct, and a decision as to whether the expulsion proposed by the President would be upheld or modified. The Governing Board may also recommend further investigation. Pursuant to Education Code section 72122, regardless of whether the matter is heard in open or closed session, the final action of the Governing Board shall be taken in open session, and the result of the action shall be a public record. The name of the student, however, shall not be released.
   10. The Chancellor’s Office will send a written statement of the Governing Board’s decision via certified or registered mail to the student’s last known address within three (3) working days of the hearing.
   11. If the Governing Board’s decision is unfavorable to the student, the student shall have a right to submit a written statement of his/her objections to the decision. This statement shall become a part of the student’s records.
   12. The decision of the Governing Board is final, and not subject to further appeal.
   13. The hearing shall be electronically recorded. The record shall be the property of the District. The student charged may listen to the tape at a mutually agreeable location at the college. An accused student may, upon request, be provided a copy of the recording at his or her own expense.

Education Code, Sections 66017, 66300, 66301, 72122, 76030-76037, 76234

Related Procedures:
• CCCCDD Board Policy 3012
• CCCCDD Student Services Procedures 3009 & 3026

Historical Annotation:
• Adopted 03/02/04
• Revisions adopted 06/17/08

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 the Counseling Center and Information Center.

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.

Student Success & Support Program
Steps to successful registration and enrollment
To register and enroll in courses at Los Medanos College, follow these steps. Not only are the steps required, but they are designed to support students in having a successful academic experience.

1. **Application:** All students new to Los Medanos College, as well as those who have missed two or more consecutive semesters, must submit a completed application online. Applications for the Summer and Fall semesters are accepted beginning February 15 and for the Spring semester beginning October 1.

2. **Assessment:** All new students are required to take the college assessment tests which will determine the appropriate English and math courses that they may sign up for. Students are also 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. Additionally, under certain circumstances, students may use previous transcripts (high school or college) as well as AP test scores and EAP scores for placement. Students submitting transcripts or AP/EAP must submit these to Admissions & Records Office.

3. **Orientation (New Student Workshops):** All new students are required to complete an orientation to LMC. This is completed by attending a New Student Workshop. At the workshops, students will be able to clarify their educational goals, learn about student services and programs, as well as develop their initial educational plan.

4. **Educational Plan:** All new students are expected to complete an initial individual electronic educational plan with the assistance of a counselor prior to registering for classes. This is completed in the “New Student Workshops.” As part of the educational planning process, all students must state a specific educational goal no later than upon completion of 15 units of course work.

5. **Registration:** Registration is set up on a priority system (see Course Enrollment Priority) and may be completed online or in the Admissions & Records Office. Students who enroll in courses must pay appropriate fees (see FEES section). Students are considered officially enrolled when all fees have been paid in full.

6. **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 their initial educational plan.

7. **Attendance & Successful completion of classes:** All students are expected to attend their classes regularly, complete assigned coursework on time, and complete their courses each semester. Students are also expected to maintain regular progress towards their educational goal.

Failure of a student to fulfill the responsibilities listed above may result in loss of priority registration and the suspension or termination of college services.

Textbooks
Information on textbooks is located under “Bookstore” on page 28.

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 Success 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 Success 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 of Student Services
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 Student Services 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.
- Student records may be released to organizations in connection with any alleged 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 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 the following information available:

- The completion or graduation rates of certificate or degree-seeking, first-time, full-time students beginning Fall 2009 and annually thereafter. Based on a cohort of first-time, full-time freshman with a declared program of study, 25.07% attained a certificate or degree or became 'transfer prepared' during a three-year period, from Fall 2009 to Spring 2012. Based on the cohort of first-time freshmen with a declared program of study, 14.64% transferred to another public institution in California (UC, CSU, or other California Community College) prior to attaining a degree or certificate during a three-year period, from Spring 2010 to Spring 2012.

- Annual reports of criminal activity on campus and procedures for prevention of campus crime, as required by the Crime Awareness and Campus Security Act of 1991. This information is available, on request, from the campus Police Services Office or the LMC website under Campus Police.
College Transfer and Graduation Requirements
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 925-473-7444, 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, and 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:
   • 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.

Cross Registration (Mills College)
See a counselor or the Transfer Center for requirements and details

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.

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.
the
TRANSFER CENTER
IS THE PLACE TO GO
Information to get you where you want to go

TRANSFER CENTER RESOURCES
• Reference books on higher education
• Internet access for college transfer information including ASSIST and CSU Mentor
• CSU, UC, and private university admission applications
• A variety of college guides to help you choose the right school for you
• The Transfer Center offers a variety of services and resources to help students transfer to the four-year institution of their choice.

TRANSFER CENTER SERVICES
• Walk-in transfer information and assistance
• Workshops and seminars on transfer issues and concerns
• Application filing assistance
• Opportunities to meet with representatives from four-year colleges and universities
• General education information (CSU GE and IGETC)
• Transfer Admission Guarantee
• Annual College Transfer Day and East County College Night
• University Tours
• Friendly and helpful staff

SPECIAL TRANSFER PROGRAMS
• TAG (Transfer Admission Guarantee)
  TAG guarantees students admission to a specific major as a junior if they complete the specified requirements. LMC does TAGs with UC Davis, UC Santa Barbara, UC Irvine, UC Merced, UC Santa Cruz, UC Riverside, University of the Pacific, National University, Fisk University, St. Mary’s College of California, Clark Atlanta University and Arizona State University.

• Cross Registration (CSUEB or Mills College)
  Cross Registration is a program that allows students to enroll concurrently at CSUEB if they meet eligibility requirements. It gives the students the opportunity to take courses at CSUEB or Mills College while paying community college fees.

• Concurrent Enrollment (UC Berkeley)
  This program permits access to UCB classes so students may test their potential for success in a university setting and/or may take required courses at the University that might not be available at their home institution.

• Transfer Academy
  The Transfer Academy provides a dynamic academic experience with strong supports in and outside of the classroom, like academic counseling, academic support, workshops, leadership development and campus tours.
### 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 18 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.

### Communications in the English Language and Critical Thinking

<table>
<thead>
<tr>
<th>AREA A</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td>A2</td>
<td>Written Communication</td>
<td>3</td>
</tr>
<tr>
<td>A3</td>
<td>Critical Thinking</td>
<td>3</td>
</tr>
</tbody>
</table>

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

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

### Physical Universe and Its Life Forms

<table>
<thead>
<tr>
<th>AREA B</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1</td>
<td>Physical Science</td>
<td>3-5</td>
</tr>
<tr>
<td>B2</td>
<td>Life Science</td>
<td>4-5</td>
</tr>
<tr>
<td>B3</td>
<td>Laboratory Activity</td>
<td>4-5</td>
</tr>
</tbody>
</table>

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.

### 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.

<table>
<thead>
<tr>
<th>DISCIPLINE(S)</th>
<th>COURSE(S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1</td>
<td>Anthropology &amp; Archeology</td>
</tr>
<tr>
<td>D2</td>
<td>Economics</td>
</tr>
<tr>
<td>D3</td>
<td>Ethnic Studies</td>
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<tr>
<td>D4</td>
<td>Gender Studies</td>
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<tr>
<td>D6</td>
<td>History</td>
</tr>
<tr>
<td>D7</td>
<td>Interdisciplinary Social or Behavioral Science</td>
</tr>
<tr>
<td>D8</td>
<td>Political Science, Government &amp; Legal Institutions</td>
</tr>
<tr>
<td>D9</td>
<td>Psychology</td>
</tr>
<tr>
<td>D10</td>
<td>Sociology and Criminology</td>
</tr>
</tbody>
</table>

### Lifelong Understanding and Self-Development

Minimum of one course, 3 units.

### 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

<table>
<thead>
<tr>
<th>AREA C</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
<td>Arts</td>
<td>3-6</td>
</tr>
<tr>
<td>C2</td>
<td>Humanities</td>
<td>3-6</td>
</tr>
</tbody>
</table>

**Group A**: ART-005, 006, 007, 008, 009, DRAMA-015, 016, 070, MUSIC-010, 012, 015, SPAN-060


### Arts, Literature, Philosophy and Foreign Languages

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

**Group A**: ART-005, 006, 007, 008, 009, DRAMA-015, 016, 070, MUSIC-010, 012, 015, SPAN-060

IGETC: Intersegmental General Education Transfer Curriculum 2014 – 2015

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 college 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 18 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, 040, 050, 060, 070, 075, 080, 160

Math 034 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, 016
   DRAMA-015, 016, 070, MUSIC-010, 015

3B **Humanities:** ART-017, CHIN-040, DRAMA-030, ENGL-127, 128, 129, 132, 133, 205, 231, FILIP-061, FRNCH-061, 062
   HUMAN-019, 020, 021, 022, 024, 030, ITAL-061
   MUSIC-012, PHIL-002, 033, 040, 042, POLSC-033,
   SIGN-066, 067, 068, SPAN-050, 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
4G **Interdisciplinary, Social and Behavioral Sciences:** CHDEV-010, HIST-047, 052, JOURN-100, POLSC-043, SPCH-130
4H **Political Science, Government and Legal Institutions:** PHIL-033, POLSC-010, 020, 033
4I **Psychology:** PSYCH-010, 011, 014, 017
4J **Sociology and Criminology:** ADJUS-110, 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, 025, 026, 028, 029, 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 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, 061; 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

Applying for Graduation

Petitions to graduate with an associate degree or a certificate of achievement should be filed in the LMC Admissions & Records Office. The deadlines for submitting a petition for graduation are: 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 mailed to graduates approximately eight weeks after the end of the semester 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 and regulations of any of the catalogs that are published while in continuous enrollment at LMC, prior to eligibility for graduation.

Continuous enrollment at LMC 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.

Associate Degrees for Transfer Requirements

California Community Colleges offer associate degrees for transfer to the CSU. These 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.adegreewithaguarantee.com.

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

Associate Degree Requirements

In order to receive an associate degree from Los Medanos College, a student must meet College standards in mathematics, reading and interpreting material and writing expository essays.

Mathematics Requirement

Students seeking an associate of arts degree must satisfy the mathematics requirement by one of the following:

1) Complete Math 26, 29 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."

Reading and Writing Requirements:

The reading/writing requirement is cleared when an “A”, “B”, or “C” grade is earned in ENGL-100.

Certificate of Achievement Requirements

Satisfaction of the requirements defined in the Majors section, including 12 units in residency, and a cumulative grade point average of 2.0, qualifies a student for the certificate of achievement. Students may earn multiple certificates.

College Skills Certificates

Shorter certificate options are available through various programs. These certificates require less than 18 units of course work within the major programs of study. Students requesting skills certificates must complete at least 50% of the courses required for the skills certificates at Los Medanos College. For information, contact the department chair or a counselor.
General Education

Philosophy

General education is designed to enhance the lives of students in the broadest sense. Generally educated people have well-developed reading, writing, speaking and critical thinking skills, and will mobilize these abilities in all areas of their lives, for the rest of their lives. They can ask thoughtful questions, grapple with difficult texts and concepts, consider competing perspectives, challenge arguments and question conventional ideas, absorb new information, admit their own limitations, and demonstrate curiosity and a love of learning.

The ends of general education are more than academic; they are civic, moral, and personal. Civic, because citizens in a democracy need to think, be informed, and work with others in public projects. Moral, because we are bound to uphold rights, to respect diversity, and to oppose the mistreatment of humanity and the natural world. And personal, to enhance self-awareness and intellectual discipline. As generally educated people, we live better in every way.

A GE course is rigorous and challenging, but also responsive to students and relevant to real-world issues. A GE course honors the diversity of its students’ opinions and life experiences. A GE course is active, dynamic, probing, far-reaching, and open to unexpected lines of inquiry. A GE course will engage and benefit any student, not only those with a professional or personal interest in the subject.

Student Learning Outcomes for the General Education Program

At the completion of the LMC general education program, a student will:

1. Read critically and communicate effectively as a writer and speaker.

    Reading
    - Reading is primary source of information and constitutes substantial portion of assignments.
    - Students are expected to analyze, synthesize and evaluate concepts, going beyond skills required for literal comprehension of text.

    Writing
    - Writing is used to develop thinking, promote learning.
    - Writing is used as evaluation instrument to measure student progress.
    - Students are asked to write with frequency and depth to explore ideas, relationships.
    - Students expected to demonstrate college level writing: clarity and command of grammar.

2. Understand connections among disciplines and apply interdisciplinary approaches to problem solving.

    • Course connects with other selected disciplines, includes references to commonalities.
    • Course includes concepts, generalizations, principles, values, attitudes and belief systems common to other branches of knowledge.
    • Course reveals to students the interrelatedness of knowledge across the curriculum.

3. Think critically and creatively

    • Critical thinking is not additional to content, but integral to it; something that defines the manner in which content is organized, conceptualized, applied.
    • Course provides opportunity for students to take charge of their thinking, develop criteria of analyzing and assessing their thinking.
    • Students are expected to demonstrate creative thinking processes which involve novel ways of defining problems, and generating solutions.

4. Consider the ethical implications inherent in knowledge, decision-making and action.

    • Course embodies values and poses ethical questions which suggest consequences for the future.
    • Course addresses the ethical obligations which can arise from knowledge within the discipline.
    • Students are expected to demonstrate understanding of moral significance, impact of knowledge on society.

5. Possess a worldview informed by diverse social, multicultural and global perspectives.

    • Course challenges students to consider contrasting experiences, viewpoints and opinions of diverse social groups within the U.S. and/or among other peoples, nations and cultures.
    • Course addresses distinctions of race, class, ethnicity, gender, religion, age, disability, sexual orientation and political persuasion where applicable.
    • Course extends beyond national centprism, where appropriate, to a more inclusive consideration of the international developments, patterns and trends that conjoin Americans with other peoples around the globe.
Student Planning

All students should have an education plan. Your education plan is your individualized roadmap to your college goals. Use the new “Student Planning” tool to track your progress, update the plan as needed, make an appointment with a counselor and register for courses. To start working on your education plan, log on through the portal using your InSite/WebAdvisor username and password. Select “Student Planning” under “Academic Profile”. And be sure to see a counselor to make sure you are selecting the best courses for your program of study.

SCHEDULE PAGE

TIMELINE PAGE
<table>
<thead>
<tr>
<th>PROGRAMS OF STUDY</th>
<th>College Skills Certificate</th>
<th>Associate Degree</th>
<th>PROGRAMS OF STUDY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration of Justice</td>
<td></td>
<td>AS-T*</td>
<td>Networking and Security (Advanced)</td>
</tr>
<tr>
<td>Basic Law Enforcement Academy Intensive</td>
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<td>Networking and Security (Basic)</td>
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<tr>
<td>Basic Law Enforcement Academy Intermediate</td>
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<td>PC Repair Technician (A+ Certification)</td>
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<td>Basic Law Enforcement Academy Advanced</td>
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<td>Web Design</td>
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<tr>
<td>Basic Law Enforcement Academy Module I</td>
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<td>Drama</td>
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<td>Criminal Investigations</td>
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<td>Theatre Arts</td>
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<td>Anthropology</td>
<td>AS</td>
<td>AS</td>
<td>Electrical/Instrumentation Technology</td>
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<td>Appliance Service Technology</td>
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<td>Engineering</td>
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<td>Fire Technology</td>
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<tr>
<td>Refrigeration Technician</td>
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<td>Fire Prevention</td>
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<td>Fine Arts</td>
<td>AA</td>
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<td>Fire Technology</td>
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<td>Graphic Communications</td>
<td>AS</td>
<td></td>
<td>Fire Academy</td>
</tr>
<tr>
<td>Studio Arts</td>
<td>AA-T*</td>
<td></td>
<td>Fire Prevention</td>
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<tr>
<td>Automotive Technology</td>
<td>AS</td>
<td></td>
<td>Fire Protection</td>
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<tr>
<td>Air Conditioning Specialist</td>
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<td></td>
<td>History</td>
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<tr>
<td>Automotive Chassis Specialist</td>
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<td></td>
<td>Journalism</td>
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<td>Engine Performance</td>
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<td>Commercial Music – Business Management</td>
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<tr>
<td>Engine Repair &amp; Machining Specialist</td>
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<td>Commercial Music – Performance</td>
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<tr>
<td>Smog Technician Specialist</td>
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<td>Commercial Music – Pedagogy</td>
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<tr>
<td>Transmission Specialist</td>
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<td>Behavioral Science and Social Science</td>
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<tr>
<td>Biological Science</td>
<td>AS</td>
<td></td>
<td>Math and Science</td>
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<tr>
<td>Accounting</td>
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<td>Management and Supervision</td>
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<td>Music</td>
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<td>Retail Management</td>
<td>AS</td>
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<td>Commercial Music – Business Management</td>
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<td>Small Business Management and Operations</td>
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<td>Chemistry</td>
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<td>Travel Marketing</td>
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<td>Cruise Specialist</td>
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<tr>
<td>Associate Teacher</td>
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<td>Vocational</td>
<td>Home-Based Travel Specialist</td>
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<tr>
<td>Curriculum in Early Childhood Education</td>
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<td>Computer Science</td>
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<tr>
<td>Infant Toddler Care</td>
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<td>AS</td>
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<td>School-Age Child Care</td>
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<td>Welding Technology</td>
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<td>School-Age Development &amp; Education</td>
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<td>School-Age Associate Teacher</td>
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<td>Pre-Apprenticeship</td>
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<td>Site Supervisor/ Program Director</td>
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<td>World Languages</td>
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<td>Special Needs Care &amp; Education</td>
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<td>American Sign Language</td>
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<td>Communication Studies</td>
<td>AA-T*</td>
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<td>Foundation</td>
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<tr>
<td>Networking and Security</td>
<td></td>
<td>AS</td>
<td>Communication Studies</td>
</tr>
</tbody>
</table>

*Degrees designed especially for those who plan to transfer to a four-year college or university.
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 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 or the Intersegmental General Education Transfer Curriculum (IGETC). *

**Standard AA/AS Path**

- Students must complete the LMC General Education 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 the following Associate Degrees for Transfer:

- Administration of Justice
- Business Administration
- Communication Studies
- Early Childhood Education
- English
- History
- Journalism
- Kinesiology
- Physics
- Psychology
- Sociology
- Studio Arts
- Theater Arts

Students must complete 60 degree applicable units and must have 12 units at LMC.

*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**  
2014-15

**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 18-19 units. Please see a counselor for assistance in selecting appropriate courses. Students choosing the transfer track option are strongly encouraged to see a counselor since four-year college requirements vary widely and are subject to change. Courses that double count are listed in both boxes. This document is subject to change. For updates contact the Counseling Center or www.losmedanos.edu

### General Education Requirements

<table>
<thead>
<tr>
<th>A. Natural Sciences</th>
<th>3 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Many of these courses will also satisfy the CSU Area B requirement.</td>
<td></td>
</tr>
<tr>
<td><strong>COMPLETE ONE OF:</strong></td>
<td></td>
</tr>
<tr>
<td>ASTRO – 010; BIOSC – 005*, 007, 008, 010; ENGIN – 010; PHYS – 015; PHYSC – 005</td>
<td></td>
</tr>
<tr>
<td>*Degree credit if taken Summer 2011 and later.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Social &amp; Behavioral Sciences</th>
<th>3 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Many of these courses will also satisfy the CSU Area D requirement.</td>
<td></td>
</tr>
<tr>
<td>Transfer students should consult with an LMC counselor regarding meeting the CSU American Institutions and Ideas requirement.</td>
<td></td>
</tr>
<tr>
<td><strong>COMPLETE ONE OF:</strong></td>
<td></td>
</tr>
<tr>
<td>ADJUS – 110, 160*; ANTHR – 001, 004, 005, 006, 007; CHDEV – 010, 020; ECON – 005, 010, 011; EDUC-040; HIST – 029, 030, 031, 033, 034, 035, 038, 039, 040; POLSC – 010, 020, 033, 043; PSYCH – 010, 011; SOCIO – 015, 016; SOCSC – 045* SPCH-120, 180</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C. Arts &amp; Humanities</th>
<th>3 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Many of these courses will also satisfy the CSU Area C requirement.</td>
<td></td>
</tr>
<tr>
<td><strong>COMPLETE ONE OF:</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D. Language and Rationality</th>
<th>6-7 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Many of these courses will also satisfy the CSU Area D requirement</td>
<td></td>
</tr>
<tr>
<td><strong>COMPLETE TWO COURSES:</strong> (one from English Composition and one from Communication and Analytical Thinking)</td>
<td></td>
</tr>
<tr>
<td>i. English Composition: ENGL-100</td>
<td></td>
</tr>
<tr>
<td>ii. Communication and Analytical Thinking: MATH-026, MATH-029 or higher</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>E. Ethnic/Multicultural Studies</th>
<th>3 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Many of these courses will also satisfy the CSU Area C and D requirements.</td>
<td></td>
</tr>
<tr>
<td><strong>COMPLETE ONE OF:</strong></td>
<td></td>
</tr>
<tr>
<td>*Double-counts: ADJUS-160 (LMC Area B), DRAMA-015 (LMC Area C) and SOCSC-045 (LMC Area B)</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL UNITS**  
18-19
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 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. Courses that fulfill an LMC General Education requirement. These courses will be coded with an “LMC: GE:” and the appropriate area requirement it meets. See page 63 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 lists of CSU, CSU GE and UC transferable courses are available at www.assist.org.

IGETC
Intersegmental General Education Transfer Curriculum (IGETC): Courses identified with the IGETC code are part of a comprehensive pattern of courses prospective transfer students from the California Community Colleges may complete to satisfy lower-division General Education requirements at both the University of California and the California State University.
Course Identification Numbering System (C-ID)
The Course Identification Numbering System (C-ID) is a statewide numbering system independent from the course numbers assigned by local California community colleges. A C-ID number 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 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.

<table>
<thead>
<tr>
<th>Type of teaching method</th>
<th>Learning activity</th>
<th>Expected hours of outside preparation per class</th>
<th>Ratio of units to in-class hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture or</td>
<td>Primarily dissemination of information by instructor.</td>
<td>2 hours</td>
<td>1 unit: 1 hour per week 18 hours per semester</td>
</tr>
<tr>
<td>English Composition or</td>
<td>Primarily dissemination of information by the instructor to a large or moderate-sized group of students.</td>
<td>2 hours</td>
<td>1 unit: 1 hour per week 18 hours per semester</td>
</tr>
<tr>
<td>Laboratory or</td>
<td>Hands-on experience by the students with some instruction and with close supervision by an instructor.</td>
<td>1 hour</td>
<td>1 unit: 3 hours per week 54 hours per semester</td>
</tr>
<tr>
<td>Independent study or</td>
<td>Contracted independent study with close supervision by an instructor.</td>
<td></td>
<td>1 unit: 3 hours per week 54 hours per semester</td>
</tr>
<tr>
<td>PE/Activity or</td>
<td>Highly structured physical activities directed and supervised by an instructor.</td>
<td>0</td>
<td>1 unit: 3 hours per week 54 hours per semester</td>
</tr>
<tr>
<td>Occupational work experience field work</td>
<td>Contract and/or paid work with instructor evaluation.</td>
<td>0</td>
<td>1 unit 75 paid hours per semester or 60 nonpaid hours per semester</td>
</tr>
</tbody>
</table>

Classes of less than one semester in length will be assigned units proportional to semester hours.
BIOSC-020  Principles of Biology: Cellular Processes

TOTAL HOURS LECTURE: 54
TOTAL HOURS LAB: 108
UNITS: 5

Prerequisite: MATH-029, 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 life’s processes are addressed on the molecular and cellular levels. An interdisciplinary approach will be used to treat cytology, biochemical cycles, proteonomics, genenomics, 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

ENGIN-022  Programming with MATLAB for Engineers and Scientists

TOTAL HOURS LECTURE: 54
TOTAL HOURS LAB: 54
UNITS: 4

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
Academic and Career Success

Academic and Career Success courses are designed to help students develop knowledge, skills, and abilities to succeed within the college environment, both inside and outside of the classroom. Courses focus on the development of cognitive strategies, academic skills and behaviors, as well as contextual awareness and skills necessary for navigating the complex system of higher education.

COURSE DESCRIPTIONS

ACS-010 Becoming a College Scholar-a First-Year Seminar

TOTAL HOURS LECTURE: 54
UNITS: 3
Advisory: Eligibility for ENGL-090

Becoming a College Scholar – a First-Year Seminar introduces first-year students into intellectual life, prepares them for rigorous university-level work, develops multidisciplinary thinking skills, and supports them in developing a strong sense of academic purpose and identity. The course explores topics such as motivation and attitudes, values, goal setting, decision-making processes, critical and creative thinking, personal health, interpersonal communication, study group collaboration, behavioral expectations and etiquette, personality and learning theories, cultural and economic diversity, information and technology competence, as well as techniques for maximizing the ability to succeed as a lifelong learner. Students will develop thinking strategies that can be used for lifelong problem solving in academic, social, and personal life. There is an emphasis on the development of academic writing, inquiry, and collaboration. May not be repeated. LR

LMC: DA
TRANSFER: CSU Gen. Ed. Area E

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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. 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

TOTAL HOURS LECTURE: 18
TOTAL HOURS LAB: 36
UNITS: 1.5

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 not be repeated. P/NP

LMC: NDA
TRANSFER: CSU

ACS-110 Academy for College Excellence Foundation Course

TOTAL HOURS LECTURE: 9
TOTAL HOURS LAB: 54
UNITS: 1.5
Advisory: Eligibility for ENGL-090

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

TOTAL HOURS LAB: 36
UNITS: .5
Prerequisite: ACS-110 (may be taken concurrently)
Advisory: Eligibility for ENGL-090

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 not be repeated. SC

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

TOTAL HOURS LECTURE: 27
TOTAL HOURS LAB: 54
UNITS: 2.5

Prerequisite: ACS-110 (may be taken concurrently)
Co-requisite: ACS-111

Advisory: Eligibility for ENGL-090

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 not be repeated. SC

LMC: DA

ACS-170  Occupational Work Experience Education in Education

TOTAL HOURS: 60-300
UNITS: 1-4

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. Credit may be applied as electives toward graduation. SC

LMC: DA
TRANSFER: CSU

ACS-900s  Selected Topics in Education

DA varies with course content.

ACS-170A  Internship in Education

TOTAL HOURS: 60-300
UNITS: 1-4

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
Administration of Justice

DEGREE—Associate in Science for Transfer
Administration of Justice

CERTIFICATES OF ACHIEVEMENT
Administration of Justice
Basic Law Enforcement Intensive
Basic Law Enforcement Intermediate
Basic Law Enforcement Advanced
Criminal Investigations
Criminal Law

COLLEGE SKILLS CERTIFICATE
Basic Law Enforcement Academy Module III

ASSOCIATE IN SCIENCE
ADMINISTRATION OF JUSTICE FOR TRANSFER DEGREE

The Administration of Justice program prepares students for entry-level positions in criminal justice and for transfer to the California State Universities. There are three components in administration of justice – law enforcement, the court system, and corrections. Law enforcement is the gateway function and includes police, sheriffs, and federal law enforcement agencies. The court system is responsible for adjudicating crimes as presented by the prosecutor. The court-room work group includes the judge, the attorneys, bailiffs, court clerks and court reporters. Corrections which comprise incarceration and community-based corrections include custody officers, probation and parole officers, program counselors, and other rehabilitative services.

The Administration of Justice department at Los Medanos College offers an Associate in Science in Administration of Justice for Transfer which can be completed in 2 to 3 years by a full-time student.

The Associate in Science in Administration of Justice for Transfer requires:
1. Completion of 60 semester units that are eligible for transfer to the California State University, including both of the following:
   a. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education Breadth requirements.
   b. A minimum of 18 semester units in the Administration of Justice major
2. Obtainment of a minimum grade point average of 2.0.
3. Associate degrees for transfer also require that students must earn a C or better in all courses required for the major or area of emphasis. A “P” (Pass) grade is not an acceptable grade for courses in the major.

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

<table>
<thead>
<tr>
<th>REQUIRED CORE COURSES (6 UNITS TOTAL):</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJUS-110 Introduction to Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS-120 Concepts of Criminal law</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LIST A - CHOOSE ANY TWO OF THE FOLLOWING COURSES (6 UNITS TOTAL):</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJUS-122 Criminal Trial Process</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS-124 Legal Aspect of Evidence</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS-140 Criminal Investigation</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS-160 Community and the Justice System</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS-200 Introduction to Corrections</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS-220 Juvenile Procedure</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LIST B - SELECT TWO OF THE FOLLOWING OR ANY COURSE FROM LIST A NOT ALREADY USED: (MINIMUM 6 UNITS TOTAL):</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOCIO-015 Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>MATH-034 Introduction to Statistics</td>
<td>4</td>
</tr>
<tr>
<td>PSYCH-011 General Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR THE MAJOR: 18-19
TOTAL UNITS FOR THE DEGREE: 60

Program Student Learning Outcomes

1. Cite and apply the process of substantive and procedural law.
2. Analyze and critique the historical developments of the criminal justice system.
3. Write accurate written reports and demonstrate culturally-sensitive communication skills.
4. Demonstrate a commitment to community diversity through ethical service, law enforcement and order maintenance.
5. Prepare students to take and successfully pass entry-level industry examinations.

CERTIFICATES OF ACHIEVEMENT
ADMINISTRATION OF JUSTICE

Certificate of Achievement in Administration of Justice

The Administration of Justice program prepares students for entry-level positions in criminal justice and for transfer to the California State Universities. There are three components in administration of justice – law enforcement, the court system, and corrections. Law enforcement is the gateway function and includes police, sheriffs, and federal law enforcement agencies. The court system is responsible for adjudicating crimes as presented by the prosecutor. The court-room work group includes the judge, the attorneys, bailiffs, court clerks and court reporters. Corrections which comprise incarceration and community-based corrections, include custody officers, probation and parole officers, program counselors, and other rehabilitative services.

The Administration of Justice department at Los Medanos College offers an Associate of Science for Transfer Degree which can be completed in 2 to 3 years by a full-time student. The Certificate of continued on next page ▶.
Achievement in Administration of Justice includes the core curriculum of the Associate of Science Degree and may be completed by a full-time student in two semesters. The Certificates of Achievement in Criminal Investigations and in Criminal Law may be completed in two semesters each by a full-time student.

### REQUIRED COURSE:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJUS-110</td>
<td>Introduction to Criminal Justice</td>
</tr>
<tr>
<td>ADJUS-120</td>
<td>Concepts of Criminal Law</td>
</tr>
<tr>
<td>ADJUS-122</td>
<td>Criminal Trial Process</td>
</tr>
<tr>
<td>ADJUS-140</td>
<td>Criminal Investigation</td>
</tr>
<tr>
<td>ADJUS-160</td>
<td>Community &amp; Justice System</td>
</tr>
<tr>
<td>ADJUS-220</td>
<td>Juvenile Procedure</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR THIS CERTIFICATE:** 25

### Program Student Learning Outcomes

1. **Cite and apply the process of substantive and procedural law.**
2. **Analyze and critique the historical developments of the criminal justice system.**
3. **Write accurate written reports and demonstrate culturally-sensitive communication skills.**
4. **Demonstrate a commitment to community diversity through ethical service, law enforcement and order maintenance.**
5. **Prepare students to take and successfully pass entry-level industry examinations.**

### Certificate of Achievement in Basic Law Enforcement Academy – Intensive

Certificate of Achievement in Basic Law Enforcement Academy – Intensive is a 25-unit program 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 1,020 hours of instruction delivered over 26 weeks. The content 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 the student will receive a POST Certificate of Completion and is eligible for employment as a peace officer in most California jurisdictions. Mandatory materials fee due on first day on instruction.

### REQUIRED COURSE:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJUS-001</td>
<td>Basic Law Enforcement Academy – Beginning</td>
</tr>
<tr>
<td>ADJUS-002</td>
<td>Basic Law Enforcement Academy – Intermediate</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR THIS CERTIFICATE:** 15

### Program Student Learning Outcomes

1. **Be academically prepared to obtain an intermediate-level reserve 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 reserve entry level examinations.**
4. ** Appropriately apply intermediate level 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.**

### Certificate of Achievement in Basic Law Enforcement Academy – Advanced

Certificate of Achievement in Basic Law Enforcement Academy – Advanced is a 29-unit program for persons wishing to apply as a Level II Reserve with a participating law enforcement agency or, upon completion of ADJUS-003, as a full-time regular law enforcement officer with a participating law enforcement agency. The courses in the program are certified by the California Commission on Peace Officer Standards and Training (P.O.S.T) and are presented in the extended (evenings and weekends) format. The content 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. Mandatory materials fee due on first day on instruction.

### REQUIRED COURSE:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJUS-003</td>
<td>Basic Law Enforcement Academy – Advanced</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR THIS CERTIFICATE:** 29

### Program Student Learning Outcomes

1. **Cite and apply the process of substantive and procedural law.**
2. **Analyze and critique the historical developments of the criminal justice system.**
3. **Write accurate written reports and demonstrate culturally-sensitive communication skills.**
4. **Demonstrate a commitment to community diversity through ethical service, law enforcement and order maintenance.**
5. **Prepare students to take and successfully pass entry-level industry examinations.**
6. **Demonstrate professional and ethical responsibility in their decisions.**
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. Mandatory materials fee due on first day on instruction.

**REqUIRED COURSES: UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJUS-001</td>
<td>Basic Law Enforcement Academy – Beginning</td>
<td>6</td>
</tr>
<tr>
<td>ADJUS-002</td>
<td>Basic Law Enforcement Academy – Intermediate</td>
<td>9</td>
</tr>
<tr>
<td>ADJUS-003</td>
<td>Basic Law Enforcement Academy – Advanced</td>
<td>14</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR THIS CERTIFICATE:** 29

**Program Student Learning Outcomes**

1. Be academically prepared to obtain an advanced-level reserve or entry-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 examinations.
4. Appropriately apply advanced level 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 varied professions.
6. Demonstrate professional and ethical responsibility in their decisions.

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**Certificate of Achievement in Criminal Investigations**

The Administration of Justice program prepares students for entry-level positions in criminal justice and for transfer to the California State Universities. There are three components in administration of justice – law enforcement, the court system, and corrections. Law enforcement is the gateway function and includes police, sheriffs, and federal law enforcement agencies. The court system is responsible for adjudicating crimes as presented by the prosecutor. The court-room work group includes the judge, the attorneys, bailiffs, court clerks and court reporters. Corrections which comprise incarceration and community-based corrections include custody officers, probation and parole officers, program counselors, and other rehabilitative services.

The Certificate of Achievement in Administration of Justice includes the core curriculum of the Associate of Science Degree and may be completed by a full-time student in two semesters. The Certificates of Achievement in Criminal Investigations and in Criminal Law may be completed in two semesters each by a full-time student.

**REqUIRED COURSES: UNITS**

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ADJUS-110</td>
<td>Introduction to Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS-120</td>
<td>Concepts of Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS-122</td>
<td>Legal Aspects of Evidence</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS-140</td>
<td>Criminal Investigation</td>
<td>3</td>
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<tr>
<td>ART-072</td>
<td>Introduction to Photography</td>
<td>3</td>
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</tbody>
</table>

**TOTAL UNITS FOR THE MAJOR:** 15

**Program Student Learning Outcomes**

1. Identify and protect a crime scene, label and process all evidence.
2. Write an accurate report based on evidentiary findings.
3. Properly follow the custody for evidence.
4. Accurately testify findings in court.
5. Prepare students to take and successfully pass entry-level industry examinations.

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**Certificate of Achievement in Criminal Law**

**REqUIRED COURSES: UNITS**

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<thead>
<tr>
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<tbody>
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<td>3</td>
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<tr>
<td>ADJUS-122</td>
<td>Criminal Trial Process</td>
<td>3</td>
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<tr>
<td>ADJUS-160</td>
<td>Community &amp; Justice System</td>
<td>3</td>
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<tr>
<td>ADJUS-220</td>
<td>Juvenile Procedures</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR THE MAJOR:** 15

**Program Student Learning Outcomes**

1. Systematically research, cite, compare and contrast previous cases to current case
2. Demonstrate culturally-sensitive communication skills in interviewing witnesses and interrogating suspects
3. Communicate findings through accurate written reports
4. Prepare students to take and successfully pass entry-level industry examinations
COLLEGE SKILLS CERTIFICATE
ADMINISTRATION OF JUSTICE

Recognition of completion of the first of three modules that lead to the Certificate of Achievement in Basic Law Enforcement. Successful completion of Module III, Module II and Module I constitute satisfaction of the Police Officer Standards Training (POST) Regular Basic Course training requirement. Upon successful completion of ADJUS-001 students may apply as a Level III reserve with a participating law enforcement agency. ADJUS-001 is the first in a series of courses that when completed permit students to apply as a Level I reserve or full-time regular law enforcement officer with a participating law enforcement agency.

Basic Law Enforcement Academy Module III

REQUIRED COURSE: UNITS
ADJUS-001 Basic Law Enforcement Academy - Beginning 6

TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE 6

Program Student Learning Outcomes
1. Be academically prepared to obtain a beginning-level reserve 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 examinations.
4. Appropriately apply beginning level 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 varied professions.
6. Demonstrate professional and ethical responsibility in their decisions.

COURSE DESCRIPTIONS

ADJUS-001 Basic Law Enforcement Academy - Beginning

TOTAL HOURS LECTURE: 80
TOTAL HOURS LAB: 102
UNITS: 6

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 - Intermediate

TOTAL HOURS LECTURE: 103
TOTAL HOURS LAB: 168
UNITS: 9

Prerequisite: 1) ADJUS-001 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-Intermediate is a 9-unit course 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. This Module 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 - Advanced

TOTAL HOURS LECTURE: 160
TOTAL HOURS LAB: 290
UNITS: 14

Prerequisite: 1) ADJUS-001 and ADJUS-002, 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-Advanced is a 14-unit course 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. This Module 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-005  Basic Law Enforcement Academy - Intensive

TOTAL HOURS LECTURE: 162
TOTAL HOURS LAB: 858
UNITS: 25

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 is a 25-unit course 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 1,020 hours of instruction delivered over 26 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 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
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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Total Hours Lecture</th>
<th>Units</th>
<th>Prerequisite</th>
<th>Advisory</th>
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<tr>
<td>ADJUS-098</td>
<td>Independent Study in Administration of Justice</td>
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<td>Provides students an opportunity to design and</td>
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<td>pursue their own interests within a particular</td>
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<td>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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. SC</td>
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<td>LMC:</td>
<td>Independent study courses may be DA or transferable depending on specific course. See your counselor.</td>
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<td>TRANSFER:</td>
<td>Independent study courses may be DA or transferable depending on specific course. See your counselor.</td>
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<tr>
<td>ADJUS-110</td>
<td>Introduction to Criminal Justice</td>
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<td>TOTAL HOURS LECTURE: 54</td>
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<td>Advisory: Eligibility for ENGL-100</td>
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<tr>
<td>(formerly ADJUS-120)</td>
<td>This is an integrated, interdisciplinary study of the criminal justice system. Examination will be made of the American system (law enforcement, courts, and corrections) and the various sub-systems; roles and role expectations of criminal justice agencies and the interrelationships in society; crime causations, punishment and rehabilitation, ethics, education and training for professionalism in the social system. May not be repeated. SC</td>
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<tr>
<td>ADJUS-120</td>
<td>Concepts of Criminal Law</td>
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<td>TOTAL HOURS LECTURE: 54</td>
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<td>Prerequisite: ADJUS-110 (formerly ADJUS-120)</td>
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<td>Advisory: Eligibility for ENGL-100</td>
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<tr>
<td>(formerly ADJUS-121)</td>
<td>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. (C-ID AJ 120) SC</td>
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<tr>
<td>ADJUS-122</td>
<td>Criminal Trial Process</td>
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<td>TOTAL HOURS LECTURE: 54</td>
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<td>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</td>
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<td>ADJUS-124</td>
<td>Legal Aspects of Evidence</td>
<td>54</td>
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<td>Prerequisite: ADJUS-110 (formerly ADJUS-120)</td>
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<td>Advisory: Eligibility for ENGL-090</td>
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<tr>
<td>(formerly ADJUS-221)</td>
<td>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. (C-ID AJ 124) SC</td>
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<td>ADJUS-140</td>
<td>Introduction to Criminal Investigation</td>
<td>54</td>
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<td>Prerequisite: ADJUS-110 (formerly ADJUS 120)</td>
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<td>This course addresses the techniques, procedures, and ethical issues in the investigation of crime, including organization of the investigative process, crime scene searches, interviewing and interrogating, surveillance, source of information, utility of evidence, scientific analysis of evidence and the role of the investigator in the trial process. May not be repeated. (C-ID AJ 140) SC</td>
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**ADJUS-160  Community & Justice System**

TOTAL HOURS LECTURE: 54  
UNITs: 3  
Advisory: ADJUS-110 (formerly ADJUS-120) ; eligibility for ENGL-100  
(formerly ADJUS-130) 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. (C-ID AJ 160) SC  
LMC: GE: Social and Behavioral Sciences; Ethnic/Multicultural Studies; DA  
TRANSFER: CSU

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

TOTAL HOURS: 60-300  
UNITs: 1-4  
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**

TOTAL HOURS: 60-300  
UNITs: 1-4  
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-200  Introduction to Corrections**

TOTAL HOURS LECTURE: 54  
UNITs: 3  
Prerequisite: ADJUS-110 (formerly ADJUS-120)  
Advisory: Eligibility for ENGL-100  
(formerly ADJUS-042) 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. (C-ID AJ 200) SC  
LMC: DA  
TRANSFER: CSU

**ADJUS-220  Juvenile Procedures**

TOTAL HOURS LECTURE: 54  
UNITs: 3  
Advisory: ADJUS-110 (formerly ADJUS-120) ; eligibility for ENGL-100  
(formerly ADJUS-222) 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. (C-ID AJ 220) SC  
LMC: DA  
TRANSFER: CSU, Gen. Ed. Area D0

**ADJUS-900s  Selected Topics in Administration of Justice**

DA varies with course content.
Air Conditioning and Refrigeration

**COURSE DESCRIPTIONS**

**ACREF-045  Basic Heating and Cooling Technology**

TOTAL HOURS LECTURE: 18
TOTAL HOURS LAB: 54
UNITS: 2
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 included 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 not be repeated. SC

LMC: DA
TRANSFER: CSU

**ACREF-073  Commercial Refrigeration Technology**

TOTAL HOURS LECTURE: 27
TOTAL HOURS LAB: 44
UNITS: 2
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 not be repeated. SC

LMC: DA
TRANSFER: CSU

**ACREF-075  HVAC Technician H1A Heating Technology**

TOTAL HOURS LECTURE: 27
TOTAL HOURS LAB: 44
UNITS: 2
Advisory: ETEC-004; 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 not be repeated. SC

LMC: DA
TRANSFER: CSU

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

TOTAL HOURS LECTURE: 27
TOTAL HOURS LAB: 44
UNITS: 2
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 not be repeated. SC

LMC: DA
TRANSFER: CSU

**ACREF-077  Air Distribution (Duct) Testing and Repair**

TOTAL HOURS LECTURE: 27
TOTAL HOURS LAB: 44
UNITS: 2
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 not be repeated. SC

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

**TOTAL HOURS LECTURE:** 18
**TOTAL HOURS LAB:** 36
**UNITS:** 1.5

**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 not be repeated. 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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. 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

**TOTAL HOURS:** 60-300
**UNITS:** 1-4

**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 work experience internship during community college attendance. Credit may be applied as electives toward graduation. SC

**LMC:** DA
**TRANSFER:** CSU

ACREF-170A  Internship in Air Conditioning/Refrigeration

**TOTAL HOURS:** 60-300
**UNITS:** 1-4

**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

DEGREE—Associate of Science

Anthropology

The Anthropology major is designed to meet the needs of a broad spectrum of students. In addition to providing valuable multicultural understanding and cultural literacy life skills, the anthropology major can be used to augment career success in business, mental health, as well as medical and social service occupations. The major in anthropology also prepares students for further study at a four-year institution.

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

**SELECT A MINIMUM OF TWO COURSES IN ANTHROPOLOGY FROM:**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE NAME</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTHR-005</td>
<td>General Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTHR-006</td>
<td>Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTHR-007</td>
<td>Anthropology of Culture Change</td>
<td>3</td>
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<td>TOTAL UNITS</td>
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<td>6</td>
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**AND SELECT:**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE NAME</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>PSYCH-010*</td>
<td>Individual and Social Processes</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH-011*</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOCIO-015*</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SOCIO-016*</td>
<td>Introduction to Social Problems</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL UNITS</td>
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**AND SELECT A MINIMUM OF TWO ELECTIVE COURSES FROM:**

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<td>PSYCH-010*</td>
<td>Individual and Social Processes</td>
<td>3</td>
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<tr>
<td>PSYCH-011*</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH-014</td>
<td>Psychology of Human Sexuality</td>
<td>3</td>
</tr>
<tr>
<td>SOCIO-015*</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SOCIO-016*</td>
<td>Introduction to Social Problems</td>
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<tr>
<td>MATH-034</td>
<td>Introduction to Statistics</td>
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<tr>
<td>TOTAL UNITS</td>
<td>MAJOR</td>
<td>18-19</td>
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</table>

**TOTAL UNITS FOR THE DEGREE**

60

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

**Program Student Learning Outcomes**

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.

ANTHR-001 Introduction to Biological Anthropology

**TOTAL HOURS LECTURE:** 54

**UNITS:** 3

**Advisory:** Eligibility for ENGL-090

Anthropology is a holistic discipline and attempts to view humans, their biology, cultural history, and activities in as broad a view as possible. Biological anthropology is a subfield of the larger discipline that studies humankind. The primary goal of this subfield is to understand the biological nature and history of humans and their closest living and extinct relatives. Biological anthropology is firmly rooted in evolutionary theory; thus, the evolutionary biology of humans is the central focus of this course. This course promotes insight into the evolution of human biology and behavior from an objective or scientific perspective. The approach emphasizes critical inquiry employing testable models or hypotheses supported by empirical or observable data. The ultimate goal in this course is to understand humanity’s place in nature. May not be repeated. LR

LMC: GE: Social and Behavioral Sciences; DA TRANSFER: CSU

ANTHR-004 Introduction to Archaeology

**TOTAL HOURS LECTURE:** 54

**UNITS:** 3

**Advisory:** Eligibility for ENGL-090

This course is an introduction to the fundamental principles of method and theory in archaeology, beginning with the goals of archaeology, going on to consider the basic concepts of culture, time, and space, and discussing the finding and excavation of archaeological sites. Students will analyze the basic methods and theoretical approaches used by archaeologist to reconstruct the past and understand human prehistory. This includes human origins, the peoples of the globe, the origins of agriculture, ancient civilization including the Maya civilization, Classical and Historical archaeological, and finally the relevance of Archaeology today. The course includes an analysis of the nature of scientific inquiry; the history and interdisciplinary nature of archaeological research; dating techniques, methods of survey, excavation, analysis, and interpretation; cultural resource management, professional ethics; and cultural change and sequences. The inclusion of the interdisciplinary approach utilized in this field will provide students with the most up to date interpretation of human origins, the reconstruction of human behavior, and the emergence of cultural, identity, and human existence. May not be repeated. SC

LMC: Social and Behavioral Sciences; DA TRANSFER: CSU
ANTHR-005  General Anthropology
TOTAL HOURS LECTURE: 54
UNITS: 3
Advisory: Eligibility for ENGL-090
An introduction and general overview of the 5 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: Social and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area D1; IGETC Area 4A

ANTHR-006  Cultural Anthropology
TOTAL HOURS LECTURE: 54
UNITS: 3
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: Social and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area D1; IGETC Area 4A

ANTHR-007  Culture Change and Globalization
TOTAL HOURS LECTURE: 54
UNITS: 3
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: Social and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area D1, E; IGETC Area 4A

ANTHR-008  Introduction to Anthropological Linguistics
TOTAL HOURS LECTURE: 54
UNITS: 3
Advisory: Eligibility for ENGL-100
This introductory course serves as a foundation for understanding language from an anthropological perspective. The course addresses such core questions as how, what, when, where, why and with whom we communicate. This course surveys such core areas in linguistics as structural linguistics: phonetics, phonology, morphology and syntax, as well as the bio-cultural basis of language; historical linguistics: origins and evolution/change, dialects, and language families; and sociocultural linguistics: language acquisition in cultural context. It emphasizes the relationship between language and culture, and issues of language conservation and loss. May not be repeated. SC
LMC: DA
TRANSFER: CSU

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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated.
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 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 prepared 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
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.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>APPLI-013</td>
<td>Beginning Electrical Appliances Tech I</td>
<td>3</td>
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<tr>
<td>APPLI-015</td>
<td>Electrical Appliances I</td>
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</tr>
<tr>
<td>APPLI-014</td>
<td>Advanced Electrical Appliances Tech I</td>
<td>3</td>
</tr>
<tr>
<td>APPLI-016</td>
<td>Electrical Appliances II</td>
<td>4</td>
</tr>
<tr>
<td>APPLI-023</td>
<td>Basic Refrigeration Tech I</td>
<td>3</td>
</tr>
<tr>
<td>APPLI-025</td>
<td>Refrigeration I</td>
<td>4</td>
</tr>
<tr>
<td>APPLI-024</td>
<td>Advanced Refrigeration Tech I</td>
<td>3</td>
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<tr>
<td>APPLI-026</td>
<td>Refrigeration II</td>
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</tr>
<tr>
<td>APPLI-020</td>
<td>Electrical Appliances Shop Practice</td>
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<tr>
<td>APPLI-030</td>
<td>Refrigeration Shop Practice</td>
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<tr>
<td>APPLI-035</td>
<td>Appliance Shop Practice-Intermediate</td>
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<tr>
<td>APPLI-036</td>
<td>Appliance Shop Practice-Advanced</td>
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<tr>
<td>APPLI-046</td>
<td>Principles and Repair of Microwave Ovens</td>
<td>.5</td>
</tr>
<tr>
<td>ACREF-045</td>
<td>Basic Heating &amp; Cooling</td>
<td>2</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR THE MAJOR 18.5-22.5
TOTAL UNITS FOR THE DEGREE 60

Program Student Learning Outcomes
Demonstrate problem solving techniques used in troubleshooting appliances and make an estimate of what will have to be done to complete the repair.
1. Use written or oral service directions used in the appliance field to locate service information, demonstrate mechanical knowledge by diagnosing the failure and replacing the proper component.
2. Demonstrate the skills and knowledge necessary to take and pass the federal EPA exam required for employment in the Appliance field.
3. Demonstrate skills needed for entry level employment in the appliance field by passing an industry employment test (Certified Appliance Professional) and obtaining a job in that field.

CERTIFICATES OF ACHIEVEMENT
APPLIANCE SERVICE TECHNOLOGY

For the Certificate of Achievement in Appliance Service Technology, complete the coursework listed below. Consult a Los Medanos College counselor to develop your education plan.

Certificate of Achievement in Appliance Technician I
(primarily an evening program)

Job Opportunities
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.

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Units</th>
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</thead>
<tbody>
<tr>
<td>APPLI-013</td>
<td>Beginning Electrical Appliances Tech I</td>
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<tr>
<td>APPLI-014</td>
<td>Advanced Electrical Appliances Tech I</td>
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</tr>
<tr>
<td>APPLI 021</td>
<td>Electrical Appliances Lab Tech I</td>
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<tr>
<td>APPLI-023</td>
<td>Basic Refrigeration Tech I</td>
<td>3</td>
</tr>
<tr>
<td>APPLI-024</td>
<td>Advanced Refrigeration Tech I</td>
<td>3</td>
</tr>
<tr>
<td>APPLI-031</td>
<td>Refrigeration Lab Tech I</td>
<td>1</td>
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<tr>
<td>APPLI-037</td>
<td>Intermediate Appliance &amp; Refrigeration Lab</td>
<td>1</td>
</tr>
<tr>
<td>APPLI-038</td>
<td>Advanced Appliance &amp; Refrigeration Lab</td>
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<tr>
<td>APPLI-046</td>
<td>Principles and Repair of Microwave Ovens</td>
<td>.5</td>
</tr>
<tr>
<td>ACREF-045</td>
<td>Basic Heating &amp; Cooling Technology</td>
<td>2</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR THIS CERTIFICATE 18.5

Program Student Learning Outcomes
1. Demonstrate problem solving techniques used in troubleshooting appliances and make an estimate of what will have to be done to complete the repair.
2. Use written or oral service directions used in the appliance field to locate service information, demonstrate mechanical knowledge by diagnosing the failure and replacing the proper component.

Certificate of Achievement in Appliance Technician II
(primarily a day program)

Job Opportunities
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.

REQUered COURSES:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>APPL-015</td>
<td>Electrical Appliances I</td>
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<tr>
<td>APPL-016</td>
<td>Electrical Appliances II</td>
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<tr>
<td>APPL-020</td>
<td>Electrical Appliance Shop Practice</td>
<td>5</td>
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<tr>
<td>APPL-025</td>
<td>Refrigeration I</td>
<td>4</td>
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<td>APPL-026</td>
<td>Refrigeration II</td>
<td>4</td>
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<tr>
<td>APPL-030</td>
<td>Refrigeration Shop Practice</td>
<td>5</td>
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<tr>
<td>APPL-035</td>
<td>Appliance Shop Practice-Intermediate</td>
<td>5</td>
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<tr>
<td>APPL-036</td>
<td>Appliance Shop Practice-Advanced</td>
<td>5</td>
</tr>
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</table>

TOTAL UNITS required FOR this CERTIFICATE 36

With the approval of an Appliance Technology instructor, APPL-170 can be used to satisfy the requirements of some appliance repair courses for the Appliance Technician II option.

Program Student Learning Outcomes
1. Use written or oral service directions used in the appliance field to locate service information, demonstrate mechanical knowledge by diagnosing the failure and replacing the proper component.
2. Demonstrate the skills and knowledge necessary to take and pass the federal EPA exam required for employment in the Appliance field.
3. Demonstrate skills needed for entry level employment in the appliance field by passing an industry employment test (Certified Appliance Professional) and obtaining a job in that field.

COLLEGE SKILLS CERTIFICATES
APPLIANCE SERVICE TECHNOLOGY

Heating, Ventilation & Air Conditioning Specialist

Job Opportunities
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.

REQUered COURSES:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>APPLI-023</td>
<td>Basic Refrigeration Tech I</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>Advanced Refrigeration Tech I</td>
<td>3</td>
</tr>
<tr>
<td>APPLI-024</td>
<td>Advanced Refrigeration Tech I</td>
<td>3</td>
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</table>

TOTAL UNITS required FOR this CERTIFICATE 4-9

Program Student Learning Outcomes
1. Demonstrate the skills and knowledge necessary to take and pass the federal EPA exam required for employment in the Appliance field.

Electrical Appliance Technician

ONE OF THE FOLLOWING:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
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<td>Beginning Electrical Appliances Tech I</td>
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<td>APPLI-015</td>
<td>Electrical Appliances I</td>
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<td>APPLI-014</td>
<td>Advanced Electrical Appliances Tech I</td>
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<tr>
<td>APPLI-016</td>
<td>Advanced Electrical Appliances II</td>
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AND ONE OF THE FOLLOWING:

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<tbody>
<tr>
<td>APPLI-020</td>
<td>Electrical Appliance Shop Practice</td>
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<tr>
<td>APPLI-021</td>
<td>Electrical Appliance Lab: Tech I</td>
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</table>

TOTAL UNITS required FOR COLLEGE SKILLS CERTIFICATE 4-9

Program Student Learning Outcomes
1. Use written or oral service directions used in the appliance field to locate service information, demonstrate mechanical knowledge by diagnosing the failure and replacing the proper component.

Refrigeration Technician

ONE OF THE FOLLOWING:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>APPLI-023</td>
<td>Basic Refrigeration Tech I</td>
<td>3</td>
</tr>
<tr>
<td>APPLI-025</td>
<td>Refrigeration I</td>
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</tr>
<tr>
<td>APPLI-024</td>
<td>Advanced Refrigeration Tech I</td>
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<tr>
<td>APPLI-026</td>
<td>Advanced Refrigeration II</td>
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AND ONE OF THE FOLLOWING:

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<td>APPLI-031</td>
<td>Refrigeration Lab Tech I</td>
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TOTAL UNITS required FOR COLLEGE SKILLS CERTIFICATE 4-9

Program Student Learning Outcomes
1. Demonstrate the skills and knowledge necessary to take and pass the federal EPA exam required for employment in the Appliance field.
COURSE DESCRIPTIONS

APPLI-013   Beginning Electrical Appliances Tech I
TOTAL HOURS LECTURE: 54
UNITS: 3
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
TOTAL HOURS LECTURE: 54
UNITS: 3
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. May not be repeated. SC
LMC: DA
TRANSFER: CSU

APPLI-015   Electrical Appliances I
TOTAL HOURS LECTURE: 72
TOTAL HOURS LAB: 18
UNITS: 4
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
TOTAL HOURS LECTURE: 72
TOTAL HOURS LAB: 18
UNITS: 4
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
TOTAL HOURS LAB: 270
UNITS: 5
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 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 not be repeated. SC
LMC: DA
TRANSFER: CSU
APPLI-021  Electrical Appliance Lab: Tech I
TOTAL HOURS LAB: 54
UNITS: 1
Advisory: Concurrent enrollment in APPLI-013, 014, 015 or 016
This introductory course in electrical appliances lab 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. The introductory lab class is part of the Appliance Service Technician I Certificate of Achievement (primary an evening program). May not be repeated. SC
LMC: DA
TRANSFER: CSU

APPLI-023  Basic Refrigeration Tech I
TOTAL HOURS LECTURE: 54
UNITS: 3
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
TOTAL HOURS LECTURE: 54
UNITS: 3
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. It will cover the theory and practice in the diagnosis and repair of major brands of refrigerators as well as 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
TOTAL HOURS LECTURE: 72
TOTAL HOURS LAB: 18
UNITS: 4
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
TOTAL HOURS LECTURE: 72
TOTAL HOURS LAB: 18
UNITS: 4
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

<table>
<thead>
<tr>
<th>TOTAL HOURS LAB: 270</th>
<th>UNITS: 5</th>
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</thead>
<tbody>
<tr>
<td><strong>Advisory:</strong> Concurrent enrollment in APPLI-023, 024, 025, or 026</td>
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</tbody>
</table>

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 not be repeated. SC

LMC: DA
TRANSFER: CSU

### APPLI-031  Refrigeration Lab: Tech I

<table>
<thead>
<tr>
<th>TOTAL HOURS LAB: 54</th>
<th>UNITS: 1</th>
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</thead>
<tbody>
<tr>
<td><strong>Advisory:</strong> Concurrent enrollment in APPLI-023, 024, 025, or 026</td>
<td></td>
</tr>
</tbody>
</table>

This course is designed to give a beginning student the necessary shop skills 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 work on various brands of refrigerators, freezers, and window air conditioners provided. This is an introductory refrigeration class in the Appliance Service Technician I Certificate of Achievement (primary an evening program). May not be repeated. SC

LMC: DA
TRANSFER: CSU

### APPLI-035  Intermediate Appliance Lab

<table>
<thead>
<tr>
<th>TOTAL HOURS LAB: 270</th>
<th>UNITS: 5</th>
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</thead>
<tbody>
<tr>
<td><strong>Advisory:</strong> APPLI-020, APPLI-030; concurrent enrollment in APPLI-013, 014, 015 or 016</td>
<td></td>
</tr>
</tbody>
</table>

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, refrigerators 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 not be repeated. SC

LMC: DA
TRANSFER: CSU

### APPLI-036  Advanced Appliance and Refrigeration Lab

<table>
<thead>
<tr>
<th>TOTAL HOURS LAB: 270</th>
<th>UNITS: 5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advisory:</strong> APPLI-020, APPLI-030 and APPLI-035; concurrent enrollment in APPLI-023, 024, 025 or 026</td>
<td></td>
</tr>
</tbody>
</table>

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 not be repeated. SC

LMC: DA
TRANSFER: CSU

### APPLI-037  Intermediate Appliance and Refrigeration Lab: Tech I

<table>
<thead>
<tr>
<th>TOTAL HOURS LAB: 54</th>
<th>UNITS: 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advisory:</strong> APPLI-021, APPLI-031. Concurrent enrollment in APPLI-023, 024, 025, or 026</td>
<td></td>
</tr>
</tbody>
</table>

Intermediate appliance lab course is a continuation of APPLI 21 and 31 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, refrigeration units 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 lab. This intermediate lab class is part of the Appliance Service Technician I Certificate of Achievement (primary an evening program). May not be repeated. SC

LMC: DA
TRANSFER: CSU
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Total Hours LAB</th>
<th>Units</th>
<th>Advisory</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPLI-038</td>
<td>Advanced Appliance and Refrigeration Lab: Tech I</td>
<td>54</td>
<td>1</td>
<td>APPLI-021, APPLI-031 &amp; APPLI-037. Concurrent enrollment in APPLI-023, 024, 025, or 026. SC</td>
</tr>
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<td></td>
<td>8</td>
<td>.5</td>
<td></td>
</tr>
<tr>
<td>APPLI-046</td>
<td>Principles and Repair of Microwave Ovens</td>
<td>12</td>
<td>1</td>
<td>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 not be repeated. SC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>54</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>APPLI-098</td>
<td>Independent Study in Appliance Service Technology</td>
<td>54</td>
<td>1</td>
<td></td>
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</tbody>
</table>

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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. SC

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<th>Advisory</th>
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</thead>
<tbody>
<tr>
<td>APPLI-170</td>
<td>Occupational Work Experience in Appliance Service Technology</td>
<td>60-300</td>
<td>1-4</td>
<td>Approved online application and employer placement eligibility for ENGL-090</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12</td>
<td>1-4</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
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<th>Total Hours</th>
<th>Units</th>
<th>Advisory</th>
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</thead>
<tbody>
<tr>
<td>APPLI-170A</td>
<td>Internship in Appliance Service Technology</td>
<td>60-300</td>
<td>1-4</td>
<td>Eligibility for ENGL-090</td>
</tr>
<tr>
<td></td>
<td></td>
<td>54</td>
<td>1-4</td>
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</tr>
</tbody>
</table>

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

<table>
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<th>Advisory</th>
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<tbody>
<tr>
<td>APPLI-170</td>
<td>Occupational Work Experience in Appliance Service Technology</td>
<td>60-300</td>
<td>1-4</td>
<td>Eligibility for ENGL-090</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12</td>
<td>1-4</td>
<td></td>
</tr>
</tbody>
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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

PROGRAM REQUIREMENTS, COURSES and LEARNING OUTCOMES

www.losmedanos.edu
Art

DEGREES—Associate of Arts
Fine Arts
Graphic Communications

DEGREE—Associate in Arts for Transfer
Studio Arts

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 empha-
sis 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
FINE ARTS
GRAPHIC COMMUNICATIONS

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

### Associate of Arts Degree in Fine Arts

**REQUIRED COURSES:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ART-005</td>
<td>3</td>
</tr>
<tr>
<td>ART-006, 7, 8 or 9</td>
<td>3</td>
</tr>
<tr>
<td>ART-016 or ART-017</td>
<td>3</td>
</tr>
<tr>
<td>ART-010</td>
<td>3</td>
</tr>
<tr>
<td>ART-011</td>
<td>3</td>
</tr>
<tr>
<td>ART-020 or ART-012</td>
<td>3</td>
</tr>
<tr>
<td>ART-072</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS:** 18

**FINE ART ELECTIVES:**

- Select a minimum of 12 elective units from:
  - ART-021 Intermediate Drawing 3
  - ART-030 Figure Drawing 3
  - ART-040 Introduction to Painting 3
  - ART-041 Intermediate Painting 3
  - ART-060 Concepts of Sculpture 3
  - ART-066 Introduction to Ceramics 3
  - ART-067 Intermediate Ceramics 3

**TOTAL UNITS FOR THE MAJOR:** 30

**TOTAL UNITS FOR THE DEGREE:** 60

Program Student Learning Outcomes

1. Demonstrate appropriate studio practices
2. Present, explain and justify their design solutions using the
   vocabulary of art and design
3. Research and use examples of historical and cultural products to
   inform their creative process

### Associate of Arts Degree in Graphic Communications

**REQUIRED COURSES:**

<table>
<thead>
<tr>
<th>Course</th>
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<td>ART-005</td>
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<tr>
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<td>3</td>
</tr>
<tr>
<td>ART-016 or ART-017</td>
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<tr>
<td>ART-010</td>
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<td>ART-011</td>
<td>3</td>
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<tr>
<td>ART-020 or ART-012</td>
<td>3</td>
</tr>
<tr>
<td>ART-072</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS:** 18

**GRAPHIC COMMUNICATIONS ELECTIVES:**

- Select a minimum of 12 elective units from:
  - ART-015 Graphic Design 3
  - ART-025 Advertising, Marketing and Publication Design 3
  - ART-050 Designing with Adobe InDesign 3
  - ART-054 Adobe Photoshop 3
  - ART-057 Designing with Adobe Illustrator 3
  - ART-075 Documentary Photography 3
  - ART-085 Introduction to Animation 3
  - ART-086 Animation and 3D Modeling 3
  - ART-250 Introduction to Digital Art 3
  - JOURN-160 Photojournalism 3

**TOTAL UNITS FOR THE MAJOR:** 30

**TOTAL UNITS FOR THE DEGREE:** 60

Program Student Learning Outcomes

1. Demonstrate appropriate graphic design and computer
   studio practices
2. Present, explain and justify their graphic design solutions using the
   vocabulary of art and design
3. Research and use examples of historical and cultural products to
   inform their creative process in graphic design
ASSOCIATE IN ARTS
STUDIO ARTS FOR TRANSFER DEGREE

The Art Department (Fine Arts and Graphic Communications) provides comprehensive, coherent, integrated and cumulative studies in foundation courses (2D, 3D, drawing and photography) intermediate studio courses (drawing, painting and ceramics), art appreciation and art history courses, and graphic communications courses (design, software-based illustration, page layout, photo manipulation and animation). We offer students several pathways to success. These include a local A.A. degree with a focus in either fine arts or graphic communications, a certificate in graphic communications, and general education courses that meet transfer requirements to the UC or CSU systems.

To achieve the Associate in Arts in Studio Arts for Transfer students must (1) complete the 27 units of Studio Arts degree major emphasis requirements; (2) fulfill requirements of either the CSU-General Education; and/or The Intersegmental General Education Transfer Curriculum (IGETC) (3) complete 60 semester units college transfer level units; and (4) obtain a minimum grade point average of 2.0.

Note: students must earn a “C” or better in all courses required in the major area of emphasis. Associate degrees for transfer also require that students must earn a C or better in all courses required for the major or area of emphasis. A “P” (Pass) grade is not an acceptable grade for courses in the major.

ASSOCIATE IN ARTS
STUDIO ARTS FOR TRANSFER DEGREE

Program Level Student Learning Outcomes:
1. Demonstrate appropriate and safe practices in various two-dimensional media, three-dimensional media, and computer-based studio environments.
2. Present, explain and justify their conceptual design solutions using the vocabulary of design elements and principles, and critique the solutions of others in a thoughtful, constructive manner.
3. Research and synthesize examples of historical and cultural products with their own ideas in order to improve their creative and conceptualization processes.

CERTIFICATE OF ACHIEVEMENT
GRAPHIC COMMUNICATIONS

For the Certificate of Achievement in Graphic Communications, complete 30 units of coursework listed below. Consult a Los Medanos College counselor to develop your education plan.

REQUIRED COURSES (18 UNITS):
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 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-075 Documentary Photography 3
ART-085 Introduction to Animation 3
ART-086 Animation and 3D Modeling 3
ART-250 Introduction to Digital Art 3
JOURN-110 Writing for the Media 3
JOURN-160 Photojournalism 3
TOTAL UNITS FOR THIS CERTIFICATE 30

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

GRAPHIC COMMUNICATIONS
Program Student Learning Outcomes
1. Demonstrate appropriate graphic design and computer studio practices
2. Present, explain and justify their graphic design solutions using the vocabulary of art and design
3. Research and use examples of historical and cultural products to inform their creative process in graphic design
COURSE DESCRIPTIONS

ART-005 Visual Arts Concepts
TOTAL HOURS LECTURE: 54
UNITS: 3
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: Arts and Humanities; 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)
TOTAL HOURS LECTURE: 54
UNITS: 3
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. May not be repeated. (C-ID ARTH 110) LR
LMC: GE: Arts and Humanities; 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)
TOTAL HOURS LECTURE: 54
UNITS: 3
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. May not be repeated. (C-ID ARTH 110) LR
LMC: GE: Arts and Humanities; 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)
TOTAL HOURS LECTURE: 54
UNITS: 3
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. May not be repeated. LR
LMC: GE: Arts and Humanities; DA
TRANSFER: UC; CSU Gen. Ed. Area C1; IGETC Area 3A

ART-009 Western Art History IV: Modern, Postmodern and Contemporary Art
TOTAL HOURS LECTURE: 54
UNITS: 3
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. May not be repeated. LR
LMC: GE: Arts and Humanities; DA
TRANSFER: UC; CSU Gen. Ed. Area C1; IGETC Area 3A

ART-010 Two-Dimensional Design Concepts
TOTAL HOURS LECTURE: 36
TOTAL HOURS LAB: 72
UNITS: 3
Advisory: Eligibility for ENGL-100
Introduction to the visual elements in a two-dimensional design context, including line, color, texture and shape as well as design principles such as unity/variety, geometric/organic line and shape, positive/negative space, and visual balance. This course also provides an introduction to the methods and materials of two-dimensional design, including working with markers, ink, paint, cut paper, and found/selected imagery. 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 not be repeated. SC
LMC: DA
TRANSFER: UC, CSU
ART-011 Three-Dimensional Design Concepts
TOTAL HOURS LECTURE: 36
TOTAL HOURS LAB: 72
UNITS: 3
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 not be repeated. SC
LMC: DA
TRANSFER: UC, CSU

ART-012 Design Drawing
TOTAL HOURS LECTURE: 36
TOTAL HOURS LAB: 72
UNITS: 3
An art foundation course that introduces drawing as a visualization tool used in the process of design. Focuses on perspective drawing as a means to build the skills necessary for rapid and intuitive, but accurate drawing with application to two or three-dimensional design and problem solving, particular useful for students majoring in product, environmental/architectural and graphic design. Required foundation course for art majors and Certificate of Achievement in Graphic Communications. May not be repeated. SC
LMC: DA
TRANSFER: UC, CSU

ART-015 Graphic Design
TOTAL HOURS LECTURE: 36
TOTAL HOURS LAB: 72
UNITS: 3
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 not be repeated. SC
LMC: DA
TRANSFER: UC, CSU

ART-016 Asian Art History
TOTAL HOURS LECTURE: 54
UNITS: 3
Advisory: Eligibility for ENGL-100
An integrated, interdisciplinary survey of art as an aspect of cultures and civilizations from Southern and Eastern Asia, including India, China, Japan and Korea from prehistory through the 19th century. Investigates how art and architecture reflect the religious, political and philosophical perspectives of the artists and societies that created them. May not be repeated. LR
LMC: GE: Arts and Humanities; DA
TRANSFER: UC; CSU Gen. Ed. Area C2; IGETC Area 3A

ART-017 American Art History
TOTAL HOURS LECTURE: 54
UNITS: 3
Advisory: Eligibility for ENGL-100
An integrated, interdisciplinary survey of art as an aspect of American art and culture from the Colonial period to the present day. Investigates how American art and architecture reflect the religious, political and philosophical perspectives of the artists and societies that created them. May not be repeated. LR
LMC: GE: Arts and Humanities; DA
TRANSFER: UC, CSU Gen. Ed. Area C2; IGETC Area 3B

ART-018 Art of the Ancient Americas
TOTAL HOURS LECTURE: 54
UNITS: 3
Advisory: Eligibility for ENGL-100
An integrated, interdisciplinary survey of art as an aspect of cultures and civilizations from North and South America from prehistory through the 16th century. Investigates how art and architecture reflect the religious, political and philosophical perspectives of the artists and societies that created them. Meets Humanities requirements for LMC general education. Three units of art history are required for all art majors (students may choose from ART 6, 7, 8, 9, 16, 17 or 18.) May not be repeated. LR
LMC: GE: Arts and Humanities; DA
TRANSFER: CSU Gen. Ed. Area C2
Program Requirements, Courses and Learning Outcomes

ART-020  Introduction to Drawing
TOTAL HOURS LECTURE: 36
TOTAL HOURS LAB: 72
UNITS: 3
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 not be repeated. LR
LMC: DA
TRANSFER: UC, CSU

ART-021  Intermediate Drawing
TOTAL HOURS LECTURE: 36
TOTAL HOURS LAB: 72
UNITS: 3
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. (C-ID ARTS 205) LR
LMC: DA
TRANSFER: UC, CSU

ART-025  Advertising, Marketing and Publication Design
TOTAL HOURS LECTURE: 36
TOTAL HOURS LAB: 54
UNITS: 3
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 not be repeated. SC
LMC: DA
TRANSFER: CSU

ART-030  Figure Drawing
TOTAL HOURS LECTURE: 36
TOTAL HOURS LAB: 72
UNITS: 3
Advisory: ART-012 and ART-020
This class is an introduction to drawing the figure from observation. The course will provide an introduction to anatomy, as well as historical and contemporary applications of the figure in context. Students will use a variety of media including charcoal, pastel, and brush and ink, while learning to apply descriptive and interpretive approaches to the human form. May not be repeated. LR
LMC: DA
TRANSFER: UC, CSU

ART-035  Themes in Mesoamerican Culture through Ceramics
TOTAL HOURS LECTURE: 45
TOTAL HOURS LAB: 36
UNITS: 3
Advisory: Eligibility for ENGL-100
Same as HUMAN-035. This class presents an integrated, interdisciplinary approach to aspects of Mesoamerican culture and civilization through art and history. In this broad context, students will investigate the intellectual, spiritual, cultural and political foundations of Mesoamerican culture. Students will also investigate the creative process of modern and contemporary Mesoamerican artists as well as reflect on and integrate these investigations into their own creative coursework and projects. May not be repeated. LR
LMC: GE: Arts and Humanities; DA
TRANSFER: CSU

ART-038  Introduction to Printmaking
TOTAL HOURS LECTURE: 36
TOTAL HOURS LAB BY ARRANGEMENT: 72
UNITS: 3
Advisory: ART-010 or equivalent
This is an introductory course to the basic materials, equipment, and processes of printmaking. Students will learn about the history of printmaking, contemporary practices and its cultural influence. Students will make a wide range of prints in the four areas of printmaking, including relief, intaglio, planography and stencil. This class is open to beginning and advanced students. May not be repeated. LR
LMC: DA
ART-040  Introduction to Painting
TOTAL HOURS LECTURE: 36
TOTAL HOURS LAB: 72
UNITS: 3
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 not be repeated. SC
LMC: DA
TRANSFER: UC, CSU

ART-041  Intermediate Painting
TOTAL HOURS LECTURE: 36
TOTAL HOURS LAB: 72
UNITS: 3
Advisory: ART-040
Continuing studies and practices in tools, materials and techniques of painting in oil, acrylic and watercolor 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 not be repeated. SC
LMC: DA
TRANSFER: UC, CSU

ART-047  Color Theory
TOTAL HOURS LECTURE: 36
TOTAL HOURS LAB: 72
UNITS: 3
A study of the principles, theories, and applications of additive and subtractive color in two dimensions. Topics will include major historical and contemporary color systems, production of projects in applied color, and the elements of design as they apply to color. May not be repeated. SC
LMC: DA
TRANSFER: CSU

ART-050  Designing with Adobe InDesign
TOTAL HOURS LECTURE: 36
TOTAL HOURS LAB: 54
UNITS: 3
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 not be repeated. SC
LMC: DA
TRANSFER: CSU

ART-054  Adobe Photoshop
TOTAL HOURS LECTURE: 36
TOTAL HOURS LAB: 54
UNITS: 3
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 not be repeated. SC
LMC: DA
TRANSFER: CSU

ART-057  Designing with Adobe Illustrator
TOTAL HOURS LECTURE: 36
TOTAL HOURS LAB: 54
UNITS: 3
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 not be repeated. SC
LMC: DA
TRANSFER: CSU
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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Total Hours Lecture</th>
<th>Total Hours Lab</th>
<th>Units</th>
<th>Advisory</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>ART-060</td>
<td>Concepts of Sculpture</td>
<td>36</td>
<td>72</td>
<td>3</td>
<td>ART-011; eligibility for ENGL-090</td>
<td>This introductory course explores the concepts of sculpture through the use of plaster, metal, wood, and mixed media as expressive and utilitarian mediums. 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 not be repeated. SC</td>
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<tr>
<td>ART-066</td>
<td>Introduction to Ceramics</td>
<td>36</td>
<td>72</td>
<td>3</td>
<td>ART-011; eligibility for ENGL-090</td>
<td>This introductory course explores the traditional and contemporary applications 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 working with these materials. Lab assignments focus on hand building and throwing techniques. Lectures will highlight the function of this versatile medium from contemporary, cultural, and historical perspectives. “An optional material fee may be applied”. May not be repeated. SC</td>
</tr>
<tr>
<td>ART-067</td>
<td>Intermediate Ceramics</td>
<td>36</td>
<td>72</td>
<td>3</td>
<td>ART-011; eligibility for ENGL-090</td>
<td>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 and throwing techniques and glazing. Lectures will highlight the use of this versatile medium from contemporary, cultural, and historical perspectives. Students will purchase clay and tools. “An optional material fee may be applied.” May not be repeated. SC</td>
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<tr>
<td>ART-069</td>
<td>Ceramic Sculpture</td>
<td>36</td>
<td>72</td>
<td>3</td>
<td>ART-011; eligibility for ENGL-090</td>
<td>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</td>
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<tr>
<td>ART-072</td>
<td>Introduction to Digital Photography</td>
<td>36</td>
<td>54</td>
<td>3</td>
<td>Eligibility for ENGL-090</td>
<td>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 not be repeated. SC</td>
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<tr>
<td>ART-073</td>
<td>Location Photography</td>
<td>9</td>
<td>27</td>
<td>1</td>
<td>Beginning photography course or equivalent</td>
<td>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 not be repeated. SC</td>
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</table>
**ART-074 Photo II: Developing a Personal Vision**

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<th>TOTAL HOURS LECTURE: 36</th>
<th>TOTAL HOURS LAB: 54</th>
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<td>UNITS: 3</td>
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**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 not be repeated. P/NP

LMC: DA

TRANSFER: CSU

**ART-075 Documentary Photography**

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<tr>
<th>TOTAL HOURS LECTURE: 36</th>
<th>TOTAL HOURS LAB: 54</th>
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<td>UNITS: 3</td>
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</table>

**Advisory:** ART-072 or ART-074 or concurrent enrollment or completion of any other journalism class

Same as JOURN-160. This course deals with the photographer as a journalist, focusing on theory and practice in press and publications photography, with emphasis on using the camera as a reporting and communications tool. Covered are news and feature photography and photographic essays, including composition, impact, and creativity, for newspapers, magazines, Internet and other mass communications media. The course includes a background in the history, ethics and aesthetics of the documentary still photograph. Students will complete successive and cumulative exercises and projects based on current industry standards and expectations, including photographic assignments, exercises, quizzes as well as participate in class discussions and critiques. May not be repeated. SC

LMC: DA

TRANSFER: CSU

**ART-085 Introduction to Animation**

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<tr>
<th>TOTAL HOURS LECTURE: 36</th>
<th>TOTAL HOURS LAB: 72</th>
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<td>UNITS: 3</td>
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</table>

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 not be repeated. SC

LMC: DA

TRANSFER: UC, CSU

**ART-086 Animation and 3D Modeling**

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<tr>
<th>TOTAL HOURS LECTURE: 36</th>
<th>TOTAL HOURS LAB: 72</th>
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<td>UNITS: 3</td>
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</table>

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 not be repeated. SC

LMC: DA

TRANSFER: CSU

**ART-088 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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. 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**

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<th>TOTAL HOURS: 60-300</th>
<th>UNITS: 1-4</th>
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</table>

**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
### Program Requirements, Courses and Learning Outcomes

**ART-170A Internship in Art**

- **Total Hours:** 60-300
- **Units:** 1-4
- **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-250 Introduction to Digital Art**

- **Total Hours Lecture:** 36
- **Total Hours Lab:** 54
- **Units:** 3

This course is an introduction to the fundamental concepts, practices and theories of digital art creation. Topics include integration of traditional design, color and compositional principles with contemporary digital tools like Adobe Photoshop, Illustrator, and InDesign. May not be repeated. SC

**LMC:** DA

**TRANSFER:** CSU

**ART-900s Selected Topics in Art**

- **DA varies with course content.**

### Astronomy Course Descriptions

**ASTRO-010 Introduction to Astronomy**

- **Total Hours Lecture:** 54
- **Units:** 3
- **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: Natural Sciences; DA

**TRANSFER:** UC; CSU Gen. Ed. Area B1; IGETC Area 5A

**ASTRO-011 Astronomy Laboratory**

- **Total Hours Lab:** 54
- **Units:** 1
- **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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. 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

### COURSE DESCRIPTIONS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Total Hours Activity</th>
<th>Units</th>
<th>Advisory</th>
<th>Description</th>
<th>Transfer</th>
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</thead>
<tbody>
<tr>
<td>ATH-006</td>
<td>Fitness for Athletic Competition</td>
<td>54-108</td>
<td>1-2</td>
<td>High school athletic experience</td>
<td>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. May be repeated three times. SC</td>
<td>LMC: DA</td>
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<tr>
<td>ATH-008</td>
<td>Strength and Weight Training for Athletes</td>
<td>54</td>
<td>1</td>
<td>High school athletic experience</td>
<td>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. May be repeated three times. SC</td>
<td>LMC: DA</td>
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<tr>
<td>ATH-014</td>
<td>Advanced Volleyball Skills for Athletes</td>
<td>108</td>
<td>2</td>
<td>High school volleyball or club experience recommended</td>
<td>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. Advanced skills in kicks, dribbles and passes as well as offensive and defensive strategies will be emphasized to prepare the student to excel. May be repeated three times. SC</td>
<td>LMC: DA</td>
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<tr>
<td>ATH-026</td>
<td>Advanced Soccer Skills for Athletes</td>
<td>108</td>
<td>2</td>
<td>High school soccer or club experience recommended</td>
<td>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. May be repeated three times. SC</td>
<td>LMC: DA</td>
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<tr>
<td>ATH-027</td>
<td>Offensive Football Skills and Conditioning</td>
<td>54-108</td>
<td>1-2</td>
<td>Designed for intercollegiate football participants</td>
<td>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. May be repeated three times. SC</td>
<td>LMC: DA</td>
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<tr>
<td>ATH-028</td>
<td>Defensive Football Skills and Conditioning</td>
<td>54-108</td>
<td>1-2</td>
<td>Designed for intercollegiate football participants</td>
<td>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. May be repeated three times. SC</td>
<td>LMC: DA</td>
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<tr>
<td>Course Code</td>
<td>Course Name</td>
<td>Total Hours Activity</td>
<td>Units</td>
<td>Advisory</td>
<td>Description</td>
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<tr>
<td>ATH-046</td>
<td>Advanced Basketball Skills for Athletes</td>
<td>108</td>
<td>2</td>
<td>High school basketball or club experience recommended</td>
<td>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. May be repeated three times. SC</td>
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<tr>
<td>ATH-062</td>
<td>Advanced Baseball Skills for Athletes</td>
<td>108</td>
<td>2</td>
<td>High school baseball or club experience recommended</td>
<td>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. May be repeated three times. SC</td>
<td></td>
</tr>
<tr>
<td>ATH-066</td>
<td>Advanced Softball Skills for Athletes</td>
<td>108</td>
<td>2</td>
<td>High school softball or club experience recommended</td>
<td>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. May be repeated three times. SC</td>
<td></td>
</tr>
<tr>
<td>ATH-076</td>
<td>Intercollegiate Volleyball</td>
<td>175</td>
<td>3</td>
<td>High school volleyball or club experience recommended</td>
<td>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. May be repeated three times. SC</td>
<td></td>
</tr>
<tr>
<td>ATH-077</td>
<td>Intercollegiate Football</td>
<td>175</td>
<td>3</td>
<td>High school basketball or club experience recommended</td>
<td>Intercollegiate football provides the opportunity for competition as a member of an LMC team in conference play which includes championship playoffs. May be repeated three times. SC</td>
<td></td>
</tr>
<tr>
<td>ATH-079</td>
<td>Intercollegiate Basketball for Men</td>
<td>175</td>
<td>3</td>
<td>High school basketball or club experience recommended</td>
<td>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. May be repeated three times. SC</td>
<td></td>
</tr>
<tr>
<td>ATH-081</td>
<td>Intercollegiate Baseball</td>
<td>175</td>
<td>3</td>
<td>High school baseball or club experience recommended</td>
<td>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. May be repeated three times. SC</td>
<td></td>
</tr>
<tr>
<td>ATH-089</td>
<td>Intercollegiate Soccer</td>
<td>175</td>
<td>3</td>
<td>High school soccer or club experience recommended</td>
<td>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. May be repeated three times. SC</td>
<td></td>
</tr>
</tbody>
</table>
ATH-090  Intercollegiate Basketball for Women  
TOTAL HOURS ACTIVITY: 175  
UNITs: 3  
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. May be repeated three times. SC  
LMC: DA  
TRANSFER: UC, CSU  

ATH-092  Intercollegiate Softball  
TOTAL HOURS ACTIVITY: 175  
UNITs: 3  
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. May be repeated 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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated.  
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  
TOTAL HOURS ACTIVITY: 60-300  
UNITs: 1-4  
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: UC, CSU  

ATH-170A  Internship in Athletics  
TOTAL HOURS ACTIVITY: 60-300  
UNITs: 1-4  
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: UC, CSU  

ATH-900s  Selected Topics in Athletics  
DA varies with course content.
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

ASSOCIATE OF SCIENCE DEGREE AND CERTIFICATE OF ACHIEVEMENT
AUTOMOTIVE TECHNOLOGY

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 18-24 units of coursework listed below as well as the General Education requirements. Consult a Los Medanos College counselor to develop your education plan.

For the Certificate of Achievement in Automotive Technology, complete 18 units of coursework listed below. Consult a Los Medanos College counselor to develop your education plan.

SELECT A MINIMUM OF 18 OR 24 UNITS FROM:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO-035</td>
<td>Automotive Fundamentals</td>
<td>4</td>
</tr>
<tr>
<td>AUTO-037</td>
<td>Automotive Engine Machining</td>
<td>4</td>
</tr>
<tr>
<td>AUTO-040</td>
<td>Automotive Engine Diagnosis I</td>
<td>4</td>
</tr>
<tr>
<td>AUTO-041</td>
<td>Automotive Engine Diagnosis II</td>
<td>4</td>
</tr>
<tr>
<td>AUTO-042</td>
<td>Automotive Brakes</td>
<td>4</td>
</tr>
<tr>
<td>AUTO-043</td>
<td>Automotive Suspension and Steering</td>
<td>4</td>
</tr>
<tr>
<td>AUTO-045</td>
<td>Automotive Laboratory Practice</td>
<td>1.5</td>
</tr>
<tr>
<td>AUTO-046</td>
<td>Automotive Electricity and Electronics</td>
<td>4</td>
</tr>
<tr>
<td>AUTO-047</td>
<td>Automotive Heating and Air Conditioning</td>
<td>4</td>
</tr>
<tr>
<td>AUTO-048</td>
<td>Automatic Transmission and Transaxles</td>
<td>4</td>
</tr>
<tr>
<td>AUTO-049</td>
<td>Manual Transmission and Differential</td>
<td>4</td>
</tr>
<tr>
<td>AUTO-055</td>
<td>Clean Air Car Course + OBD II</td>
<td>3</td>
</tr>
<tr>
<td>AUTO-909*</td>
<td>Automotive Open Lab</td>
<td>1</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR THE MAJOR 18-24

TOTAL UNITS FOR THE DEGREE 60

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

ASSOCIATE OF SCIENCE
Program Student Learning Outcomes
1. Demonstrate problem solving techniques used in troubleshooting automotive systems by writing up a diagnosis and completing the repair.
2. Use written or oral service directions used in the automotive field to locate service information, demonstrate mechanical knowledge by diagnosing the failure and replacing the proper component.
3. Demonstrate the skills and knowledge necessary to take and pass the state and ASE exams required for employment in the automotive field.

CERTIFICATE OF ACHIEVEMENT
Program Student Learning Outcomes
1. Demonstrate problem solving techniques used in troubleshooting automotive systems by writing up a diagnosis and completing the repair.
2. Use written or oral service directions used in the automotive field to locate service information, demonstrate mechanical knowledge by diagnosing the failure and replacing the proper component.
3. Demonstrate the skills and knowledge necessary to take and pass the state and ASE exams required for employment in the automotive field.

COLLEGE SKILLS CERTIFICATES
AUTOMOTIVE TECHNOLOGY

Smog Technician Specialist

REQUIRED COURSES:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO-040</td>
<td>Automotive Engine Diagnosis I</td>
<td>4</td>
</tr>
<tr>
<td>AUTO-041</td>
<td>Automotive Engine Diagnosis II</td>
<td>4</td>
</tr>
<tr>
<td>AUTO-046</td>
<td>Automotive Electricity and Electronics</td>
<td>4</td>
</tr>
<tr>
<td>AUTO-055</td>
<td>Clean Air Car Course + OBD II</td>
<td>3</td>
</tr>
<tr>
<td>AUTO-057</td>
<td>Smog Update</td>
<td>5</td>
</tr>
</tbody>
</table>

TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE 15.5

Program Student Learning Outcomes
1. Demonstrate the skills and knowledge necessary to take and pass the State smog license and ASE exam (A 6, A 8 & L 1) required for employment in the automotive field.

Air Conditioning Specialist

REQUIRED COURSES:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO-047</td>
<td>Automotive Heating &amp; Air Conditioning</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE 3

Program Student Learning Outcomes
1. Demonstrate the skills and knowledge necessary to take and pass the State refrigerant handling license and ASE exam (A 6) required for employment in the automotive field.
Transmission Specialist

REQUIRED COURSES:  UNITS
AUTO-048  Automatic Transmission & Transaxles  4
AUTO-049  Manual Transmission & Differential  4
TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE  8

Program Student Learning Outcomes
1. Demonstrate the skills and knowledge necessary to take and pass the ASE exam (A2 & A3) required for employment in the automotive field.

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

Program Student Learning Outcomes
1. Demonstrate the skills and knowledge necessary to take and pass the ASE exam (A2 & A3) required for employment in the automotive field.

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

Program Student Learning Outcomes
1. Demonstrate the skills and knowledge necessary to take and pass the ASE exam (A1) required for employment in the automotive field.

Automotive Chassis Specialist

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

Program Student Learning Outcomes
1. Demonstrate the skills and knowledge necessary to take and pass the ASE exam (A4 & AS) required for employment in the automotive field.

COURSE DESCRIPTIONS

AUTO-035  Automotive Fundamentals
TOTAL HOURS LECTURE: 54
TOTAL HOURS LAB: 72
UNITS: 4
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 not be repeated. SC
LMC: DA
TRANSFER: CSU

AUTO-037  Automotive Engine Machining
TOTAL HOURS LECTURE: 36
TOTAL HOURS LAB: 108
UNITS: 4
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 not be repeated. SC
LMC: DA
TRANSFER: CSU

AUTO-040  Automotive Engine Diagnosis I
TOTAL HOURS LECTURE: 36
TOTAL HOURS LAB: 108
UNITS: 4
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 not be repeated. SC
LMC: DA
TRANSFER: CSU
AUTO-041 Automotive Engine Diagnosis II
TOTAL HOURS LECTURE: 36
TOTAL HOURS LAB: 108
UNITS: 4
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 not be repeated. SC
LMC: DA
TRANSFER: CSU

AUTO-042 Automotive Brakes
TOTAL HOURS LECTURE: 36
TOTAL HOURS LAB: 108
UNITS: 4
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 not be repeated. SC
LMC: DA
TRANSFER: CSU

AUTO-043 Automotive Suspension and Steering
TOTAL HOURS LECTURE: 36
TOTAL HOURS LAB: 108
UNITS: 4
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 not be repeated. SC
LMC: DA
TRANSFER: CSU

AUTO-044 Automotive Laboratory Practice
TOTAL HOURS LAB: 72
UNITS: 1.5

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 not be repeated. P/NP
LMC: DA
TRANSFER: CSU

AUTO-046 Automotive Electricity and Electronics
TOTAL HOURS LECTURE: 36
TOTAL HOURS LAB: 108
UNITS: 4
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 not be repeated. SC
LMC: DA
TRANSFER: CSU

AUTO-047 Automotive Heating and Air Conditioning
TOTAL HOURS LECTURE: 36
TOTAL HOURS LAB: 54
UNITS: 3
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 not be repeated. SC
LMC: DA
TRANSFER: CSU

AUTO-048 Automatic Transmission and Transaxles
TOTAL HOURS LECTURE: 36
TOTAL HOURS LAB: 108
UNITS: 4
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 not be repeated. SC
LMC: DA
TRANSFER: CSU
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Total Hours Lecture</th>
<th>Total Hours Lab</th>
<th>Units</th>
<th>Advisory</th>
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</thead>
<tbody>
<tr>
<td>AUTO-049</td>
<td>Manual Transmission and Differential</td>
<td>36</td>
<td>108</td>
<td>4</td>
<td>Eligibility for ENGL-090</td>
</tr>
<tr>
<td>AUTO-055</td>
<td>Clean Air Car Course + OBD II</td>
<td>36</td>
<td>48</td>
<td>3</td>
<td>AUTO-040 and 041</td>
</tr>
<tr>
<td>AUTO-056</td>
<td>Advanced Level Smog Training</td>
<td>14</td>
<td>22</td>
<td>1</td>
<td>AUTO-055; eligibility for ENGL-090</td>
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<tr>
<td>AUTO-057</td>
<td>Smog Update</td>
<td>8</td>
<td>12</td>
<td>.5</td>
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<tr>
<td>AUTO-098</td>
<td>Independent Study in Automotive Technology</td>
<td>8</td>
<td>12</td>
<td>.5</td>
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<tr>
<td>AUTO-170</td>
<td>Occupational Work Experience Education in Automotive Technology</td>
<td>60-300</td>
<td>60-300</td>
<td>1-4</td>
<td>Approved online application</td>
</tr>
</tbody>
</table>

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 troubleshoot, repair, and adjust modern manual transmission and transaxle systems. It will prepare students for the ASE A-5 Examination. May not be repeated. SC

LMC: DA

TRANSFER: CSU

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 not be repeated. SC

LMC: DA

TRANSFER: CSU

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 not be repeated. SC

LMC: DA

TRANSFER: CSU

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

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 not be repeated. P/NP

LMC: DA

TRANSFER: Independent study courses may be DA or transferable depending on specific course. See your counselor.

This course provides 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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. SC

LMC: Independent study courses may be DA or transferable depending on specific course. See your counselor.

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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. SC

LMC: DA

TRANSFER: Independent study courses may be DA or transferable depending on specific course. See your counselor.
**AUTO-170A  Internship in Automotive Technology**

**TOTAL HOURS ACTIVITY:** 60-300  
**UNITS:** 1-4  

**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.

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**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 requirements. Consult a Los Medanos College counselor to develop your education plan.

**Job Opportunities**

A major in the biological sciences will prepare students to enter numerous exciting careers. Some may enter the private sector and work for biotechnology or pharmaceutical companies conducting research, manufacturing life-saving medicines, marketing innovative products, or presenting discoveries to diverse audiences. Others may work for government agencies, such as the USDA, to help us conserve our valuable resources, or use their biotechnology knowledge to solve crimes as forensics specialists in the FBI. Many biology majors will enter the medical and public health fields and become geneticists, clinical lab scientists, and physicians. Biologists may share their love for this subject with others by becoming teachers or working for museums, aquariums, or educational non-profit agencies. Educating the public on the importance of new discoveries is always an important job, and biology majors who enjoy communicating science to the public may also work in journalism, television and publishing. Scientific training also prepares students for careers in business, law, and consulting.

**REQUIRED COURSES:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>BIOSC-020</td>
<td>Principles of Biology: Cellular Processes</td>
<td>5</td>
</tr>
<tr>
<td>BIOSC-021</td>
<td>Principles of Biology: Organismic</td>
<td>5</td>
</tr>
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</table>

**TOTAL UNITS**  
10

**AND SELECT A MINIMUM OF 8 UNITS FROM:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>BIOSC-007</td>
<td>Ecology and the Environment*</td>
<td>4</td>
</tr>
<tr>
<td>CHEM-025</td>
<td>General College Chemistry</td>
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<tr>
<td>CHEM-026</td>
<td>General College Chemistry</td>
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<tr>
<td>CHEM-028</td>
<td>Organic Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM-029</td>
<td>Organic Chemistry*</td>
<td>5</td>
</tr>
<tr>
<td>MATH-050</td>
<td>Calculus and Analytic Geometry I*</td>
<td>4</td>
</tr>
<tr>
<td>MATH-060</td>
<td>Calculus and Analytic Geometry II*</td>
<td>4</td>
</tr>
<tr>
<td>MATH-034</td>
<td>Introduction to Statistics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS-035</td>
<td>General College Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS-036</td>
<td>General College Physics II</td>
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**TOTAL UNITS FOR THE MAJOR**  
18

**TOTAL UNITS FOR THE DEGREE**  
60

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

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Program Student Learning Outcomes
1. Utilize the scientific method to develop hypotheses, conduct scientific experiments, critically analyze experimental data, and communicate results through written reports and oral presentations.
2. Identify and/or describe the correlation between structure and function in living organisms including the functional roles of the internal and external structures of cells, the basic relationship between DNA, proteins, and the transmission of traits, and the similarities and differences between metabolic processes and structures of diverse living organisms that allow them to exhibit distinctive characteristics of life.
3. Explain how evolution provides a framework for understanding the unity, diversity, and interdependency of living organisms.
4. Evaluate aspects of ecology and the interactions among the life forms on Earth - including the implications of human economic and cultural practices on the Earth's natural resources. Ultimately students will comprehend the numerous ethical implications and applications of bioscience concepts in their everyday lives.

Course Descriptions

BIOSC-005  Biology of Health
TOTAL HOURS LECTURE: 54
TOTAL HOURS LAB BY ARRANGEMENT: 18
UNITS: 3

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, 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 well being of the whole individual. This course meets the General Education Requirement for Science as of summer 2011. May not be repeated. LR
LMC: GE: Natural Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area E1

BIOSC-007  Ecology and the Environment
TOTAL HOURS LECTURE: 54
TOTAL HOURS LAB: 54
UNITS: 4

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: Natural Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area B2, B3; IGETC Area 5B

BIOSC-008  Human Biology
TOTAL HOURS LECTURE: 54
TOTAL HOURS LAB: 54
UNITS: 4

Advisory: Eligibility for ENGL-090 or higher; MATH-012 or higher

This is an introductory course for non-science majors that explores major biological principles as they apply to human beings. Problem solving and critical thinking skills will be emphasized as students investigate the structure and function of the human organism. Areas of study include the major body systems, human evolution, homeostasis, cells, tissues, heredity, gene expression, biotechnology and the interaction of humans and the environment. Weekly laboratory experiments on all major topics will allow the student to use the scientific method to gain knowledge and practical experience in the collection and analysis of data, and in drawing appropriate conclusions. This course meets the LMC General Education Requirement for Natural Sciences. May not be repeated. LR
LMC: GE: Natural Sciences; DA

BIOSC-010  General Biology
TOTAL HOURS LECTURE: 54
TOTAL HOURS LAB: 54
UNITS: 4

Advisory: MATH-012 or higher; eligibility for ENGL-090 or higher

An integrated study of life forms with weekly laboratory activities. The course will focus on biological concepts, principles, and laws pertaining to life processes, as well as the scientific method used to investigate these processes. Throughout the course students will be encouraged to apply their critical thinking abilities to investigate the connections between biological theories and real world observations. This course meets the General Education Requirement for Lab Science. May not be repeated. LR
LMC: GE: Natural Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area B2, B3; IGETC Area 5B
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Total Hours Lecture</th>
<th>Total Hours Lab</th>
<th>Units</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOSC-020</td>
<td>Principles of Biology: Cellular Processes</td>
<td>54</td>
<td>108</td>
<td>5</td>
<td>MATH-029, MATH-030 or equivalent</td>
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<tr>
<td></td>
<td></td>
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<td>Advisory: BIOSC-010, High school biology, chemistry</td>
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<td></td>
<td>This is an integrated study of the fundamental concepts of biology. Using laboratory methods and techniques, the principles and laws underlying life's processes are addressed on the molecular and cellular levels. An interdisciplinary approach will be used to treat cytology, biochemical cycles, proteomics, 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</td>
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<td>LMC: DA</td>
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<td>TRANSFER: UC; CSU Gen. Ed. Area B2, B3; IGETC Area 5B</td>
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<tr>
<td>BIOSC-021</td>
<td>Principles of Biology: Organismal</td>
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<td>BIOSC-020</td>
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<td>Advisory: BIOSC-010, High school biology, chemistry</td>
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<td></td>
<td>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</td>
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<td>LMC: DA</td>
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<td>TRANSFER: UC; CSU Gen. Ed. Area B2, B3; IGETC Area 5B</td>
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<tr>
<td>BIOSC-030</td>
<td>Introduction to Anatomy and Physiology</td>
<td>54</td>
<td>54</td>
<td>4</td>
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<td></td>
<td>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</td>
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<td>LMC: DA</td>
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<td></td>
<td>TRANSFER: CSU</td>
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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Total Hours Lecture</th>
<th>Total Hours Lab</th>
<th>Units</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOSC-040</td>
<td>Human Anatomy</td>
<td>54</td>
<td>108</td>
<td>5</td>
<td>BIOSC-030 or equivalent</td>
</tr>
<tr>
<td></td>
<td>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</td>
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<td></td>
<td>LMC: DA</td>
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<td></td>
<td>TRANSFER: UC; CSU Gen. Ed. Area B2, B3; IGETC Area 5B</td>
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<tr>
<td>BIOSC-045</td>
<td>Human Physiology</td>
<td>54</td>
<td>108</td>
<td>5</td>
<td>BIOSC-040 and CHEM-007 (or another college-level chemistry course)</td>
</tr>
<tr>
<td></td>
<td>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</td>
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<td></td>
<td>LMC: DA</td>
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<td>TRANSFER: UC; CSU Gen. Ed. Area B2, B3; IGETC Area 5B</td>
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<tr>
<td>BIOSC-050</td>
<td>Microbiology</td>
<td>36</td>
<td>108</td>
<td>4</td>
<td>CHEM-006, 007, 008, 020, 021 or 025, or equivalent</td>
</tr>
<tr>
<td></td>
<td>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</td>
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<tr>
<td></td>
<td>LMC: DA</td>
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<tr>
<td></td>
<td>TRANSFER: UC; CSU Gen. Ed. Area B2, B3; IGETC Area 5B</td>
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</tbody>
</table>
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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. 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

DEGREES—Associate in Science for Transfer

Business Administration

DEGREES—Associate of Science

Accounting
Small Business Operations
Office Administration

CERTIFICATES OF ACHIEVEMENT—Business

Accounting
Office Administration
Retail Management
Small Business Operations

ASSOCIATE IN SCIENCE
BUSINESS ADMINISTRATION FOR TRANSFER DEGREE

The Associate in Science in Business Administration for Transfer Degree is designed for students desiring advanced degrees in business administration. The LMC Business Administration courses meet lower division transfer requirements for business degrees such as accounting, marketing, management, international business, or finance. The curriculum includes the first and second year requirements for transfer to a four-year institution. A baccalaureate degree is the recommended preparation for those considering professional careers in business. To achieve the Associate in Science degree in Business Administration for Transfer from LMC, students must (1) complete the Business Administration major requirements (2) fulfill the CSU General Education requirements and/or IGETC requirements (3) complete 60 college transfer level units and (4) obtain a minimum grade point average of 2.0. Students are strongly advised to meet with a counselor to discuss transfer requirements and lower division major preparation that is needed for their intended school. Associate degrees for transfer also require that students must earn a C or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is not an acceptable grade for courses in the major.

The specific program requirements for an AS-T in Business Administration are listed below. Some courses may double count and satisfy both the major and an LMC General Education requirement or Graduation requirement. Students will be able to complete the major, the General Education and Graduation requirements within 60 units.

REQUIRED CORE COURSES:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS-186</td>
<td>Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>BUS-187</td>
<td>Managerial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ECON-010</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON-011</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>BUS-294</td>
<td>Business Law</td>
<td>3</td>
</tr>
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</table>

LIST A - SELECT ONE OF THE FOLLOWING:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH-037</td>
<td>Applied Calculus</td>
<td>4</td>
</tr>
<tr>
<td>MATH-034</td>
<td>Introduction to Statistics</td>
<td>4</td>
</tr>
<tr>
<td>MATH-035</td>
<td>Finite Mathematics</td>
<td>3</td>
</tr>
</tbody>
</table>
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.

Program Student Learning Outcomes
1. Analyze practical business problems and utilize research and critical thinking to evaluate and recommend alternative solutions.
2. Demonstrate strong oral and written skills necessary to effectively collaborate and communicate from a global perspective with diverse groups of people.
3. Apply accounting concepts and principles in making decisions about business operations.
4. Identify and explain the major functional areas of the business organizations including management, marketing, finance, and accounting.
5. Apply commonly used computer application programs to create relevant business documents.

ASSOCIATE OF SCIENCE DEGREE AND CERTIFICATE OF ACHIEVEMENT

ACCOUNTING

The associate degree and certificate of achievement curriculum in accounting prepare students for entry-level positions and professional 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 the units of coursework listed. Consult a Los Medanos College counselor to develop your education plan.

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

ASSOCIATE OF SCIENCE DEGREE AND CERTIFICATE OF ACHIEVEMENT

SMALL BUSINESS OPERATIONS

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 the units of coursework listed. Consult a Los Medanos College counselor to develop your education plan.

For the Associate of Science Degree in Small Business Operations, complete the units of coursework listed as well as the LMC General Education requirements. Consult a Los Medanos College counselor to develop your education plan.
ASSOCIATE OF SCIENCE DEGREE AND CERTIFICATE OF ACHIEVEMENT  
OFFICE ADMINISTRATION

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 the units of coursework listed below. Consult a Los Medanos College counselor to develop your education plan.

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

**REQUIRED COURSES:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS-018</td>
<td>Microsoft Excel for Windows</td>
<td>3</td>
</tr>
<tr>
<td>BUS-047</td>
<td>Office Procedures and Records Management</td>
<td>3</td>
</tr>
<tr>
<td>BUS-058</td>
<td>Business English (See Note)</td>
<td>3</td>
</tr>
<tr>
<td>BUS-059</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BUS-091</td>
<td>Managing/Working in a Diverse Workforce</td>
<td>.5</td>
</tr>
<tr>
<td>BUS-092</td>
<td>Business Ethics</td>
<td>.5</td>
</tr>
<tr>
<td>BUS-093</td>
<td>Dealing with Difficult People</td>
<td>.5</td>
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<tr>
<td>BUS-095</td>
<td>Developing Customer Service Satisfaction</td>
<td>.5</td>
</tr>
<tr>
<td>BUS-096</td>
<td>Time Management and Goal Setting</td>
<td>.5</td>
</tr>
<tr>
<td>BUS-160</td>
<td>Personal Finance</td>
<td>3</td>
</tr>
<tr>
<td>BUS 900***</td>
<td>Selected Topics in Business</td>
<td>varies</td>
</tr>
<tr>
<td>ART-015</td>
<td>Graphic Design</td>
<td>3</td>
</tr>
<tr>
<td>COMSC-030</td>
<td>Web Site Development-Part 1</td>
<td>1.5</td>
</tr>
<tr>
<td>COMSC-031</td>
<td>Web Site Development-Part II</td>
<td>1.5</td>
</tr>
<tr>
<td>COMSC-060</td>
<td>Emerging Microcomputer Technologies</td>
<td>4</td>
</tr>
<tr>
<td>JOURN-100</td>
<td>Mass Communication</td>
<td>3</td>
</tr>
<tr>
<td>MANGT-050</td>
<td>Introduction to Supervision</td>
<td>3</td>
</tr>
<tr>
<td>MANGT-060</td>
<td>Making Effective Decisions</td>
<td>3</td>
</tr>
<tr>
<td>MANGT-065</td>
<td>Mastering Management’s Essential Tools</td>
<td>3</td>
</tr>
<tr>
<td>MANGT-070</td>
<td>Relating in Human Terms</td>
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</table>

**TOTAL UNITS FOR THE MAJOR** 24-31.5

**TOTAL UNITS FOR THE DEGREE** 60

**TOTAL UNITS FOR THIS CERTIFICATE** 24-31.5

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

Program Student Learning Outcomes

1. Describe starting, operating, and expanding a small business that supports an ethical, legal, and social responsibility focused approach.
2. Explain sound financial management principles and procedures.
3. Discuss effective communication, human resources management, and decision making practices and techniques.

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 the units of coursework listed below. Consult a Los Medanos College counselor to develop your education plan.

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

**REQUIRED COURSES:**

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<td>BUS-047</td>
<td>Office Procedures and Records Management</td>
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<td>BUS-058</td>
<td>Business English (See Note)</td>
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<td>BUS-059</td>
<td>Business Communication</td>
<td>3</td>
</tr>
<tr>
<td>BUS-065</td>
<td>Introduction to Word Processing</td>
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</tr>
<tr>
<td>BUS-091</td>
<td>Managing/Working in a Diverse Workforce</td>
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<tr>
<td>BUS-092</td>
<td>Business Ethics</td>
<td>.5</td>
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<td>Dealing with Difficult People</td>
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<td>MANGT-065</td>
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<tr>
<td>MANGT-070</td>
<td>Relating in Human Terms</td>
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**SELECT A MINIMUM OF ANY 7 UNITS FROM COURSES BELOW:**

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

**TOTAL UNITS FOR THE MAJOR** 24
BASICHILLS

Program Requirements, Courses, and Learning Outcomes

Las Positas (Marketing 50).

MANGT-075
Managing Human Resources
Relating in Human Terms

MANGT-070
Introduction to Supervision

BUS-059
Business Communications

BUS-058
Business English

COMSC-060
Emerging Microcomputer Technologies

or

BUS-018
Microsoft Excel for Windows

or

BUS-035
Microsoft Office

or

BUS-035A/B/C
Microsoft Office Word/Excel/Powerpoint

or

BUS-018
Microsoft Excel for Windows

or

COMSC-060
Emerging Microcomputer Technologies

BUS-058
Business English

BUS-059
Business Communications

MANGT-050
Introduction to Supervision

MANGT-070
Relating in Human Terms

MANGT-075
Managing Human Resources

TOTAL UNITS FOR THIS CERTIFICATE 24

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

Note: Students who place at the ENGL-100 level on assessment or have completed ENGL-100 are not required to complete BUS-058.

Program Student Learning Outcomes

1. Demonstrate the knowledge and skills necessary to obtain an entry level business office position.
2. Apply commonly used computer applications to create relevant business documents.
3. Identify appropriate information storage and retrieval systems using manual and technological approaches for common business situations.

CERTIFICATE OF ACHIEVEMENT
BASICHILLS—RETAIL MANAGEMENT

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 the coursework listed below. Consult a Los Medanos College counselor to develop your education plan.

REQUIRED COURSES:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS-003 Business Math</td>
<td>3</td>
</tr>
<tr>
<td>or MATH-007 Self-Pacific Arithmetic Skills</td>
<td>3-3.5</td>
</tr>
<tr>
<td>or MATH-009 Arithmetic Skills with Applications</td>
<td>4</td>
</tr>
<tr>
<td>or BUS-181 Accounting: Applied Principles</td>
<td>3</td>
</tr>
<tr>
<td>or BUS-186 Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>BUS-026 Retailing Operations</td>
<td>3</td>
</tr>
<tr>
<td>BUS-033 Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BUS-035 Microsoft Office</td>
<td>3</td>
</tr>
<tr>
<td>or BUS-035A/B/C Microsoft Office Word/Excel/Powerpoint</td>
<td>3</td>
</tr>
<tr>
<td>or BUS-018 Microsoft Excel for Windows</td>
<td>3</td>
</tr>
<tr>
<td>or COMSC-060 Emerging Microcomputer Technologies</td>
<td>4</td>
</tr>
<tr>
<td>BUS-058 Business English</td>
<td>3</td>
</tr>
<tr>
<td>BUS-059 Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>MANGT-050 Introduction to Supervision</td>
<td>3</td>
</tr>
<tr>
<td>MANGT-070 Relating in Human Terms</td>
<td>3</td>
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<tr>
<td>MANGT-075 Managing Human Resources</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR THIS CERTIFICATE 30-32

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

Program Student Learning Outcomes

1. Describe retail operations, effective communication, marketing, and supervision.
2. Explain appropriate mathematical and accounting procedures used in retail business.

COURSE DESCRIPTIONS

BUS-001 Civil Litigation for Legal Secretaries

TOTAL HOURS LECTURE: 54
UNITS: 3

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

TOTAL HOURS LECTURE: 54
UNITS: 3

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**

| TOTAL HOURS LECTURE: | 54 |
| TOTAL HOURS LAB:     | 18 |
| UNITS:               | 3  |

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
TRANSFER: CSU

**BUS-018 Microsoft Excel for Windows**

| TOTAL HOURS LECTURE: | 54 |
| TOTAL HOURS LAB:     | 18 |
| UNITS:               | 3  |

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. May not be repeated. SC
LMC: DA
TRANSFER: CSU

**BUS-027 Small Business Management**

| TOTAL HOURS LECTURE: | 54 |
| UNITS:               | 3  |

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**

| TOTAL HOURS LECTURE: | 27 |
| TOTAL HOURS LAB:     | 27 |
| UNITS:               | 2  |

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 not be repeated. SC
LMC: DA
TRANSFER: CSU

**BUS-035 Microsoft Office**

| TOTAL HOURS LECTURE: | 54 |
| TOTAL HOURS LAB:     | 18 |
| UNITS:               | 3  |

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 word 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: DA
TRANSFER: CSU

**BUS-035A Microsoft Word**

| TOTAL HOURS LECTURE: | 18 |
| TOTAL HOURS LAB:     | 27 |
| UNITS:               | 1.5 |

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  

TOTAL HOURS LECTURE: 18  
TOTAL HOURS LAB: 27  
UNITS: 1.5  
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  

TOTAL HOURS LECTURE: 18  
TOTAL HOURS LAB: 27  
UNITS: 1.5  
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  

TOTAL HOURS LECTURE: 54  
TOTAL HOURS LAB: 18  
UNITS: 3  
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, alone 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  

TOTAL HOURS LECTURE: 54  
UNITS: 3  
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  

TOTAL HOURS LECTURE: 9  
TOTAL HOURS LAB: 18  
UNITS: 1  

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 not be repeated. P/NP  

LMC: NDA
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Total Hours Lecture</th>
<th>Total Hours Lab</th>
<th>Units</th>
<th>Advisory</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS-055</td>
<td>Typing Speed/Accuracy Development</td>
<td>9</td>
<td>18</td>
<td>1</td>
<td>Demonstrated keyboarding speed of 30 GWAM (gross words a minute)</td>
<td>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 &quot;pre-employment&quot; testing. May not be repeated. P/NP</td>
</tr>
<tr>
<td>BUS-058</td>
<td>Business English</td>
<td>54</td>
<td></td>
<td>3</td>
<td>Eligibility for ENGL-090</td>
<td>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</td>
</tr>
<tr>
<td>BUS-059</td>
<td>Business Communications</td>
<td>54</td>
<td></td>
<td>3</td>
<td>Prior or concurrent enrollment in BUS-058 or equivalent; eligibility for ENGL-090</td>
<td>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</td>
</tr>
<tr>
<td>BUS-065</td>
<td>Word Processing with MS Word 2013</td>
<td>54</td>
<td>18</td>
<td>3</td>
<td>Prior or concurrent enrollment in BUS-051 OR Typing@25WPM; eligibility for ENGL-090</td>
<td>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. May not be repeated. SC</td>
</tr>
<tr>
<td>BUS-080</td>
<td>Ten-Key / Data Entry Skills</td>
<td>12</td>
<td>18</td>
<td>1</td>
<td>Prior or concurrent enrollment in BUS-051 OR Typing@25WPM; eligibility for ENGL-090</td>
<td>This course is designed to enable students to develop proper ten-key technique, a necessary skill for the accounting and business vocation. Students work at an independent pace applying techniques learned to the computer numeric keypad. The course focuses on proper posture, correct fingerling, 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 not be repeated. P/NP</td>
</tr>
<tr>
<td>BUS-081</td>
<td>Office Accounting Essentials - Accounts Receivable &amp; Accounts Payable</td>
<td>54</td>
<td>18</td>
<td>3</td>
<td>Completion of the other courses in the certificate: BUS-018, BUS-080, BUS-181 and BUS-003; eligibility for ENGL-090</td>
<td>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</td>
</tr>
</tbody>
</table>

LMC: NDA
TRANSFER: CSU
BUS-082 Payroll I

TOTAL HOURS LECTURE: 54
TOTAL HOURS LAB: 18
UNITS: 3

Advisory: Completion of the other courses in the certificate: BUS-018, BUS-080, BUS-181 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, biweekly, monthly, semimonthly, and piecework are computed; breaking down the regular and overtime components. Both federal and California payroll taxes for the employee and employer are covered; as well as, the accompanying tax forms. Additionally, common nontax payroll deductions and payroll related responsibilities are presented. Some industry specific issues are also addressed: prevailing wage, union fringe benefits, tips, and self-employment. May not be repeated.

LMC: DA
TRANSFER: CSU

BUS-083 Basic CPT and ICD-9CM Coding

TOTAL HOURS LECTURE: 54
TOTAL HOURS LAB: 18
UNITS: 3

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.

LMC: DA
TRANSFER: CSU

BUS-084 Medical Office Procedures and Records Management

TOTAL HOURS LECTURE: 27
TOTAL HOURS LAB: 27
UNITS: 2

Advisory: BUS-051 OR concurrent enrollment in BUS 51, OR Typing at 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.

LMC: DA
TRANSFER: CSU

BUS-086 Medical Terminology

TOTAL HOURS LECTURE: 54
UNITS: 3

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.

LMC: DA
TRANSFER: CSU

BUS-087 Medical Transcription I

TOTAL HOURS LECTURE: 36
TOTAL HOURS LAB: 54
UNITS: 3

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 not be repeated.

LMC: DA
TRANSFER: CSU

BUS-088 Patient Billing/Accounting

TOTAL HOURS LECTURE: 36
TOTAL HOURS LAB: 18
UNITS: 2

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.

LMC: DA
TRANSFER: CSU
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>TOTAL HOURS LECTURE</th>
<th>UNITS</th>
<th>Advisory</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS-089</td>
<td>Medical Law and Ethics for the Medical Office</td>
<td>18</td>
<td>1</td>
<td>Eligibility for ENGL-090</td>
<td>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</td>
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<td>LMC: DA</td>
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<td>TRANSFER: CSU</td>
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<tr>
<td>BUS-090</td>
<td>Advanced Patient Billing</td>
<td>36</td>
<td>2</td>
<td>Eligibility for ENGL-090</td>
<td>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</td>
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<td>TRANSFER: CSU</td>
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<tr>
<td>BUS-091</td>
<td>Managing and Working in a Diverse Workplace</td>
<td>8</td>
<td>.5</td>
<td>Eligibility for ENGL-090</td>
<td>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</td>
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<td>LMC: DA</td>
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<td>TRANSFER: CSU</td>
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<tr>
<td>BUS-092</td>
<td>Business Ethics</td>
<td>8</td>
<td>.5</td>
<td>Eligibility for ENGL-090</td>
<td>A primary goal of the this 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</td>
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<td>LMC: DA</td>
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<td>TRANSFER: CSU</td>
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<tr>
<td>BUS-093</td>
<td>Dealing with Difficult People</td>
<td>8</td>
<td>.5</td>
<td>Eligibility for ENGL-090</td>
<td>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</td>
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<td>LMC: DA</td>
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<td></td>
<td>TRANSFER: CSU</td>
</tr>
<tr>
<td>BUS-095</td>
<td>Developing Customer Service Satisfaction</td>
<td>8</td>
<td>.5</td>
<td>Eligibility for ENGL-090</td>
<td>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</td>
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<td></td>
<td>LMC: DA</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td>TRANSFER: CSU</td>
</tr>
</tbody>
</table>
### BUS-096  Time Management and Goal Setting

**TOTAL HOURS LECTURE:** 8  
**UNITS:** .5  
**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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated.  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

**TOTAL HOURS LECTURE:** 54  
**UNITS:** 3  
**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

**TOTAL HOURS LECTURE:** 54  
**TOTAL HOURS LAB:** 18  
**UNITS:** 3  
**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

**TOTAL HOURS:** 60-300  
**UNITS:** 1-4  
**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

**TOTAL HOURS:** 60-300  
**UNITS:** 1-4  
**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
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Total Hours Lecture</th>
<th>Total Hours Lab</th>
<th>Units</th>
<th>Advisory</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS-181</td>
<td>Accounting: Applied Principles</td>
<td>54</td>
<td>18</td>
<td>3</td>
<td>BUS-003, MATH-012; eligibility for ENGL-090</td>
<td>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</td>
</tr>
<tr>
<td>BUS-185</td>
<td>Computer Assisted Accounting</td>
<td>36</td>
<td>54</td>
<td>3</td>
<td>BUS-018; BUS-181 or BUS-186; eligibility for ENGL-100</td>
<td>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 not be repeated. SC</td>
</tr>
<tr>
<td>BUS-186</td>
<td>Financial Accounting</td>
<td>72</td>
<td></td>
<td>4</td>
<td>BUS-181; MATH-012 or BUS-003; eligibility for ENGL-090</td>
<td>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</td>
</tr>
<tr>
<td>BUS-187</td>
<td>Managerial Accounting</td>
<td>72</td>
<td></td>
<td>4</td>
<td>BUS-186</td>
<td>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</td>
</tr>
<tr>
<td>BUS-285</td>
<td>Tax Accounting</td>
<td>54</td>
<td></td>
<td>3</td>
<td>Eligibility for ENGL-090</td>
<td>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</td>
</tr>
<tr>
<td>BUS-294</td>
<td>Business Law</td>
<td>54</td>
<td></td>
<td>3</td>
<td>BUS-109; eligibility for ENGL-100</td>
<td>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. (C-ID BUS-120) SC</td>
</tr>
<tr>
<td>BUS-900s</td>
<td>Selected Topics in Business</td>
<td>DA varies with course content.</td>
<td></td>
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</tr>
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</table>

LMC: DA
TRANSFER: CSU
Chemistry

DEGREE–Associate of Science in Chemistry

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

Job Opportunities
Agricultural and food scientists; chemists and materials scientists; elementary, middle, and high school teachers; environmental scientists; forensic scientists; materials engineers; occupational health and safety specialists; research technicians; government laboratory technicians; medical technicians; petroleum chemists; pharmacists; scientific writers and/or artists.

REQUISITE COURSES: UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM-025</td>
<td>General College Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM-026</td>
<td>General College Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM-028</td>
<td>Organic Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM-029</td>
<td>Organic Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>MATH-050</td>
<td>Calculus and Analytic Geometry I</td>
<td>4</td>
</tr>
<tr>
<td>MATH-060</td>
<td>Calculus and Analytic Geometry II</td>
<td>4</td>
</tr>
<tr>
<td>MATH-070</td>
<td>Calculus and Analytic Geometry III</td>
<td>4</td>
</tr>
<tr>
<td>PHYS-040</td>
<td>Physics for Scientists and Engineers I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS-041</td>
<td>Physics for Scientists and Engineers II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS-042</td>
<td>Physics for Scientists and Engineers III</td>
<td>4</td>
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</tbody>
</table>

TOTAL UNITS FOR THE MAJOR 44

TOTAL UNITS FOR THE DEGREE 60

RECOMMENDED ELECTIVE COURSES:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH-075</td>
<td>Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH-080</td>
<td>Differential Equations</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Student 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:
   - involving energy and entropy changes characteristic of chemical and physical reactions
   - concerning rates and mechanisms of chemical reactions
   - involving the principles of equilibrium

6. Demonstrated an understanding of electromagnetic radiation (i.e., light energy) and its interactions with matter, by carrying out spectroscopic analyses of atoms and compounds.

7. Conducted laboratory or field analyses using modern, professional technologies, selected from colorimetric, titrimetric, gravimetric, electrochemical, spectrometric, and chromatographic equipment and instruments.

8. 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.

COURSE DESCRIPTIONS

CHEM-006 Introduction to Inorganic and Physical Chemistry

TOTAL HOURS LECTURE: 54
TOTAL HOURS LAB: 72
UNITS: 4

Prerequisite: MATH-025, MATH-029 or equivalent

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

TOTAL HOURS LECTURE: 54
TOTAL HOURS LAB: 72
UNITS: 4

Prerequisite: MATH-025, MATH-029 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-025 General College Chemistry

<table>
<thead>
<tr>
<th>TOTAL HOURS LECTURE: 54</th>
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<tbody>
<tr>
<td>TOTAL HOURS LAB: 108</td>
</tr>
<tr>
<td>UNITS: 5</td>
</tr>
</tbody>
</table>

**Prerequisite:** CHEM-006 or (one year of High School chemistry); MATH-029; 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, thermochimisty and the properties of gases. Throughout the course, skills in critical thinking, problem-solving, and effective learning will be developed. May not be repeated. (C-ID CHEM 110) (C-ID CHEM 120S) LR

**LMC:** DA

**TRANSFER:** UC; CSU Gen. Ed. Area B1, B3; IGETC Area 5A

### CHEM-026 General College Chemistry

<table>
<thead>
<tr>
<th>TOTAL HOURS LECTURE: 54</th>
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<tbody>
<tr>
<td>TOTAL HOURS LAB: 108</td>
</tr>
<tr>
<td>UNITS: 5</td>
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</tbody>
</table>

**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. (C-ID CHEM 120S) SC

**LMC:** DA

**TRANSFER:** UC; CSU Gen. Ed. Area B1, B3; IGETC Area 5A

### CHEM-028 Organic Chemistry

<table>
<thead>
<tr>
<th>TOTAL HOURS LECTURE: 54</th>
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<tr>
<td>TOTAL HOURS LAB: 108</td>
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<tr>
<td>UNITS: 5</td>
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</table>

**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. (C-ID CHEM 150) (C-ID CHEM 160S) LR

**LMC:** DA

**TRANSFER:** UC; CSU Gen. Ed. Area B1, B3; IGETC Area 5A

### CHEM-029 Organic Chemistry

<table>
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<tr>
<th>TOTAL HOURS LECTURE: 54</th>
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<tbody>
<tr>
<td>TOTAL HOURS LAB: 108</td>
</tr>
<tr>
<td>UNITS: 5</td>
</tr>
</tbody>
</table>

**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. (C-ID CHEM 160S) 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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. 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

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

The Child Development Department prepares you for careers with children, such as early childhood educator, Head Start teacher, family child care provider, center director/site supervisor and elementary school teacher. Courses in our department also ready you for transfer to 4 year universities in majors such as Human Development, Child Development, Liberal studies towards a teaching credential, and Early Childhood Education. Parents and future parents will also benefit from the coursework as it prepares all adults to work successfully with children. We also offer specialization coursework as it prepares you to work with infants and toddlers, children with special needs and school age children in addition to coursework that meets the requirement to become a center director/site supervisor. The curriculum is a combination of classroom teaching, laboratory practicum experiences and community site visits based on a philosophy of active learning. Many courses are also available in an online format.

ASSOCIATE IN SCIENCE
EARLY CHILDHOOD EDUCATION FOR TRANSFER DEGREE

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. Associate degrees for transfer also require that students must earn a C or better in all courses required for the major or area of emphasis. A “P” (Pass) grade is not an acceptable grade for courses in the major.

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 FOR THE MAJOR 25

TOTAL UNITS FOR THE DEGREE 60

Program Student 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, 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 education 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.

CERTIFICATE OF ACHIEVEMENT
CHILD DEVELOPMENT

For the Certificate of Achievement in Child Development, complete the coursework listed below.

For degree, certificate, waiver assistance and educational planning, contact the Child Development Department at 925-473-7640.

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
**Program Requirements, Courses and Learning Outcomes**

### REqUIRED COURSES: SECOND SEMESTER

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Units</th>
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<tbody>
<tr>
<td>CHDEV-020</td>
<td>Child, Family &amp; Community</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV-062</td>
<td>Curriculum Foundations for the Young Child</td>
<td>3</td>
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### REqUIRED COURSES: THIRD SEMESTER

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<tr>
<td>CHDEV-050</td>
<td>Teaching in a Diverse Society</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV-011</td>
<td>Observation &amp; Assessment</td>
<td>3</td>
</tr>
<tr>
<td>Electives**</td>
<td></td>
<td>2-3</td>
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</table>

### REqUIRED COURSES: FOURTH SEMESTER

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHDEV-065</td>
<td>Health, Safety and Nutrition for the Young Child</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV-090</td>
<td>Supervised Teaching in Local Child Development Programs</td>
<td>4</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR THIS CERTIFICATE**: 27-28

**CHILD DEVELOPMENT ELECTIVES (MUST TAKE CHDEV-083 IF NO FIELD EXPERIENCE YET):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>CHDEV-022</td>
<td>Relationship-Based Discipline Strategies For Children</td>
<td>2</td>
</tr>
<tr>
<td>CHDEV-025</td>
<td>Creative Art for the Young Child</td>
<td>2</td>
</tr>
<tr>
<td>CHDEV-032</td>
<td>Caring for and Educating School Age Children</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV-033</td>
<td>Developmentally and Culturally Appropriate Practice for the School Age Child</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV-035</td>
<td>Teaching Science and Math to Young Children through Hands on Exploration</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV-040</td>
<td>Infant and Toddler Care and Development</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV-041</td>
<td>Developmentally Appropriate Practices For Infants and Toddlers</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV-045</td>
<td>Music and Movement for the Young Child</td>
<td>2</td>
</tr>
<tr>
<td>CHDEV-055</td>
<td>Introduction to Children with Special Needs</td>
<td>3</td>
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<tr>
<td>CHDEV-057</td>
<td>Developmentally Appropriate Practices for Children with Special Needs</td>
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<tr>
<td>CHDEV-060</td>
<td>Language and Literacy for the Young Child</td>
<td>2</td>
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<tr>
<td>CHDEV-077</td>
<td>Working with Drug-Exposed Children from Birth to 5 years of Age</td>
<td>2</td>
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<tr>
<td>CHDEV-083</td>
<td>Field Experience in Early Childhood Programs</td>
<td>2</td>
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<tr>
<td>CHDEV-092</td>
<td>Adult Supervision/Mentor Teacher Training</td>
<td>2</td>
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<tr>
<td>CHDEV-095</td>
<td>Administration of Early Childhood Programs</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV-096</td>
<td>Supervision and Leadership in Early Childhood Programs</td>
<td>3</td>
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</table>

**TOTAL UNITS REqUIRED FOR THE COLLEGE SKILLS CERTIFICATE**: 6

### Program Student 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 and effective communication to research, observe, assess, evaluate, analyze, and synthesize early learning and child development information.

3. Select, develop, and/or use educational equipment, curriculum, assessments, materials, technology, and environments that are culturally, linguistically, and developmentally relevant and appropriate.

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### COLLEGE SKILLS CERTIFICATES

**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 the Child Development Department at 925-473-7640 for application assistance.

#### Assistant

**REQUIRED COURSES:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHDEV-001</td>
<td>Introduction to Early Childhood Studies</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV-010</td>
<td>Child Growth and Development</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS REQUIRED FOR THE COLLEGE SKILLS CERTIFICATE**: 6

**Program Student Learning Outcomes**

1. Obtain permit qualifications at the Assistant Teacher level.

#### Associate Teacher

**REQUIRED COURSES:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHDEV-001</td>
<td>Introduction to Early Childhood Studies</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV-010</td>
<td>Child Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV-020</td>
<td>Child, Family, and Community</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV-062</td>
<td>Curriculum Foundation for the Young Child</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS REQUIRED FOR THE COLLEGE SKILLS CERTIFICATE**: 12

**Program Student Learning Outcomes**

1. Obtain permit qualifications at the Associate Teacher level.

#### Specialization: Infant Toddler Care

**REQUIRED COURSES:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHDEV-040</td>
<td>Infant and Toddler Care and Development</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV-041</td>
<td>Developmentally Appropriate Practices For Infants and Toddlers</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS REQUIRED FOR THE COLLEGE SKILLS CERTIFICATE**: 6

**Program Student Learning Outcomes**

1. Select, develop, and/or use educational equipment, curriculum, assessments, materials, technology, and environments that are culturally relevant and developmentally appropriate for infant/toddler care and education.
### 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-035** Teaching Science and Math to Young Children through Hands on Exploration 3

**TOTAL UNITS REQUIRED FOR THE COLLEGE SKILLS CERTIFICATE** 7

**Program Student Learning Outcomes**

1. Select, develop, and/or use educational equipment, curriculum, assessments, materials, technology, and environments in curriculum development that are culturally relevant and developmentally appropriate.

### Specialization: Special Needs Care & Education

**REQUIRED COURSES:**

- **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

**Program Student Learning Outcomes**

1. Select, develop, and/or use educational equipment, curriculum, assessments, materials, technology, and environments that are culturally relevant and developmentally appropriate for children with special needs.

### Specialization: Site Supervisor/Program Director

**REQUIRED COURSES:**

- **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

**Program Student Learning Outcomes**

1. Advance in qualifications towards permit licensure as a Program Director or Site Supervisor.

### School-Age Development and Education

**REQUIRED COURSES:**

- **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

**Program Student Learning Outcomes**

1. Select, develop, and/or use educational equipment, curriculum, assessments, materials, technology, and environments that are culturally relevant and developmentally appropriate for school-age care and education.

2. Apply critical thinking to research, observe, assess, evaluate, analyze, and synthesize early learning and child development information related to the school aged child orally and in writing.

### School-Age Associate Teacher

**REQUIRED COURSES:**

- **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

**Program Student Learning Outcomes**

1. Obtain permit qualifications at the School-Age Associate Teacher level.
COURSE DESCRIPTIONS

CHDEV-001  Introduction to Principles and Practices in Early Childhood Education

TOTAL HOURS LECTURE: 54  
UNITS: 3  
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. (C-ID ECE 120)  SC

LMC: DA  
TRANSFER: CSU

CHDEV-010  Child Growth and Development

TOTAL HOURS LECTURE: 54  
UNITS: 3  
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: Social and Behavioral Sciences; DA  
TRANSFER: UC; CSU Gen. Ed. Area D7, E; IGETC Area 4G

CHDEV-011  Observation and Assessment

TOTAL HOURS LECTURE: 54  
UNITS: 3
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 plan, working in partnership with families, supporting children with special needs, supporting a child’s culture and home language, and confidentiality are values that underpin all discussions and class assignments. May not be repeated. (C-ID ECE 200)  SC

LMC: DA  
TRANSFER: CSU

CHDEV-012  Parenting Seminar A

TOTAL HOURS LECTURE: 36  
TOTAL HOURS LAB: 27  
UNITS: 2.5
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

TOTAL HOURS LECTURE: 54  
UNITS: 3  
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 relationships; 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. (C-ID CDEV 110)  SC

LMC: GE: Social and Behavioral Sciences; DA  
TRANSFER: UC; CSU Gen. Ed. Area D7

CHDEV-022  Relationship-Based Discipline Strategies for Children

TOTAL HOURS LECTURE: 36  
UNITS: 2
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
<table>
<thead>
<tr>
<th>CHDEV-023</th>
<th>Positive Discipline for the Young Child</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL HOURS LECTURE: <strong>18</strong></td>
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<tr>
<td>UNITS: <strong>1</strong></td>
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<tr>
<td><strong>Advisory:</strong> Eligibility for ENGL-090</td>
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<tr>
<td>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</td>
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<tr>
<td><strong>LMC:</strong> DA</td>
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<table>
<thead>
<tr>
<th>CHDEV-025</th>
<th>Creative Art for Young Children</th>
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<tbody>
<tr>
<td>TOTAL HOURS LECTURE: <strong>36</strong></td>
<td></td>
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<tr>
<td>UNITS: <strong>2</strong></td>
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<tr>
<td><strong>Advisory:</strong> Eligibility for ENGL-100</td>
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<tr>
<td>The focus of this course 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</td>
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<tr>
<td><strong>LMC:</strong> DA</td>
<td></td>
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<td><strong>TRANSFER:</strong> CSU</td>
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<table>
<thead>
<tr>
<th>CHDEV-032</th>
<th>Caring for and Educating School Age Children</th>
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<tbody>
<tr>
<td>TOTAL HOURS LECTURE: <strong>54</strong></td>
<td></td>
</tr>
<tr>
<td>UNITS: <strong>3</strong></td>
<td></td>
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<tr>
<td><strong>Advisory:</strong> Eligibility for ENGL-100</td>
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<tr>
<td>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</td>
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<tr>
<td><strong>LMC:</strong> DA</td>
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<td><strong>TRANSFER:</strong> CSU</td>
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<table>
<thead>
<tr>
<th>CHDEV-033</th>
<th>Developmentally and Culturally Appropriate Practice for the School Age Child</th>
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<tbody>
<tr>
<td>TOTAL HOURS LECTURE: <strong>54</strong></td>
<td></td>
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<tr>
<td>UNITS: <strong>3</strong></td>
<td></td>
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<tr>
<td><strong>Advisory:</strong> Concurrent enrollment in CHDEV-170A</td>
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<tr>
<td>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</td>
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<tr>
<td><strong>LMC:</strong> DA</td>
<td></td>
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<td><strong>TRANSFER:</strong> CSU</td>
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<table>
<thead>
<tr>
<th>CHDEV-035</th>
<th>Teaching Science and Math to Young Children through Hands-On Exploration</th>
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<tbody>
<tr>
<td>TOTAL HOURS LECTURE: <strong>54</strong></td>
<td></td>
</tr>
<tr>
<td>UNITS: <strong>3</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Advisory:</strong> CHDEV-001, CHDEV-062</td>
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<tr>
<td>Survey and exploration of science, mathematics, and the physical and natural world suitable for teaching young children. Students will acquire the appropriate blend of science and mathematics content and pedagogical skills to increase confidence and attitudes towards science and mathematics to young children. Students will receive training in using appropriate materials, inquiry-based activities, and guided discovery teaching methods to promote learning. Students will gain practice in translating curriculum standards and guidelines into high quality science and math programs. May not be repeated. SC</td>
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<tr>
<td><strong>LMC:</strong> DA</td>
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<td><strong>TRANSFER:</strong> CSU</td>
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<table>
<thead>
<tr>
<th>CHDEV-040</th>
<th>Infant and Toddler Care and Development</th>
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<tbody>
<tr>
<td>TOTAL HOURS LECTURE: <strong>54</strong></td>
<td></td>
</tr>
<tr>
<td>UNITS: <strong>3</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Advisory:</strong> Eligibility for ENGL-090</td>
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<tr>
<td>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</td>
<td></td>
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<tr>
<td><strong>LMC:</strong> DA</td>
<td></td>
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<tr>
<td><strong>TRANSFER:</strong> CSU</td>
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</tbody>
</table>
CHDEV-041  Developmentally Appropriate Practices for Infants and Toddlers

TOTAL HOURS LECTURE: 54
UNITS: 3
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 care-giving 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

TOTAL HOURS LECTURE: 54
UNITS: 3
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. (C-ID ECE 230) SC

LMC: GE: Ethnic/Multicultural Studies; DA
TRANSFER: CSU Gen. Ed. Area D3, 7

CHDEV-055  Introduction to Children with Special Needs

TOTAL HOURS LECTURE: 54
UNITS: 3
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

TOTAL HOURS LECTURE: 54
UNITS: 3
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

TOTAL HOURS LECTURE: 54
UNITS: 3
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. (C-ID ECE 130) SC

LMC: DA
TRANSFER: CSU

CHDEV-065  Health, Safety, and Nutrition in Early Childhood Programs

TOTAL HOURS LECTURE: 54
UNITS: 3
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

TOTAL HOURS LECTURE: 27  
UNITS: 1.5  
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

TOTAL HOURS LECTURE: 36  
UNITS: 2  
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 Programs

TOTAL HOURS LECTURE: 54-162  
UNITS: 1-3  
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

TOTAL HOURS LECTURE: 36  
TOTAL HOURS BY ARRANGEMENT: 108  
UNITS: 4  
Prerequisite: CHDEV-001, 010, 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 a 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. (C-ID ECE 210) LR

LMC: DA  
TRANSFER: CSU

CHDEV-092  Adult Supervision / Mentor Teacher Training

TOTAL HOURS LECTURE: 36  
UNITS: 2  
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**

**TOTAL HOURS LECTURE:** 54  
**UNITS:** 3  
**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

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**CHDEV-096 Staff Development and Leadership in Early Childhood Programs**

**TOTAL HOURS LECTURE:** 54  
**UNITS:** 3  
**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 and 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

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**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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated.  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.

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**CHDEV-170 Occupational Work Experience Education in Child Development**

**TOTAL HOURS LECTURE:** 60-300  
**UNITS:** 1-4  
**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

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**CHDEV-170A Internship in Child Development**

**TOTAL HOURS LECTURE:** 60-300  
**UNITS:** 1-4  
**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

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**CHDEV-900s Selected Topics in Child Development**

DA varies with course content.
**Chinese**

**COURSE DESCRIPTIONS**

**CHIN-030  Elementary Chinese I**

- **TOTAL HOURS LECTURE:** 90
- **UNITS:** 5
- **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**

- **TOTAL HOURS LECTURE:** 90
- **UNITS:** 5
- **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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. 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.

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**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. Associate degrees for transfer also require that students must earn a C or better in all courses required for the major or area of emphasis. A “P” (Pass) grade is not an acceptable grade for courses in the major. 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 CORE COURSE:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPCH-110  Oral Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

**LIST A:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPCH-120  Argumentation</td>
<td>3</td>
</tr>
<tr>
<td>SPCH-130  Interpersonal Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS:** 6

**LIST B: SELECT TWO COURSES (6 UNITS)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPCH-160  Debate Practicum</td>
<td>3</td>
</tr>
<tr>
<td>SPCH-150  Intercultural Communication</td>
<td>3</td>
</tr>
<tr>
<td>JOURN-100  Mass Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS:** 6

**LIST C: SELECT ONE COURSE. ANY LIST A OR LIST B COURSES NOT USED ABOVE (3 UNITS)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL-220  Critical Inquiry and Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ENGL-221  Advanced Composition and Critical Thinking</td>
<td>3</td>
</tr>
<tr>
<td>JOURN-110  Writing for the Media</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR THE MAJOR:** 18

**TOTAL UNITS FOR THE DEGREE:** 60
Program Student Learning Outcomes
1. Be academically prepared to transfer to a communication program at a four-year university.
2. Demonstrate the ability to critically listen and analyze speech performances for their logical soundness, elements of proof and delivery.
3. Create and perform a presentation with the appropriate digital and physical materials to support the performance.

Speech

COURSE DESCRIPTIONS

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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. 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
TOTAL HOURS LECTURE: 54
UNITS: 3
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. (C-ID COMM 110) LR

LMC: GE: Arts and Humanities; DA
TRANSFER: UC; CSU Gen. Ed. Area A1; IGETC Area 1C

SPCH-120 Argumentation and Debate
TOTAL HOURS LECTURE: 54
UNITS: 3
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. (C-ID COMM 120) SC

LMC: GE: Social and Behavioral Sciences; DA
TRANSFER: UC, CSU Gen. Ed. Area A1, A3; IGETC Area 1C

SPCH-130 Interpersonal Communication
TOTAL HOURS LECTURE: 54
UNITS: 3
Advisory: Eligibility for ENGL-100

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. (C-ID COMM 130) SC

LMC: GE: Arts and Humanities; DA
TRANSFER: UC, CSU Gen. Ed. Area D7; IGETC Area 4G

SPCH-150 Intercultural Communication
TOTAL HOURS LECTURE: 54
UNITS: 3
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. (C-ID COMM 150) SC

LMC: GE: Ethnic/Multicultural Studies; DA
TRANSFER: UC, CSU Gen. Ed. Area D3, D7; IGETC Area 4C
SPCH-160  Forensics
TOTAL HOURS LECTURE: 54
UNITS: 3
Advisory: Eligibility for ENGL 100
In this course students will learn and practice the theory, format and structure of competitive debate. Students will complete research assignments, practice, and compete in weekend travel as a member of the Los Medanos Debate Team. Team members will meet during this scheduled course time to research, prepare, deliver, and analyze formal argumentation for competitive and public debates which occur on the weekends or evening. May be repeated three times. (C-ID COMM 160B) SC
LMC: DA
TRANSFER: CSU

SPCH-180  Introduction to Communication Studies
TOTAL HOURS LECTURE: 54
UNITS: 3
Advisory: Eligibility for ENGL-100
Communication shapes the possession of power and perception of the world for each of us in our daily lives. Gender, sex, distance, experience, language, authority and many more are all fundamental categories of social organization. Communication theory, as a field, was developed to explore the impact these factors have on the world and each other. This class is designed to focus on the interactive relationship between the theory and practice of communication in contemporary American society. We will examine the way in which communication variables intersect with race, ethnicity, class, nationality, disability, and other topics of social inequality and how these various intersections affect our ability to engage/maintain/terminate various interpersonal relationships. May not be repeated. SC
LMC: GE: Social and Behavioral Sciences; DA
TRANSFER: CSU

SPCH-900s  Selected Topics in Speech
DA varies with course content.

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)

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
COMPUTER SCIENCE

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>COMSC-040</td>
<td>4</td>
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<tr>
<td>COMSC-124</td>
<td>4</td>
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<tr>
<td>COMSC-125</td>
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<tr>
<td>MATH-050</td>
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<tr>
<td>MATH-060</td>
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<tr>
<td>MATH-070</td>
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<tr>
<td>MATH-075</td>
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<tr>
<td><strong>TOTAL UNITS</strong></td>
<td><strong>27</strong></td>
</tr>
</tbody>
</table>
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

TOTAL UNITS FOR THE DEGREE: 60

Program Student Learning Outcomes
1. Analyze, define, and develop efficient computer code based on user requirements.
2. Investigate, troubleshoot and solve program deficiencies (bugs) in software code.
3. Prepare clear and accurate program documentation, procedures, report of work performed, and other written materials.

ASSOCIATE OF SCIENCE DEGREE
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  Introduction to Computer Ethics 3

TOTAL UNITS FOR THE MAJOR: 33

TOTAL UNITS FOR THE DEGREE: 60

Program Student Learning Outcomes
1. Provide technical assistance and problem resolution to computer users regarding hardware, software, and networking issues.
2. Design and implement an information and communication Technology support system that includes a tracking system and documentation.
3. Support new installations, including hardware and software, peripherals, training policies and documentation.

ASSOCIATE OF SCIENCE DEGREE
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  Introduction to 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

TOTAL UNITS FOR THE DEGREE: 60

For an associate of science degree, students must complete General Education and Graduation requirements.

Program Student Learning Outcomes
1. Logically configure, troubleshoot, and support network operations.
2. Manage the network operating system, users, hardware, software, and resources.
3. Develop security policies consistent with current standards and then provide analysis of and document security and other network issues.

CERTIFICATE OF ACHIEVEMENT
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

Program Student Learning Outcomes
1. Provide technical assistance and problem resolution regarding hardware, software, and networking at the workstation level.
2. Maintain problem tracking software applications.
CERTIFICATE OF ACHIEVEMENT
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  Introduction to Computer Ethics  3
TOTAL UNITS FOR THIS CERTIFICATE  33

Program Student Learning Outcomes
1. Provide technical assistance and problem resolution to computer users regarding hardware, software, and networking issues.
2. Design and implement an information and communication technology support system that includes a tracking system and documentation.
3. Support new installations, including hardware and software, peripherals, training policies and documentation.

CERTIFICATE OF ACHIEVEMENT
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

TOTAL UNITS FOR THIS CERTIFICATE  33

Program Student Learning Outcomes
1. Demonstrate technological proficiency with hardware, common operating systems and computer applications.
2. Demonstrate the ability to analyze problems and develop effective solutions including troubleshooting common hardware and software issues.
3. Be technologically proficient to obtain entry-level or mid-level positions and pass certification exams in the Information Technology industry.

CERTIFICATE OF ACHIEVEMENT
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

Program Student Learning Outcomes
1. Provide technical support on hardware and software, and manage user resources on local area networks.
2. Provide analysis of and document security breaches and network issues.
### CERTIFICATE OF ACHIEVEMENT  
**NETWORKING AND SECURITY (ADVANCED)**

<table>
<thead>
<tr>
<th>REQUIRED COURSES:</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMSC-010</td>
<td>2</td>
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<tr>
<td>COMSC-011</td>
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<tr>
<td>COMSC-012</td>
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<tr>
<td>COMSC-037</td>
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<tr>
<td>COMSC-040</td>
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<td>COMSC-080</td>
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<td>COMSC-120</td>
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<tr>
<td>COMSC-121</td>
<td>3</td>
</tr>
<tr>
<td>COMSC-123</td>
<td>3</td>
</tr>
</tbody>
</table>

**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

**Program Student Learning Outcomes**

1. Logically configure, troubleshoot, and support network operations.
2. Manage the network operating system, users, hardware, software, and resources.
3. Develop security policies consistent with current standards and then provide analysis of and document security and other network issues.

### COLLEGE SKILLS CERTIFICATES

#### COMPUTER SCIENCE

**Foundation**

<table>
<thead>
<tr>
<th>REQUIRED COURSES:</th>
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<tbody>
<tr>
<td>COMSC-040</td>
<td>4</td>
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<tr>
<td>COMSC-060</td>
<td>4</td>
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<tr>
<td>COMSC-061</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE** 11

**Program Student Learning Outcomes**

1. Demonstrate technological proficiency operating a computer system using common operating systems and a range of applications.

#### Core Competencies

<table>
<thead>
<tr>
<th>REQUIRED COURSES:</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>COMSC-030</td>
<td>1.5</td>
</tr>
<tr>
<td>COMSC-031</td>
<td>1.5</td>
</tr>
<tr>
<td>COMSC-056</td>
<td>3</td>
</tr>
<tr>
<td>COMSC-080</td>
<td>3</td>
</tr>
</tbody>
</table>

**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 FOR COLLEGE SKILLS CERTIFICATE** 12

**Program Student Learning Outcomes**

1. Use HTML and JavaScript to create web pages that include a full range of web elements.
2. Analyze, define, and develop efficient computer code based on user requirements.
3. Effectively utilize the features and capabilities of an operating system, including file management, backup, and user interface customization.

#### Game Design

<table>
<thead>
<tr>
<th>REQUIRED COURSES:</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>COMSC-110</td>
<td>3</td>
</tr>
<tr>
<td>COMSC-111</td>
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<tr>
<td>COMSC-112</td>
<td>3</td>
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<tr>
<td>ART-020</td>
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<tr>
<td>ART-054</td>
<td>3</td>
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</tbody>
</table>

**TOTAL UNITS REQUIRED FOR THE COLLEGE SKILLS CERTIFICATE** 15

**Program Student Learning Outcomes**

1. Demonstrate software game development skills by designing a complete game synopsis using a variety of computer programming tools, techniques and practices.
2. Develop a complete game environment with individual detailed narratives and related storyboards and illustrations that define the characters, game strategy, and storyline behind the game using a variety of technologies.
3. Construct a working 3D environment utilizing industry-standard software to create a short narrative animation project.
PC Repair Technician (A+ Certification)

<table>
<thead>
<tr>
<th>COURSE DESCRIPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMSC-090 PC Repair - Hardware</td>
</tr>
<tr>
<td>COMSC-091 PC Repair – Software</td>
</tr>
<tr>
<td>COMSC-092 A+ Certification Exam Preparation</td>
</tr>
<tr>
<td>TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE</td>
</tr>
</tbody>
</table>

Program Student Learning Outcomes
1. Install, configure, maintain and troubleshoot a multivendor Personal Computer System in DOS / Windows Environments at the beginning level.
2. Access and perform core functions while using utility functions with the Microsoft, LINUX and MAC O/S operating systems.
3. Prepare for and take the COMP TIA A+ Certification Exam.

Web Design

<table>
<thead>
<tr>
<th>COURSE DESCRIPTIONS</th>
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</thead>
<tbody>
<tr>
<td>COMSC-030 Web Site Development Part I</td>
</tr>
<tr>
<td>COMSC-031 Web Site Development Part II</td>
</tr>
<tr>
<td>COMSC-032 Web Site Development – Dreamweaver and Flash</td>
</tr>
<tr>
<td>COMSC-040 Introduction to Computers</td>
</tr>
<tr>
<td>TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE</td>
</tr>
</tbody>
</table>

Program Student Learning Outcomes
1. Demonstrate use of developer tools to create web pages that include a full range of web elements.
2. Communicate information on the Internet through the design and programming of professional interactive, multimedia web sites.
3. Use industry standard software for web development and build standard compliant web pages.

COURSE DESCRIPTIONS

COMSC-010 Introduction to Computer Networking
TOTAL HOURS LECTURE: 27
TOTAL HOURS LAB: 36
UNITS: 2
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 not be repeated. SC
LMC: DA
TRANSFER: CSU

COMSC-011 Introduction to Network Operating Systems
TOTAL HOURS LECTURE: 27
TOTAL HOURS LAB: 36
UNITS: 2
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 not be repeated. SC
LMC: DA
TRANSFER: CSU
COMSC-012  Introduction to Network Security  
TOTAL HOURS LECTURE: 27  
TOTAL HOURS LAB: 36  
UNITS: 2  
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 not be repeated. SC  
LMC: DA  
TRANSFER: CSU

COMSC-030  Web Site Development-Part I  
TOTAL HOURS LECTURE: 27  
UNITS: 1.5  
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  
TOTAL HOURS LECTURE: 27  
UNITS: 1.5  
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, organization, or personal use. May not be repeated. SC  
LMC: DA  
TRANSFER: CSU

COMSC-032  Web Site Development- Dreamweaver/Flash  
TOTAL HOURS LECTURE: 54  
UNITS: 3  
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: UC, CSU

COMSC-037  Help Desk Customer Technical Support  
TOTAL HOURS LECTURE: 36  
TOTAL HOURS LAB: 72  
UNITS: 3  
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 not be repeated. SC  
LMC: DA  
TRANSFER: CSU

COMSC-040  Introduction to Computers  
TOTAL HOURS LECTURE: 54  
TOTAL HOURS LAB: 36  
UNITS: 4  
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: DA  
TRANSFER: UC, CSU

COMSC-041  Programming with Visual Basic.Net (VB.NET)  
TOTAL HOURS LECTURE: 54  
UNITS: 3  
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

TOTAL HOURS LECTURE: 54
UNITS: 3
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

TOTAL HOURS LECTURE: 54
UNITS: 3
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

TOTAL HOURS LECTURE: 27
TOTAL HOURS LAB: 9
UNITS: 1.5
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: DA

COMSC-051  Java for Programmers, Part I

TOTAL HOURS LECTURE: 36
TOTAL HOURS LAB: 54
UNITS: 3
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 not be repeated. SC

LMC: DA
TRANSFER: UC, CSU

COMSC-052  Java for Programmers, Part II

TOTAL HOURS LECTURE: 36
TOTAL HOURS LAB: 54
UNITS: 3
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 not be repeated. SC

LMC: DA
TRANSFER: UC, CSU

COMSC-053  Advanced Visual Basic.NET

TOTAL HOURS LECTURE: 54
UNITS: 3
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
TOTAL HOURS LECTURE:  54
TOTAL HOURS LAB:       0
UNITs:                 3
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
TOTAL HOURS LECTURE:  54
TOTAL HOURS LAB:       54
UNITs:                 4
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 not be repeated. SC
LMC: DA
TRANSFER: CSU

COMSC-061  Advanced Microcomputer Applications
TOTAL HOURS LECTURE:  54
TOTAL HOURS LAB:       18
UNITs:                 3
Advisory: COMSC-060; eligibility for ENGL-090
This course 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
TOTAL HOURS LECTURE:  54
TOTAL HOURS LAB:       18
UNITs:                 3
Advisory: COMSC-040, ENGL-090
This class is a comprehensive survey of operating systems. Coverage includes the fundamentals of operating systems: what they are, what they do, how they function, how they can be evaluated, and how they compare to one another. Students will learn the basic structure and operating procedures of different operating systems necessary to control a contemporary microcomputer and handheld devices. 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 utilize a range of operating systems, such as UNIX, LINUX, Windows, Android, iOS, and VMWare. Course will be taught using the current version of popular operating systems. May not be repeated. SC
LMC: DA
TRANSFER: CSU

COMSC-090  PC Repair - Hardware (A+ Certification)
TOTAL HOURS LECTURE:  36
TOTAL HOURS LAB:       36
UNITs:                 3
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 not be repeated. SC
LMC: DA
TRANSFER: CSU
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Total Hours Lecture</th>
<th>Total Hours Lab</th>
<th>Units</th>
<th>Advisory</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMSC-091</td>
<td>PC Repair - Software (A+ Certification)</td>
<td>36</td>
<td>36</td>
<td>3</td>
<td>COMSC-090, or working knowledge of PC systems and operating systems; eligibility for ENGL-090</td>
<td>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 coursework, 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 not be repeated. SC</td>
</tr>
<tr>
<td>COMSC-092</td>
<td>PC Repair - A + Prep (A+ Certification)</td>
<td>18</td>
<td>18</td>
<td>1.5</td>
<td>COMSC-090, 091, or working knowledge of PC systems and operating systems; eligibility for ENGL-090</td>
<td>The third of three courses (COMSC-090, 091, and 092) designed to prepare students for the Comptia A+ Certification Exams. Mastering the craft of the PC Technician requires students to learn many details about a number of operating systems, drivers, and configurations. With A+ approved coursework, 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 not be repeated. SC</td>
</tr>
<tr>
<td>COMSC-098</td>
<td>Independent Study in Computer Science</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. SC</td>
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<tr>
<td>COMSC-110</td>
<td>Gaming: An Introduction</td>
<td>54</td>
<td>18</td>
<td>3</td>
<td>COMSC-040; eligibility for ENGL-090</td>
<td>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</td>
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<tr>
<td>COMSC-111</td>
<td>Gaming: Beginning Illustration and Storyboarding</td>
<td>54</td>
<td>18</td>
<td>3</td>
<td>COMSC-040; eligibility for ENGL-090</td>
<td>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</td>
</tr>
<tr>
<td>COMSC-112</td>
<td>Gaming: Beginning Game Design</td>
<td>54</td>
<td>18</td>
<td>3</td>
<td>COMSC-040; eligibility for ENGL-090</td>
<td>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</td>
</tr>
</tbody>
</table>
COMSC-120  Introduction to Computer Forensics
TOTAL HOURS LECTURE: 36
TOTAL HOURS LAB: 72
UNITS: 3
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 not be repeated. SC
LMC: DA
TRANSFER: CSU

COMSC-121  Computer Forensics Investigations and Analysis
TOTAL HOURS LECTURE: 36
TOTAL HOURS LAB: 72
UNITS: 3
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 not be repeated.
LMC: DA
TRANSFER: CSU

COMSC-122  Programming Concepts & Methodologies I
TOTAL HOURS LECTURE: 54
UNITS: 3
Advisory: Eligibility for ENGL-090
This course introduces the discipline of computer science with practical hands-on problem solving using a “high-level” computer programming language. The course will include basic syntax and semantics of a “high-level” language, variables, types, expressions, assignment, basic computation, simple I/O, conditional and iterative control structures, functions and parameter passing, structured decomposition, program design, programming style, algorithms and problem solving strategies, overview of programming languages, binding, visibility, scoping, and lifetime management. May not be repeated. (C-ID COMP 122) SC
LMC: DA
TRANSFER: UC, CSU

COMSC-123  Introduction to Computer Ethics
TOTAL HOURS LECTURE: 54
UNITS: 3
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
TOTAL HOURS LECTURE: 54
TOTAL HOURS LAB: 36
UNITS: 4
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. (C-ID COMP 132) SC
LMC: DA
TRANSFER: UC, CSU

COMSC-125  Assembly Language Programming/Computer Organization
TOTAL HOURS LECTURE: 54
TOTAL HOURS LAB: 36
UNITS: 4
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. (C-ID COMP 142) SC
LMC: DA
TRANSFER: UC, CSU
**COMSC-126  Introduction to Database Management Systems**

TOTAL HOURS LECTURE: 54  
UNITS: 3  
Advisory: COMSC-040; eligibility for ENGL-090  
This course introduces the core concepts in database management systems (DBMSs). This is done through the hands-on process of building a database. This process is centered around the understanding of the importance of database management systems, learning and understanding the key terms associated with databases and their management systems; what the major characteristics of DBMSs and their advantages and disadvantages are; gaining a thorough grasp of the structures of different DBMSs; describing how database software is used to analyze and manipulate data; being familiar with data security issues, quality and recovery, and differing approaches to protecting and recovering data; identifying the value of decision support systems, data mining and warehousing. May not be repeated. SC  
LMC: DA  
TRANSFER: CSU

**COMSC-132  Programming Concepts & Methodologies II**

TOTAL HOURS LECTURE: 54  
UNITS: 3  
Prerequisite: COMSC-122 or equivalent  
Advisory: Eligibility for ENGL-090  
This course introduces the discipline of computer science with practical hands-on problem solving using a “high-level” computer programming language. The course will include basic syntax and semantics of a “high-level” language, variables, types, expressions, assignment, basic computation, simple I/O, conditional and iterative control structures, functions and parameter passing, structured decomposition, program design, programming style, algorithms and problem solving strategies, overview of programming languages, binding, visibility, scoping, and lifetime management. May not be repeated. SC  
LMC: DA  
TRANSFER: UC, CSU

**COMSC-142  Computer Architecture and Organization**

TOTAL HOURS LECTURE: 54  
UNITS: 3  
Advisory: Eligibility for ENGL-090  
The organization and behavior of real computer systems at the assembly-language level. The mapping of statements and constructs in a “high-level” language into sequences of machine instructions is studied, as well as the internal representation of simple data types and structures. Numerical computation is examined, noting the various data representation errors and potential procedural errors. May not be repeated. SC  
LMC: DA  
TRANSFER: UC, CSU

**COMSC-170  Occupational Work Experience Education in Computer Science**

TOTAL HOURS: 60-300  
UNITS: 1-4  
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**

TOTAL HOURS: 60-300  
UNITS: 1-4  
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

COUSE DESCRIPTIONS

COOP-160  General Work Experience Education

TOTAL HOURS: 60-300
UNITS: 1-4
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-170A  Occupational Work Experience Internship

TOTAL HOURS: 60-300
UNITS: 1-4
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

COOP-170  Occupational Work Experience Education

TOTAL HOURS: 60-300
UNITS: 1-4
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 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
Counseling

COURSE DESCRIPTIONS

COUNS-030 Orientation to College
TOTAL HOURS LECTURE: 18
UNITS: 1
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
TRANSFER: CSU

COUNS-032 Career Development
TOTAL HOURS LECTURE: 9
TOTAL HOURS LAB: 18
UNITS: 1
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
TOTAL HOURS LECTURE: 18
UNITS: 1
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
TOTAL HOURS LECTURE: 18
UNITS: 1
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 testtaking 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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. 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.
Drama

DEGREE—Associate of Arts

Acting

DEGREE—Associate in Arts Degree for Transfer

Theatre Arts

The Drama program is designed to develop strong academic and artistic foundations in voice, movement, and acting techniques as well as theatrical and film analysis and history. The curriculum is designed after our local transfer institution, CSU Eastbay. Upon completion of the degree students will be prepared to enter the 4-year academic institution with the knowledge and professionalism to succeed in the specialized degree for Acting, which it offers.

ASSOCIATE OF ARTS

ACTING

For the Associate of Arts Degree in Acting, complete the coursework listed below as well as the LMC General Education requirements. Consult a Los Medanos College counselor to develop your education plan.

REQUIRED COURSES:  UNITS

<table>
<thead>
<tr>
<th>COURSE</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRAMA-015</td>
<td>Multicultural Perspectives in Theatre</td>
</tr>
<tr>
<td>or</td>
<td>Theatrical Production I: Acting for Performance</td>
</tr>
<tr>
<td>DRAMA-016</td>
<td>Theatre Appreciation</td>
</tr>
<tr>
<td>DRAMA-020</td>
<td>Principles of Acting I</td>
</tr>
<tr>
<td>DRAMA-021</td>
<td>Principles of Acting II</td>
</tr>
<tr>
<td>DRAMA-022</td>
<td>Principles of Voice and Dialects</td>
</tr>
<tr>
<td>DRAMA-023</td>
<td>Principles of Improvisation and Movement</td>
</tr>
<tr>
<td>DRAMA-052</td>
<td>Directing and Collaboration</td>
</tr>
<tr>
<td>TOTAL UNITS FOR THE MAJOR:</td>
<td>18</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR THE DEGREE:  60

Program Student 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 describe the process 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 acting or film program with an advanced standing.

ASSOCIATE IN ARTS

THEATRE ARTS FOR TRANSFER DEGREE

Associate in Arts in Theatre Arts for Transfer at Los Medanos College is a 60-unit degree program designed to prepare students to transfer and study theatre at a California State University. The program, which requires 18 units of lower division work in Theatre, is combined with the California State General Education Pattern to prepare students to take upper division courses at a California State University. Typically, students who complete this program will be able to complete their upper division coursework at their chosen CSU in two additional years. Students obtaining a degree must earn a minimum 2.0 GPA for all course work and achieve a minimum grade of C or higher for all major course work. Please contact an advisor or counselor for advice on course selection Associate degrees for transfer also require that students must earn a C or better in all courses required for the major or area of emphasis. A “P” (Pass) grade is not an acceptable grade for courses in the major.

REQUIRED COURSES:  UNITS

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<tbody>
<tr>
<td>DRAMA-016</td>
<td>Theatre Appreciation</td>
</tr>
<tr>
<td>DRAMA-020</td>
<td>Principles of Acting I</td>
</tr>
<tr>
<td>DRAMA-050</td>
<td>Theatrical Production I: Acting for Performance</td>
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<tr>
<td>TOTAL UNITS</td>
<td>9</td>
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SELECT THREE COURSES:  UNITS

<table>
<thead>
<tr>
<th>COURSE</th>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>DRAMA-021</td>
<td>Principles of Acting II</td>
</tr>
<tr>
<td>DRAMA-040</td>
<td>Theatrical Stagecraft</td>
</tr>
<tr>
<td>DRAMA-041</td>
<td>Theatrical Design</td>
</tr>
<tr>
<td>DRAMA-051</td>
<td>Theatrical Production II: Intermediate Acting for Performance</td>
</tr>
<tr>
<td>or</td>
<td>Directing and Collaborative Performance</td>
</tr>
<tr>
<td>DRAMA-052</td>
<td>Directing and Collaborative Performance</td>
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<td>TOTAL UNITS FOR THE MAJOR:</td>
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</tbody>
</table>

TOTAL UNITS FOR THE DEGREE:  60

Program Student 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.
<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>HOURS</th>
<th>UNITS</th>
<th>ADVISORY</th>
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<tbody>
<tr>
<td>DRAMA-015</td>
<td>Multicultural Perspectives within Theatre</td>
<td>54</td>
<td>3</td>
<td>Eligibility for ENGL-100</td>
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<td>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</td>
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<tr>
<td>LMC: GE: Ethnic/Multicultural Studies; Arts and Humanities; DA</td>
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<tr>
<td>TRANSFER: UC; CSU Gen. Ed. Area C1; IGETC Area 3A</td>
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<tr>
<td>DRAMA-016</td>
<td>Theatre Appreciation</td>
<td>54</td>
<td>3</td>
<td>Eligibility for ENGL-100</td>
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<td>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. (C-ID THTR 111) SC</td>
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<td>LMC: GE: Arts and Humanities; DA</td>
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<td>TRANSFER: UC; CSU Gen. Ed. Area C1; IGETC Area 3A</td>
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<tr>
<td>DRAMA-020</td>
<td>Principles of Acting I</td>
<td>36</td>
<td>3</td>
<td>Eligibility for ENGL-090</td>
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<td>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 not be repeated. (C-ID THTR 151) SC</td>
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<td>TRANSFER: UC, CSU</td>
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<tr>
<td>DRAMA-021</td>
<td>Principles of Acting II</td>
<td>36</td>
<td>3</td>
<td>DRAMA-020; eligibility for ENGL-090</td>
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<td>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 not be repeated. (C-ID THTR 152) SC</td>
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<tr>
<td>DRAMA-022</td>
<td>Principles of Voice and Dialects</td>
<td>36</td>
<td>3</td>
<td>Eligibility for ENGL-090</td>
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<td>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 Rodneburg, and Cicely Berry. May not be repeated. SC</td>
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<tr>
<td>LMC: DA</td>
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<tr>
<td>DRAMA-023</td>
<td>Principles of Improvisation and Movement</td>
<td>36</td>
<td>3</td>
<td>Eligibility for ENGL-090</td>
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<td>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 not be repeated. SC</td>
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<td>LMC: DA</td>
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<td>Total Hours Lab</td>
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<tr>
<td>DRAMA-030</td>
<td>Chicano/a Mexican American Cinema: A Critical Analysis</td>
<td>3</td>
<td>54</td>
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<td>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</td>
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<td>LMC: GE: Ethnic/Multicultural Studies; DA</td>
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<tr>
<td>DRAMA-040</td>
<td>Theatrical Stagecraft</td>
<td>3</td>
<td>18</td>
<td>108</td>
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<td>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 not be repeated. (C-ID THTR 171) SC</td>
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<td>DRAMA-041</td>
<td>Theatrical Design</td>
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<td>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 not be repeated. (C-ID THTR 172) SC</td>
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<tr>
<td>DRAMA-050</td>
<td>Theatrical Production I: Beginning Acting for Performance</td>
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<td>162</td>
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<td>This is an immersive 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. May not be repeated. SC</td>
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<tr>
<td>DRAMA-051</td>
<td>Theatrical Production II: Intermediate Acting for Performance</td>
<td>3</td>
<td>18</td>
<td>162</td>
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<td>This is an immersive 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. May not be repeated. SC</td>
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<td>LMC: DA</td>
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<tr>
<td>DRAMA-052</td>
<td>Directing and Collaborative Performance</td>
<td>3</td>
<td>18</td>
<td>162</td>
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<td>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 not be repeated. SC</td>
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<td>LMC: DA</td>
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<td>TRANSFER: UC, CSU</td>
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ECONOMICS

DRAMA-070  Film as an International Art Form

TOTAL HOURS LECTURE: 54
TOTAL HOURS LAB: 36
UNITS: 3

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: Arts and Humanities; 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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. 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

COURSE DESCRIPTIONS

ECON-005  Economic History of the United States

TOTAL HOURS LECTURE: 54
UNITS: 3

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 and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area D6; IGETC Area 4F

ECON-010  Principles of Microeconomics

TOTAL HOURS LECTURE: 54
UNITS: 3

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 and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area D2; IGETC Area 4B

ECON-011  Principles of Macroeconomics

TOTAL HOURS LECTURE: 54
UNITS: 3

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 and Behavioral Sciences; 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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. 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.

EDUC-040  Introduction to Classroom Teaching
TOTAL HOURS LECTURE: 54
UNITS: 3
Advisory: Eligibility for ENGL-100
This course introduces students to the concepts and issues related to teaching diverse learners in today's contemporary schools, Kindergarten through grade 12 (K-12). Topics include teaching as a profession and career, historical and philosophical foundations of the American education system, contemporary educational issues, Common Core standards, and teacher performance standards. In addition to class time, the course requires a minimum of 45 hours of structured fieldwork in public school classrooms that represent California's diverse student population, and includes cooperation with at least one carefully selected and campus-approved certificated classroom teacher. May not be repeated. SC
LMC: GE: Social and Behavioral Sciences; 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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. 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
TOTAL HOURS: 60-300
UNITS: 1-4
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
TOTAL HOURS: 60-300
UNITS: 1-4
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 conduct 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

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.

The ETEC program enables students 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.

ASSOCIATE OF SCIENCE DEGREE AND CERTIFICATE OF ACHIEVEMENT

ELECTRICAL TECHNOLOGY

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

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. Consult a Los Medanos College counselor to develop an education plan.

RECOMMENDED COURSES:

<table>
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<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>MATH-012</td>
<td>Pre-Algebra 4</td>
</tr>
<tr>
<td>ENGL-090</td>
<td>Integrated Reading, Writing, and Critical Thinking 5</td>
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REQUIRED COURSES: FIRST SEMESTER

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<th>Course</th>
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<tr>
<td>ETEC-010</td>
<td>Direct Current Circuits</td>
<td>4</td>
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<tr>
<td>ETEC-012</td>
<td>Alternating Current Circuits</td>
<td>4</td>
</tr>
<tr>
<td>MATH-025</td>
<td>Elementary Algebra</td>
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REQUIRED COURSES: SECOND SEMESTER

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<td>ETEC-020</td>
<td>Electric Motor Control</td>
<td>3</td>
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<td>ETEC-022</td>
<td>Semiconductor Devices</td>
<td>2</td>
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<tr>
<td>ETEC-024</td>
<td>Digital Devices</td>
<td>2</td>
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<tr>
<td>PHYS-015</td>
<td>Introduction to Physics</td>
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REQUIRED COURSES: THIRD SEMESTER

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<td>ETEC-030</td>
<td>Programmable Logic Controllers</td>
<td>4</td>
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<tr>
<td>ETEC-032</td>
<td>Instrumentation Process Measurement</td>
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<td>ETEC-034</td>
<td>Instrument Calibration</td>
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REQUIRED COURSES: FOURTH SEMESTER

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<tr>
<td>ETEC-040</td>
<td>National Electrical Code</td>
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<tr>
<td>ETEC-042</td>
<td>Wiring Methods and Code Application</td>
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<tr>
<td>ETEC-044</td>
<td>Power Distribution &amp; Transformers</td>
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<tr>
<td>ETEC-046</td>
<td>DC &amp; AC Motors &amp; Generators</td>
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<td>TOTAL UNITS FOR THE MAJOR</td>
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TOTAL UNITS FOR THIS CERTIFICATE

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<td>MATH-012</td>
<td>Pre-Algebra</td>
<td>4</td>
</tr>
<tr>
<td>ENGL-090</td>
<td>Integrated Reading, Writing, and Critical Thinking</td>
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TOTAL UNITS FOR THE DEGREE

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<td>Pre-Algebra</td>
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</tr>
<tr>
<td>ENGL-090</td>
<td>Integrated Reading, Writing, and Critical Thinking</td>
<td>5</td>
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Program Student Learning Outcomes

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

ASSOCIATE OF SCIENCE Degree and Certificate of Achievement

INSTRUMENTATION TECHNOLOGY

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

For the certificate of achievement, complete the coursework listed below. Consult a Los Medanos College counselor to develop an education plan.

RECOMMENDED COURSES:

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<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>MATH-012</td>
<td>Pre-Algebra 4</td>
</tr>
<tr>
<td>ENGL-090</td>
<td>Integrated Reading, Writing, and Critical Thinking 5</td>
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REQUIRED COURSES: FIRST SEMESTER

<table>
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<th>Course</th>
<th>Description</th>
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<tbody>
<tr>
<td>ETEC-010</td>
<td>Direct Current Circuits</td>
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<tr>
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<td>Alternating Current Circuits</td>
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REQUIRED COURSES: SECOND SEMESTER

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<td>ETEC-020</td>
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<tr>
<td>ETEC-022</td>
<td>Semiconductor Devices</td>
<td>2</td>
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<tr>
<td>ETEC-024</td>
<td>Digital Devices</td>
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<td>Introduction to Physics</td>
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REQUIRED COURSES: THIRD SEMESTER

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<td>ETEC-030</td>
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<td>ETEC-032</td>
<td>Instrumentation Process Measurement</td>
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<td>ETEC-034</td>
<td>Instrument Calibration</td>
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REQUIRED COURSES: FOURTH SEMESTER

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<td>ETEC-040</td>
<td>National Electrical Code</td>
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<td>ETEC-042</td>
<td>Wiring Methods and Code Application</td>
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<tr>
<td>ETEC-044</td>
<td>Power Distribution &amp; Transformers</td>
<td>3</td>
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<td>ETEC-046</td>
<td>DC &amp; AC Motors &amp; Generators</td>
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TOTAL UNITS FOR THIS CERTIFICATE

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<td>MATH-012</td>
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TOTAL UNITS FOR THE DEGREE

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<td>MATH-012</td>
<td>Pre-Algebra</td>
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<td>ENGL-090</td>
<td>Integrated Reading, Writing, and Critical Thinking</td>
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Program Student Learning Outcomes

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

Required Courses: First Semester

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tr>
<td>ETEC-010</td>
<td>Direct Current Circuits</td>
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<td>Alternating Current Circuits</td>
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Required Courses: Second Semester

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<tr>
<td>ETEC-020</td>
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<td>ETEC-022</td>
<td>Semiconductor Devices</td>
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<tr>
<td>ETEC-024</td>
<td>Digital Devices</td>
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<tr>
<td>PHYS-015</td>
<td>Introduction to Physics</td>
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Required Courses: Third Semester

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<th>Course Title</th>
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<td>ETEC-030</td>
<td>Programmable Logic Controllers</td>
<td>4</td>
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<tr>
<td>ETEC-032</td>
<td>Instrumentation Process Measurement</td>
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<tr>
<td>ETEC-034</td>
<td>Instrument Calibration</td>
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<td>CHEM-006</td>
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Required Courses: Fourth Semester

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<td>ETEC-052</td>
<td>Applied Process Control</td>
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<td>ETEC-056</td>
<td>Code for Instrument Application</td>
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<td>ETEC-058</td>
<td>Analytical Instrumentation</td>
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<tr>
<td>ETEC-059</td>
<td>System Integration &amp; Troubleshooting</td>
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Program Student Learning Outcomes

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

Course Descriptions

ETEC-004 Introduction to Electrical Technology

Total Hours Lecture: 36
Total Hours Lab: 54
Units: 3
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 not be repeated. SC

LMC: DA
TRANSFER: CSU

ETEC-010 Direct Current Circuits

Total Hours Lecture: 54
Total Hours Lab: 54
Units: 4
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 not be repeated. SC

LMC: DA
TRANSFER: CSU
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Total Hours Lecture</th>
<th>Total Hours Lab</th>
<th>Units</th>
<th>Prerequisite</th>
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<th>Description</th>
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<td>ETEC-012</td>
<td>Alternating Current Circuits</td>
<td>54</td>
<td>54</td>
<td>4</td>
<td>ETEC-010</td>
<td>Eligibility for ENGL-100</td>
<td>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 not be repeated. SC</td>
<td>DA</td>
<td>CSU</td>
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<tr>
<td>ETEC-020</td>
<td>Electric Motor Control</td>
<td>36</td>
<td>72</td>
<td>3</td>
<td>ETEC-012</td>
<td>MATH-012 or equivalent; Eligibility for ENGL-100</td>
<td>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 trouble shooting techniques will be emphasized. May not be repeated. SC</td>
<td>DA</td>
<td>CSU</td>
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<tr>
<td>ETEC-022</td>
<td>Semiconductor Devices</td>
<td>18</td>
<td>54</td>
<td>2</td>
<td>ETEC-012</td>
<td>Eligibility for ENGL-100</td>
<td>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 semiconductors devices. May not be repeated. SC</td>
<td>DA</td>
<td>CSU</td>
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<tr>
<td>ETEC-024</td>
<td>Digital Devices</td>
<td>18</td>
<td>54</td>
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<td>ETEC-012</td>
<td>ETEC-022; Eligibility for ENGL-100</td>
<td>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 not be repeated. SC</td>
<td>DA</td>
<td>CSU</td>
</tr>
<tr>
<td>ETEC-030</td>
<td>Programmable Logic Controllers</td>
<td>54</td>
<td>54</td>
<td>4</td>
<td>ETEC-012</td>
<td>ETEC-020; Eligibility for ENGL-100; Eligibility for MATH-025</td>
<td>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 not be repeated. SC</td>
<td>DA</td>
<td>CSU</td>
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<tr>
<td>ETEC-032</td>
<td>Instrumentation and Process Measure</td>
<td>54</td>
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<td>ETEC-034; Eligibility for ENGL-100</td>
<td>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</td>
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<td>CSU</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
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<td>Total Hours Lab</td>
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<td>Instrument Calibration Laboratory</td>
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<td>Phys-015; MATH-012; eligibility for ENGL-100</td>
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<td>This is a lab course which provides hands on experience to enhance the fundamentals of instrumentation measurement of process control covered in ETEC-032. The student will learn to use test and calibration equipment commonly used in industry to measure Temperature, Pressure, Level and Flow as well as Analytical properties. May not be repeated. SC</td>
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<td>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 Apprentice Standards Electrical Certification Exam for the State of California. May not be repeated. SC</td>
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<td>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 not be repeated. SC</td>
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<td>Advisory: MATH-025 or equivalent; eligibility for ENGL-100</td>
<td>This course is a comprehensive study of poly-phase systems and how they are used today for power distribution. The understanding of poly-phase systems and the effects of loading and neutral current calculation will be stressed. A thorough coverage of the principles of operation, application and construction of transformer connections will be emphasized to enable the student to understand single and poly-phase system voltages and currents. In the coordinated laboratory, students will have the opportunity to calculate, connect, measure, and evaluate each transformer and poly phase circuit connection. May not be repeated. SC</td>
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<td>DC &amp; AC Motors and Generators</td>
<td>36</td>
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<td>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 not be repeated. SC</td>
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<td></td>
<td>Advisory: ETEC-010, 012, 032, 034; PHYS-015; eligibility for ENGL-100</td>
<td>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&amp;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</td>
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<td>LMC: DA</td>
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<td>TRANSFER: CSU</td>
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</tr>
</tbody>
</table>
ETEC-052  Applied Process Control Lab

TOTAL HOURS LECTURE: 54
UNITS: 1
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 not be repeated.  SC

LMC: DA
TRANSFER: CSU

ETEC-056  Codes for Instrument Application

TOTAL HOURS LECTURE: 18
UNITS: 1
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

TOTAL HOURS LECTURE: 18
TOTAL HOURS LAB: 54
UNITS: 2
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 not be repeated.  SC

LMC: DA
TRANSFER: CSU

ETEC-059  System Integration and Troubleshooting

TOTAL HOURS LECTURE: 18
TOTAL HOURS LAB: 54
UNITS: 2
Prerequisite: ETEC-012
Advisory: ETEC-020, 030, 032, 050; MATH-025; eligibility for ENGL-100

This capstone course is designed to tie together 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 not be repeated.  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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated.  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

TOTAL HOURS: 60-300
UNITS: 1-4
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

TOTAL HOURS: 60-300
UNITS: 1-4
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

COLLEGE SKILLS CERTIFICATES
Emergency Medical Services
Emergency Medical Services Recertification

EMERGENCY MEDICAL SERVICES

COURSE DESCRIPTIONS

EMS-004  Introduction to Standard First Aid/ CPR

TOTAL HOURS LECTURE: 6
TOTAL HOURS LAB: 9
UNITS: .5
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 not be repeated. P/NP

LMC: NDA
EMS-008  First Aid of Infants and Children

TOTAL HOURS LECTURE: 14
TOTAL HOURS LAB: 2
UNITS: 1

Advisory: Eligibility for ENGL-090

This course meets requirements 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

EMS-010  Emergency Medical Technician

TOTAL HOURS LECTURE: 108
TOTAL HOURS LAB: 108
UNITS: 8

Prerequisite: Students must be 18 years of age by the date the course begins

Advisory: Eligibility for ENGL-090; Medical clearance form and proof of inoculations.

This course provides training and knowledge required of the EMT-B scope of practice for the National Registry 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 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 registry 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. Students are asked to be proactive and obtain an American Heart CPR/AED Basic Life Support Provider card prior to start of their ride along, also to be fully inoculated with documentation of TB, Hepatitis B, MMR, tetanus, and proof of varicella(chicken pox). Also students must have a medical exam using DMV form 51 or LMC physical clearance form. Lastly, lab fees are $55.00 and payment of these fees provides the student a stethoscope, uniform shirt, blood pressure cuff, CPR card and gloves as needed. May not be repeated. LR

LMC: DA

TRANSFER: CSU

EMS-011  Emergency Medical Technician I

Recertification

TOTAL HOURS LECTURE: 12
TOTAL HOURS LAB: 12
UNITS: 1

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 not be repeated. SC

LMC: NDA

EMS-014  Healthcare Provider CPR

TOTAL HOURS LECTURE: 4
TOTAL HOURS LAB: 4
UNITS: .3

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 not be repeated. P/NP

LMC: NDA

EMS-017  Introduction to EKG Arrhythmias

TOTAL HOURS LECTURE: 18
TOTAL HOURS LAB: 6
UNITS: 1

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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. 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

TOTAL HOURS: 60-300
UNITS: 1-4
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

TOTAL HOURS: 60-300
UNITS: 1-4
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

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 requirements. Consult a Los Medanos College counselor to develop your education plan.

**REQUIRED COURSES:**

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

continued on next page ➤
AND SELECT TWO RESTRICTED ELECTIVES FROM:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ENGIN-036</td>
<td>Engineering Statics</td>
<td>3</td>
</tr>
<tr>
<td>ENGIN-038</td>
<td>Manufacturing Processes</td>
<td>3</td>
</tr>
<tr>
<td>ENGIN-046</td>
<td>Engineering Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>MATH-075</td>
<td>Linear Algebra</td>
<td>3</td>
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TOTAL UNITS FOR THE MAJOR 55

TOTAL UNITS FOR THE DEGREE 60+

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.

Program Student 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.

COURSE DESCRIPTIONS

ENGIN-010 Introduction to Engineering

TOTAL HOURS LECTURE: 54
TOTAL HOURS LAB: 18
UNITS: 3
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: Natural Sciences; DA
TRANSFER: UC, CSU

ENGIN-020 Programming with C++ for Engineers and Scientists

TOTAL HOURS LECTURE: 54
TOTAL HOURS LAB: 54
UNITS: 4
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

TOTAL HOURS LECTURE: 54
TOTAL HOURS LAB: 54
UNITS: 4
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

TOTAL HOURS LECTURE: 36
TOTAL HOURS LAB: 72
UNITS: 3
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

TOTAL HOURS LECTURE: 54
TOTAL HOURS LAB: 54
UNITS: 4

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

TOTAL HOURS LECTURE: 54
TOTAL HOURS LAB: 18
UNITS: 3

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

TOTAL HOURS LECTURE: 36
TOTAL HOURS LAB: 54
UNITS: 3

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

TOTAL HOURS LECTURE: 54
TOTAL HOURS LAB: 18
UNITS: 3

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. May not be repeated. LR

LMC: DA
TRANSFER: UC, CSU

ENGIN-046  Engineering Dynamics

TOTAL HOURS LECTURE: 54
UNITS: 3

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.

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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. 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

TOTAL HOURS: 60-300
UNITS: 1-4

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

TOTAL HOURS: 60-300
UNITS: 1-4

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.

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### English

#### DEGREE—Associate in Arts Degree for Transfer

**English**

The Associate in Arts in English for Transfer at Los Medanos College is designed to prepare students to transfer and study at a California State University. The program requires a minimum of 18 units lower division work in English and is combined with the California State General Education Pattern to prepare students to take upper division courses at a California State University. Students obtaining a degree must earn a minimum 2.0 GPA for all course work and achieve a minimum of a C or higher for all major course work. A “P” (Pass) grade is not an acceptable grade for courses in the major.

Students may complete lower division courses in critical thinking, literature, journalism, drama, humanities, or creative writing, having some choice for major preparation to earn a degree in English with a specific emphasis.

<table>
<thead>
<tr>
<th>REQUIRED CORE COURSES</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>ENGL-221</td>
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</tr>
<tr>
<td>Advanced Composition</td>
<td>3</td>
</tr>
<tr>
<td>and Critical Thinking</td>
<td></td>
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<tr>
<td>ENGL-230</td>
<td></td>
</tr>
<tr>
<td>Thinking/Writing</td>
<td>3</td>
</tr>
<tr>
<td>Critically about</td>
<td></td>
</tr>
<tr>
<td>Literature</td>
<td></td>
</tr>
<tr>
<td>TOTAL UNITS</td>
<td>6</td>
</tr>
</tbody>
</table>

**LIST A: SELECT TWO COURSES (6 UNITS)**

| ENGL-140          | Survey of World Literature 1 | 3 |
| ENGL-145          | Survey of World Literature 2 | 3 |
| TOTAL UNITS       | 6                             |

**LIST B: SELECT ONE COURSE (3 UNITS)**

| ENGL-111          | Creative Writing              | 3 |
| ENGL-127          | The Mythology of Ethnic       | 3 |
|                  | Americans                     |
| ENGL-128          | Asian American Literature     | 3 |
| ENGL-129          | Introduction to Contemporary  | 3 |
|                  | African-American Literature   |
| ENGL-132          | Literature of the Imagination | 3 |
| ENGL-133          | Reflections: Representations  | 3 |
|                  | of Race                       |
| ENGL-205          | California Literature         | 3 |
| ENGL-220          | Critical Analysis and         | 3 |
|                  | Literature                    |
| ENGL-231          | Mystery & Detective Fiction   | 3 |
| TOTAL UNITS       | 3                             |

**LIST C: SELECT ONE COURSE OR ONE COURSE NOT ALREADY USED FROM LIST B**

| ENGL-112          | Genres in Creative Writing    | 3 |
| HUMAN-024         | Shakespeare’s English Kings   | 3 |
| JOURN-110         | Writing for the Media         | 3 |
| DRAMA-016         | Theatre Appreciation          | 3 |
| TOTAL UNITS       | 3                             |

**TOTAL UNITS FOR THE MAJOR**

18

**TOTAL UNITS FOR THE DEGREE**

60
COURSE DESCRIPTIONS

ENGL-060  Basic Reading and Writing Skills
TOTAL HOURS LECTURE: 18
TOTAL HOURS LAB: 18
TOTAL HOURS COMPOSITION: 72
UNITS: 5
Advisory: Take English assessment test in the Assessment Center
This course prepares students for English 70. Students will learn foundational skills in reading, writing and thinking. Through an integrated approach, students will learn strategies to build reading comprehension, increase vocabulary, write well-developed and organized paragraphs, and improve editing skills, including spelling and sentence structure. May not be repeated. SC
LMC: NDA

ENGL-070  Fundamentals of English: Reading, Writing and Thinking
TOTAL HOURS LECTURE: 18
TOTAL HOURS LAB: 18
TOTAL HOURS COMPOSITION: 72
UNITS: 5
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
TOTAL HOURS LECTURE: 54
UNITS: 3
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
TOTAL HOURS COMPOSITION: 54
UNITS: 3
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
TOTAL HOURS LECTURE: 18
TOTAL HOURS LAB: 18
TOTAL HOURS COMPOSITION: 72
UNITS: 5
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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. 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

TOTAL HOURS COMPOSITION: 54
UNITs: 3

Prerequisite: ENGL-090; ENGL-926 or assessment process

English 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 6,000 words of formal, final draft 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: GE: Language and Rationality: English Composition; DA
TRANSFER: UC; CSU Gen. Ed. Area A2; IGETC Area 1A

ENGL-111  Creative Writing

TOTAL HOURS LECTURE: 54
UNITs: 3

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  Genres in Creative Writing

TOTAL HOURS LECTURE: 54
UNITs: 3

Advisory: ENGL-111

English 112 encourages writers to focus on a long creative work in one genre: short fiction or nonfiction collection, a book of poetry, a one or three act play, a screenplay. Students will be encouraged to submit their work to agents, contests, publishers and for production. May not be repeated. SC

LMC: DA
TRANSFER: CSU

ENGL-127  The Mythology and Literature of Ethnic Americans

TOTAL HOURS LECTURE: 54
UNITs: 3

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: Ethnic/Multicultural Studies; Arts and Humanities; 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

TOTAL HOURS LECTURE: 54
UNITs: 3

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: Ethnic/Multicultural Studies; Arts and Humanities; DA
TRANSFER: UC; CSU Gen. Ed. Area C2; IGETC Area 3B

ENGL-129  Introduction to Contemporary African-American Literature

TOTAL HOURS LECTURE: 54
UNITs: 3

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: Ethnic/Multicultural Studies; Arts and Humanities; DA
TRANSFER: UC; CSU Gen. Ed. Area C2; IGETC Area 3B
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Total Hours Lecture</th>
<th>Units</th>
<th>Advisory</th>
<th>Course Description</th>
<th>LMC</th>
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<tbody>
<tr>
<td>ENGL-132</td>
<td>Literature of Imagination: Myths, Tales, the Short Story, and the Novel</td>
<td>54</td>
<td>3</td>
<td>Eligibility for ENGL-100</td>
<td>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</td>
<td>DA</td>
<td>UC; CSU Gen. Ed. Area C2; IGETC Area 3B</td>
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<tr>
<td>ENGL-133</td>
<td>Reflections: Representations of Race, Ethnicity and Gender in Hollywood Films and Popular Fiction</td>
<td>54</td>
<td>3</td>
<td>Eligibility for ENGL-100</td>
<td>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</td>
<td>GE: Ethnic/Multicultural Studies; Arts and Humanities; DA</td>
<td>UC; CSU Gen. Ed. Area C2; IGETC Area 3B; Also satisfies American Cultures Requirement at UCB</td>
</tr>
<tr>
<td>ENGL-135</td>
<td>Introduction to Lesbian, Gay, Bisexual, Transgender (LGBT) Studies</td>
<td>54</td>
<td>3</td>
<td>Eligibility for ENGL-100</td>
<td>Lesbian, Gay, Bisexual, and Transgender (LGBT) Studies takes an interdisciplinary, multicultural approach to examining the historical, political, social and cultural issues that have affected LGBT people throughout time and across the world. Students will study primary and secondary texts by and about LGBT people from a wide variety of cultures, and gain a greater understanding of how matters of sexual orientation and gender identity affect not only the LGBT community, but everyone in society. Students will have an opportunity for an independent project on a subject of their own choosing. May not be repeated. SC</td>
<td>GE: Ethnic/Multicultural Studies; DA</td>
<td>CSU Gen. Ed. Area C2</td>
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<tr>
<td>ENGL-140</td>
<td>Survey of World Literature I: Antiquity to Mid-17th Century</td>
<td>54</td>
<td>3</td>
<td>ENGL-100 or equivalent</td>
<td>Survey of World Literature I is a comparative study of selected works, in translation and in English, of literature from around the world, including Europe, the Middle East, Asia, Africa, and other areas, from antiquity to the mid or late seventeenth century. Students apply basic terminology and devices for interpreting and analyzing literature while focusing on a variety of genres. They also work with critical reading strategies to write about comparisons, or contrasts, as appropriate in a baccalaureate, transfer-level course. May not be repeated. SC</td>
<td>DA</td>
<td>CSU Gen. Ed. Area C2</td>
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<tr>
<td>ENGL-145</td>
<td>Survey of World Literature II: Mid-17th Century to Present</td>
<td>54</td>
<td>3</td>
<td>ENGL-100 or equivalent</td>
<td>Survey of World Literature II is a comparative study of selected works, in translation and in English, of literature from around the world, including Europe, the Middle East, Asia, Africa, and other areas, from the mid or late seventeenth century to the present. Students apply basic terminology and devices for interpreting and analyzing literature while focusing on a variety of genres. They also work with critical reading strategies to write about comparisons, or contrasts, as appropriate in a baccalaureate, transfer course. May not be repeated. SC</td>
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<tr>
<td>ENGL-205</td>
<td>California Literature</td>
<td>54</td>
<td>3</td>
<td>ENGL-100</td>
<td>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</td>
<td>GE: Arts and Humanities; DA</td>
<td>UC; CSU Gen. Ed. Area C2; IGETC Area 3B</td>
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<td>Course Code</td>
<td>Course Title</td>
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<tr>
<td>ENGL-220</td>
<td>Critical Analysis and Inquiry</td>
<td>54</td>
<td>3</td>
<td>ENGL-100</td>
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</table>

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: DA
TRANSFER: UC; CSU Gen. Ed. Area A3; IGETC Area 1B

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Total Hours Composition</th>
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<tbody>
<tr>
<td>ENGL-221</td>
<td>Advanced Composition and Critical Thinking</td>
<td>54</td>
<td>3</td>
<td>ENGL-100</td>
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</table>

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: DA
TRANSFER: UC; CSU Gen. Ed. Area A3; IGETC Area 1B

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<tr>
<th>Course Code</th>
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<th>Total Hours Composition</th>
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<th>Prerequisite(s)</th>
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</thead>
<tbody>
<tr>
<td>ENGL-230</td>
<td>Thinking and Writing Critically about Literature</td>
<td>54</td>
<td>3</td>
<td>ENGL-100</td>
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</table>

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: Arts and Humanities; DA
TRANSFER: UC; CSU Gen. Ed. Area C2

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<thead>
<tr>
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<th>Course Title</th>
<th>Total Hours Lecture</th>
<th>Units</th>
<th>Advisory(s)</th>
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<tbody>
<tr>
<td>ENGL-231</td>
<td>Mystery and Detective Literature</td>
<td>54</td>
<td>3</td>
<td>Eligibility for ENGL-100</td>
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</table>

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: Arts and Humanities; DA
TRANSFER: UC, CSU Gen. Ed. Area C2; IGETC Area 3B

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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<th>Units</th>
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<tr>
<td>ENGL-900s</td>
<td>Selected Topics in English</td>
<td>DA varies</td>
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</table>

DA varies with course content.
ESL-011 Vocabulary Development I

TOTAL HOURS LECTURE: 54
TOTAL HOURS LAB: 18
UNITS: 3

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

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

TOTAL HOURS LECTURE: 54
TOTAL HOURS LAB: 18
UNITS: 3

Prerequisite: ESL-011, or a level two placement on the ESL placement test

Advisory: ESL-011, or a level two placement on the ESL placement test and 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

TOTAL HOURS LECTURE: 54
TOTAL HOURS LAB: 18
UNITS: 3

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

<table>
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<tr>
<th>TOTAL HOURS LECTURE:</th>
<th>54</th>
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<tr>
<td>TOTAL HOURS LAB:</td>
<td>18</td>
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<td>UNITS:</td>
<td>3</td>
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</table>

**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-022 Grammar for Communication II

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<th>TOTAL HOURS LECTURE:</th>
<th>72</th>
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<td>UNITS:</td>
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**Advisory:** ESL-021 or a level two placement on the ESL placement test and concurrent enrollment in ESL-012, ESL-032 and/or ESL-042

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

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<th>TOTAL HOURS LECTURE:</th>
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<td>UNITS:</td>
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</table>

**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

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**

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Prerequisite: ESL-023 or a level one 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 an 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

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**ESL-031 Conversation/Pronunciation I**

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<th>TOTAL HOURS LECTURE: 54</th>
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<tr>
<td>TOTAL HOURS LAB: 18</td>
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<td>UNITS: 3</td>
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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

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

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**ESL-032 Conversation/Pronunciation II**

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<th>TOTAL HOURS LECTURE: 54</th>
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<tr>
<td>TOTAL HOURS LAB: 18</td>
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<td>UNITS: 3</td>
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Advisory: ESL-031, or a level two placement on the ESL placement test and concurrent enrollment in ESL-012, ESL-022 and/or ESL-042

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

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**ESL-033 Intermediate Oral Skills**

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<th>TOTAL HOURS LECTURE: 54</th>
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<td>TOTAL HOURS LAB: 18</td>
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<td>UNITS: 3</td>
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</table>

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

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**ESL-034 Advanced Oral Skills**

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<th>TOTAL HOURS LECTURE: 54</th>
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<td>TOTAL HOURS LAB: 18</td>
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<td>UNITS: 3</td>
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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
TOTAL HOURS LECTURE: 72
UNITS: 4
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
TOTAL HOURS LECTURE: 72
UNITS: 4
Advisory: ESL-041, or a level two placement on the ESL placement test and 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 an intermediate 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
TOTAL HOURS LECTURE: 72
UNITS: 4
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
TOTAL HOURS LECTURE: 72
UNITS: 4
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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. 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.
Filipino

COURSE DESCRIPTIONS

FILIP-060 Elementary Filipino I
TOTAL HOURS LECTURE: 90
UNITS: 5
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
TOTAL HOURS LECTURE: 90
UNITS: 5
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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. 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

DEGREE—Associate of Science
Fire Technology

CERTIFICATE OF ACHIEVEMENT
Fire Technology
Fire Academy

COLLEGE SKILLS CERTIFICATE
Basic Fire Academy
Fire Prevention
Fire Protection

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.

ASSOCIATE OF SCIENCE
FIRE TECHNOLOGY

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

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 FOR THE MAJOR 21

TOTAL UNITS FOR THE DEGREE 60

Program Student Learning Outcomes
1. Gain entry-level or mid-level employment in the electrical or instrumentation field.
2. Troubleshoot, analyze, operate, repair, and install electrical systems equipment.
CERTIFICATE OF ACHIEVEMENT
FIRE TECHNOLOGY

For the Certificate of Achievement in Fire Technology, complete 24 units of coursework listed below. Consult a Los Medanos College counselor to develop your education plan.

REQUIRED COURSES:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRE-101</td>
<td>Fire Protection Organization</td>
<td>3</td>
</tr>
<tr>
<td>FIRE-102</td>
<td>Fire Behavior/Combustion</td>
<td>3</td>
</tr>
<tr>
<td>FIRE-103</td>
<td>Fire Protection Equipment &amp; Systems</td>
<td>3</td>
</tr>
<tr>
<td>FIRE-104</td>
<td>Building Construction for Fire Protection</td>
<td>3</td>
</tr>
<tr>
<td>FIRE-105</td>
<td>Fire Prevention</td>
<td>3</td>
</tr>
<tr>
<td>FIRE-107</td>
<td>Firefighter Safety and Survival</td>
<td>3</td>
</tr>
</tbody>
</table>

ELECTIVES: COMPLETE A TOTAL OF 6 UNITS FROM THE LIST BELOW:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRE-106</td>
<td>Physical Fitness for Public Safety Personnel</td>
<td>1</td>
</tr>
<tr>
<td>FIRE-170</td>
<td>Occupational Work Experience</td>
<td>1-4</td>
</tr>
<tr>
<td>EMS-010</td>
<td>Emergency Medical Technician</td>
<td>8</td>
</tr>
<tr>
<td>EMS-004</td>
<td>First Aid/CPR</td>
<td>1</td>
</tr>
<tr>
<td>BUS-086</td>
<td>Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>SPCH-110</td>
<td>Speech Communication</td>
<td>3</td>
</tr>
<tr>
<td>PHIL-041</td>
<td>Critical Thinking</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR THIS CERTIFICATE 24

Program Student Learning Outcomes
1. Be academically prepared to demonstrate the skills necessary for entry-level positions in the Fire Service.
2. Demonstrate through written and oral communication skills a broad knowledge of fire technology as it applies to a career in the Fire Service.
3. Demonstrate the skills and mechanical knowledge of Fire Service tools and equipment.

COLLEGE SKILLS CERTIFICATES
FIRE TECHNOLOGY

For the College Skills Certificate in Fire Prevention, or Fire Protection, complete the 15 units of coursework listed below. These skills certificates are in support of those students wishing to direct their efforts in seeking employment or advancement in a specific division within the fire service.

Basic Fire Academy

REQUIRED COURSES:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRE-120</td>
<td>Basic Academy</td>
<td>15</td>
</tr>
</tbody>
</table>

TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE 15

Program Student Learning Outcomes
1. Be academically prepared to demonstrate the skills necessary for entry-level positions in the Fire Service.
2. Demonstrate through written and oral communication skills a broad knowledge of fire technology as it applies to a career in the Fire Service.
3. Demonstrate the skills and mechanical knowledge of Fire Service tools and equipment.

Fire Prevention Skills

REQUIRED COURSES:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRE-103</td>
<td>Fire Protection Systems</td>
<td>3</td>
</tr>
<tr>
<td>FIRE-104</td>
<td>Building Construction Fire</td>
<td>3</td>
</tr>
<tr>
<td>FIRE-105</td>
<td>Fire Prevention</td>
<td>3</td>
</tr>
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</table>

SELECT 6 UNITS FROM THE FOLLOWING:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRE-101</td>
<td>Fire Protection Organization</td>
<td>3</td>
</tr>
<tr>
<td>FIRE-102</td>
<td>Fire Behavior</td>
<td>3</td>
</tr>
<tr>
<td>FIRE-107</td>
<td>Firefighter Safety and Survival</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS REQUIRED FOR THE COLLEGE SKILLS CERTIFICATE 15

Program Student Learning Outcomes
1. Apply critical thinking to research, evaluate, analyze and synthesize Fire Service information.
2. Demonstrate through written and oral communication skills a broad knowledge of fire technology as it applies to a career in the Fire Service.

**Fire Protection**

**REQUIRED COURSES:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRE-101</td>
<td>3</td>
</tr>
<tr>
<td>FIRE-102</td>
<td>3</td>
</tr>
<tr>
<td>FIRE-107</td>
<td>3</td>
</tr>
</tbody>
</table>

SELECT 6 UNITS FROM THE FOLLOWING:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRE-103</td>
<td>3</td>
</tr>
<tr>
<td>FIRE-104</td>
<td>3</td>
</tr>
<tr>
<td>FIRE-105</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS REQUIRED FOR THE COLLEGE SKILLS CERTIFICATE:** 15

**Program Student Learning Outcomes**

1. Be academically prepared to demonstrate the skills necessary for entry-level positions 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 technology as it applies to a career in the Fire Service.

**COURSE DESCRIPTIONS**

**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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. 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**

**TOTAL HOURS LECTURE:** 54

**UNITS:** 3

**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**

**TOTAL HOURS LECTURE:** 54

**UNITS:** 3

**Advisory:** FIRE-101; eligibility for ENGL-090

Fundamentals and scientific principles of fire behavior, combustible materials, extinguishing agents, hazardous and toxic 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**

**TOTAL HOURS LECTURE:** 54

**UNITS:** 3

**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**

**TOTAL HOURS LECTURE:** 54

**UNITS:** 3

**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**

**TOTAL HOURS LECTURE:** 54

**UNITS:** 3

**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-101  Advanced Fire Academy
**TOTAL HOURS LECTURE:** 198  
**TOTAL HOURS LAB:** 442  
**UNITS:** 19

**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-102  Advanced Fire Academy
**TOTAL HOURS LECTURE:** 198  
**TOTAL HOURS LAB:** 442  
**UNITS:** 19

**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-103  Advanced Fire Academy
**TOTAL HOURS LECTURE:** 198  
**TOTAL HOURS LAB:** 442  
**UNITS:** 19

**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-104  Advanced Fire Academy
**TOTAL HOURS LECTURE:** 198  
**TOTAL HOURS LAB:** 442  
**UNITS:** 19

**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-105  Advanced Fire Academy
**TOTAL HOURS LECTURE:** 198  
**TOTAL HOURS LAB:** 442  
**UNITS:** 19

**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
during simulated pumping conditions. Optional State Fire Marshal certification fee applies. May not be repeated. P/NP

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
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<tr>
<td>LMC: DA</td>
<td>TRANSFER: CSU</td>
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<tr>
<td><strong>FIRE-170</strong> <strong>Occupational Work Experience Education in Fire Technology</strong></td>
<td>TOTAL HOURS: 60-300 UNITS: 1-4 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</td>
</tr>
<tr>
<td>LMC: DA</td>
<td>TRANSFER: CSU</td>
</tr>
<tr>
<td><strong>FIRE-170A Internship in Fire Technology</strong></td>
<td>TOTAL HOURS: 60-300 UNITS: 1-4 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</td>
</tr>
<tr>
<td>LMC: DA</td>
<td>TRANSFER: CSU</td>
</tr>
<tr>
<td><strong>FIRE-900s Selected Topics in Fire Technology</strong></td>
<td>DA varies with course content.</td>
</tr>
</tbody>
</table>

### French

<table>
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<tr>
<th>Course</th>
<th>Description</th>
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<tbody>
<tr>
<td>LMC: DA</td>
<td>TRANSFER: CSU</td>
</tr>
<tr>
<td><strong>FRNCH-060 Elementary French I</strong></td>
<td>TOTAL HOURS LECTURE: 90 UNITS: 5 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 form the rich French culture. This course is equivalent to two years of high school French. May not be repeated. SC</td>
</tr>
<tr>
<td>LMC: DA</td>
<td>TRANSFER: UC; CSU Gen. Ed. Area C2; IGETC Area 3B, 6</td>
</tr>
<tr>
<td><strong>FRNCH-061 Elementary French II</strong></td>
<td>TOTAL HOURS LECTURE: 90 UNITS: 5 Prerequisite: FRNCH-060 or WEB CAPE Placement Score of 281-345. 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</td>
</tr>
<tr>
<td>LMC: DA</td>
<td>TRANSFER: UC; CSU Gen. Ed. Area C2; IGETC Area 3B, 6</td>
</tr>
<tr>
<td><strong>FRNCH-062 Intermediate French I</strong></td>
<td>TOTAL HOURS LECTURE: 90 UNITS: 5 Prerequisite: FRNCH-061 or 3 years of high school French or WEB CAPE Placement Score of 346-403. 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</td>
</tr>
<tr>
<td>LMC: DA</td>
<td>TRANSFER: UC; CSU GE Area C2; IGETC Area 3B, 6</td>
</tr>
</tbody>
</table>
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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. 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.

History

DEGREE—Associate in Arts Transfer Degree
History

The Associate in Arts in History for Transfer is designed to prepare students for successful transfer into upper division university programs with the objective of earning baccalaureate degrees with a history emphasis.

The program student learning outcomes or competencies that students will achieve by successfully completing the Associate of Arts in History for Transfer Degree are:

1. History Literacy and modes of inquiry to include—
   a. Documental/textual recovery and representation sufficient to attaining narrative coherence and plausibility.
   b. Evidentiary accountability of sources (primary and secondary) so as to validate narrative truth-claims and expressions.
   c. Analytical and synthetic prospects including Investigative; Conceptual; Comparative, Hemeneutical-Interpretive; and narrative wholeness aptly representative of a true past.

2. History's Intra/Interdisciplinary Responsiveness to include—
   a. Disciplinary Inclusiveness with both narratives studied and constructed (i.e. student productions) reflecting the cognitive insights associated with the two domains of modern learning; namely, the Human Arts and Sciences; and the Physical-Natural Sciences.
   b. Disciplinary Selectivity with narratives studied and constructed; these displaying a sensible and fruitful application of disciplinary modes and insights chosen as pertinent to narrative engagement in a given instance.

3. History's Ethical Alertness and Concern to include—
   a. Attaining Ethical Clarity with both narratives studied and constructed as they are informed by beliefs, values, persuasions, affirmations/negations, etc. apparent in their substantive expressions.
   b. Demonstrating Ethical Practice with narratives studied and constructed opened to consideration from “without” (theoretical-interpretive critique); and from “within” (affirmative understanding of ethical meaning).

4. History's Socio-Cultural Inclusiveness to include—
   a. Demonstrated trans-cultural referencing with both narratives studied and constructed, this to show pertinent multicultural aspects as accurate representations of variable contexts.
   b. Recognizing and explaining Socio-Cultural Trajectories (i.e. developmental patterns, trends, connections, dislocations) as narratives are studied and constructed.
   c. Discovering and explaining Globalizing relationships among peoples and nations—both ancient and modern—whose associations are often a matter of happenstance rather than intention. Narratives studied and constructed ought to explore recurrent (even ironic) episodes of intense ethos conflicts amid growing human interdependency.
REQUIREMENTS:

1. Completion of 60 semester units that are eligible for transfer to the California State University, including both of the following:
   a. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education Breadth requirements.
   b. A minimum of 18 semester units in the History major
2. Obtainment of a minimum grade point average of 2.0.
3. Earning a C or better in all courses required for the History major. A “P” (Pass) grade is not an acceptable grade for courses in the major.

REQUIRED CORE COURSES: (6 UNITS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tr>
<td>HIST-029</td>
<td>The American World Until 1865</td>
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<tr>
<td>HIST-030</td>
<td>The American World From 1865</td>
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LIST A - TWO COURSES (6 UNITS)

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tr>
<td>HIST-039</td>
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<tr>
<td>HIST-040</td>
<td>Modern World History From 1500 C.E.</td>
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LIST B - CHOOSE ONE COURSE: (MINIMUM 3 UNITS)

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<th>Area 1</th>
<th>Course</th>
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<tr>
<td>HIST-046</td>
<td>History and Culture of Native Americans through 1830</td>
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<td>HIST-047</td>
<td>Native Americans from Am. Revolution to Present</td>
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<td>HIST-052</td>
<td>Mexican American History 1900 to Present</td>
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<td>POLSC-043</td>
<td>International Relations</td>
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<td>SOCS-045</td>
<td>Issues Confronting African Americans</td>
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<td>CHIN-030</td>
<td>Elementary Chinese I</td>
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<td>CHIN-040</td>
<td>Elementary Chinese II</td>
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<td>FILIP-060</td>
<td>Elementary Filipino I</td>
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<td>FILIP-061</td>
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<td>SIGN-066</td>
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TOTAL UNITS FOR THE MAJOR 18-20

TOTAL UNITS FOR THE DEGREE 60

COURSE DESCRIPTIONS

HIST-029 The American World Until 1865: Creating A “New World” America

TOTAL HOURS LECTURE: 54
UNITS: 3

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 and Behavioral Sciences; DA

TRANSFER: UC; CSU Gen. Ed. Area D6; IGETC Area 4F
HIST-030  The American World From 1865: Creating a Modern World Hegemony

TOTAL HOURS LECTURE: 54  
UNITS: 3  
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-pre-eminent 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 and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area D6; IGETC Area 4F

HIST-031  California History

TOTAL HOURS LECTURE: 54  
UNITS: 3  
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 and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area D6; IGETC Area 4F

HIST-033  Historians: Their Worlds & Their Craft

TOTAL HOURS LECTURE: 54  
UNITS: 3  
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 HIST-033 partially satisfies the requirement for a lower division history major. May not be repeated.  SC

LMC: GE: Social and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area D6; IGETC Area 4F

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

TOTAL HOURS LECTURE: 54  
UNITS: 3  
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. (C-ID HIST 170) SC

LMC: GE: Social and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area D6; IGETC Area 4F

HIST-035  Western Inheritance in Global Perspective: Modern World History

TOTAL HOURS LECTURE: 54  
UNITS: 3  
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. (C-ID HIST 180) SC

LMC: GE: Social and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area D6; IGETC Area 4F

HIST-038  Contemporary U.S. History

TOTAL HOURS LECTURE: 54  
UNITS: 3  
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 and Behavioral Sciences; DA**
TRANSFER: UC; CSU Gen. Ed. Area D6; IGETC Area 4F

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
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<tr>
<td><strong>HIST-039</strong></td>
<td>Ancient World History: Peoples and Their Governance until 1500 C.E.</td>
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<tr>
<td><strong>TOTAL HOURS LECTURE: 54</strong></td>
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<td><strong>UNITS: 3</strong></td>
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<tr>
<td><strong>Advisory:</strong> Eligibility for ENGL-100</td>
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<td></td>
<td>An introduction to the ancient history of world peoples, beginning with nature's ancestry in a &quot;Big Bang&quot; universe and extending to the fateful era of &quot;Columbian Exchange.&quot; 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 &quot;Civilization&quot; way-of-life (modern urban-market cultures). May not be repeated. SC</td>
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<tr>
<td><strong>LMC: GE: Social and Behavioral Sciences; DA</strong></td>
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<td><strong>HIST-040</strong></td>
<td>Modern World History: Peoples and Their Governance From 1500 C.E.</td>
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<td>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 &quot;culture-of-humanity.&quot; 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</td>
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<td><strong>LMC: GE: Social and Behavioral Sciences; DA</strong></td>
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<tr>
<td><strong>HIST-046</strong></td>
<td>History and Cultures of Native Americans in North America (from Pre-European Contact Through 1838)</td>
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<td><strong>Advisory:</strong> Eligibility for ENGL-100</td>
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<td></td>
<td>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 &quot;savage&quot; stereotype and efforts to &quot;Christianize and civilize&quot; Native Americans. May not be repeated. SC</td>
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<tr>
<td><strong>LMC: GE: Ethnic/Multicultural Studies; DA</strong></td>
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<td><strong>HIST-047</strong></td>
<td>History and Cultures of Native Americans in North America (from 1830 to the Present)</td>
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<td><strong>Advisory:</strong> Eligibility for ENGL-100</td>
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<td>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</td>
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<td><strong>LMC: GE: Ethnic/Multicultural Studies; DA</strong></td>
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<td><strong>HIST-052</strong></td>
<td>Mexican American History (1900 to Present)</td>
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<td><strong>TOTAL HOURS LECTURE: 54</strong></td>
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<td><strong>Advisory:</strong> Eligibility for ENGL-100</td>
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<td>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</td>
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<tr>
<td><strong>LMC: GE: Ethnic/Multicultural Studies; DA</strong></td>
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<tr>
<td>TRANSFER: UC; CSU Gen. Ed. Area D3; IGETC Area 4G</td>
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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. Mini-
mum 1 hour per week with instructor plus 54 hours of contracted work
for each unit of credit. May not be repeated. SC
LMC: Independent study courses may be DA or transferable de-
pending on specific course. See your counselor.
TRANSFER: Independent study courses may be DA or transfer-
able depending on specific course. See your counselor.

HIST-900s  Selected Topics in History
DA varies with course content.

HUMANITIES

HUM-019  Ancient Humanities
TOTAL HOURS LECTURE: 54
UNITS: 3
Advisory: Eligibility for ENGL-100
An integrated, interdisciplinary approach to history, religion, philoso-
phy, literature, art and music as aspects of Western culture and civiliza-
tion, that focuses on the period from the first civilizations of Mesopo-
tamia 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: Arts and Humanities; DA
TRANSFER: UC; CSU Gen. Ed Area C2; IGETC Area 3B

HUM-020  Medieval and Renaissance Humanities
TOTAL HOURS LECTURE: 54
UNITS: 3
Advisory: Eligibility for ENGL-100
An integrated interdisciplinary approach to history, religion, philoso-
phy, literature, art and music as aspects of Western culture and civiliza-
tion, 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 founda-
tions of the Modern World. This course meets the general education
requirement for humanities. May not be repeated. LR
LMC: GE: Arts and Humanities; DA
TRANSFER: UC; CSU Gen. Ed Area C2; IGETC Area 3B

HUM-021  Modern Humanities
TOTAL HOURS LECTURE: 54
UNITS: 3
Advisory: Eligibility for ENGL-100
An integrated, interdisciplinary approach to history, religion, philo-
osphy, literature, art and music as aspects of Western culture and civil-
ization, 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: Arts and Humanities; DA
TRANSFER: UC; CSU Gen. Ed Area C2; IGETC Area 3B
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<tr>
<th>Course Code</th>
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<td>HUMAN-022</td>
<td>Introduction to the American Humanities</td>
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<td>HUMAN-024</td>
<td>Shakespeare's English Kings: History, Literature and Drama</td>
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<td>HUMAN-030</td>
<td>Modernist Paris: Artists and Intellectuals (1890-1950)</td>
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<td>HUMAN-035</td>
<td>Themes in Mesoamerican Culture through Ceramics</td>
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<td>HUMAN-900s</td>
<td>Selected Topics in Humanities</td>
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Advisory: Eligibility for ENGL-100

HUMAN-022: Using an integrated interdisciplinary approach, students will explore the historical, religious, and philosophical influences that shaped and have continued to define American culture and identity through the study of literature, art, and music. Focusing on the period from the mid-19th century through the 20th, 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: Arts and Humanities; DA
TRANSFER: UC; CSU Gen. Ed. Area C2; IGETC Area 3B

HUMAN-024: 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, dramaticity, 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: Arts and Humanities; DA
TRANSFER: UC; CSU Gen. Ed. Area C2; IGETC Area 3B

HUMAN-030: 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: Arts and Humanities; DA
TRANSFER: UC; CSU Gen. Ed. Area C2; IGETC Area 3B

HUMAN-035: Same as ART-035. This class presents an integrated, interdisciplinary approach to aspects of Mesoamerican culture and civilization through art and history. In this broad context, students will investigate the intellectual, spiritual, cultural and political foundations of Mesoamerican culture. Students will also investigate the creative process of modern and contemporary Mesoamerican artists as well as reflect on and integrate these investigations into their own creative coursework and projects. May not be repeated. LR

LMC: GE: Arts and Humanities; DA
TRANSFER: CSU

HUMAN-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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. 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: DA varies with course content.
ITALIAN

COURSE DESCRIPTIONS

ITAL-060  Elementary Italian I

TOTAL HOURS LECTURE: 90
UNITS: 5
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

TOTAL HOURS LECTURE: 90
UNITS: 5
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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. 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

DEGREE—Associate of Arts
Journalism

DEGREE—Associate in Arts for Transfer Degree
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.

ASSOCIATE OF ARTS
JOURNALISM

REQUIREMENTS: Major and elective requirements in recommended sequence

REQUIRED COURSES: FIRST SEMESTER  UNITS
JOURN-110  Writing for the Media  3
ELECTIVE  Select from accompanying list  3

REQUIRED COURSES: SECOND SEMESTER  UNITS
JOURN-115A  Media Writing Practicum I  1
or
JOURN-116A  Visual Storytelling Practicum I  1
JOURN-130  Production Practicum I  3
ELECTIVE  Select from accompanying list  3

REQUIRED COURSES: 3RD SEMESTER  UNITS
JOURN-115B  Media Writing Practicum II  1
or
JOURN-116B  Visual Storytelling Practicum II  1
JOURN-131  Production Practicum II  3
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
ART-075/JOURN-160: Documentary Photography/Photojournalism, 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

Program Student 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.

ASSOCIATE IN ARTS
JOURNALISM FOR TRANSFER DEGREE

The Associate in Arts in Journalism for Transfer prepares students to practice and champion freedom of the press on their journey to a four-year degree at a California State University. They will learn to gather, interpret, report, edit and present news and information with skill, responsibility, ethics, courage and social consciousness in an evolving media world. Career options for this field of study include reporter, columnist, copy editor, photojournalist, videographer, news designer, editor for the print, broadcast and online news and information media; public information officer; advertising copywriter; public relations professional.

The Journalism AA-T requires 18 units of lower division work in Journalism and supporting electives, in addition to the California State University General Education transfer package of coursework (CSU GE Breadth or IGETC). Major preparation includes courses in Mass Communication, Writing for the Media, Media Production and Photojournalism. Electives supporting the major may be selected from a list of options that includes courses in anthropology, art, economics, English, math, philosophy, political science, sociology and speech (see accompanying requirements listing).

Students completing an AA-T are guaranteed admission to the CSU system, but not to a particular campus or major. To earn the degree, students must complete a minimum of 60 required semester units of CSU-transferable coursework with a minimum GPA of 2.0. In addition, students must complete each course used to meet a major requirement with a “C” grade or higher; a “P” (Pass) grade is not an acceptable grade for courses in the major. Students transferring to a CSU campus that accepts the degree will be required to complete no more than 60 units after transfer to earn a bachelor’s degree. This degree may not be the best option for students intending to transfer to a university or college that is not part of the CSU system, or those students who do not intend to transfer.

Students who plan to transfer to a UC, a private college or university, or an out-of-state institution should consult with an academic counselor about the best lower-division preparation for them. Students who plan to look for an entry-level job in journalism or a related field right after earning their degree from LMC should instead complete the regular A.A. in Journalism. Students interested in a more traditional degree in Communication Studies with an emphasis in journalism should also review the Los Medanos College AA-T in Communication Studies.

REQUIRED CORE COURSES: 9 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOURN-100</td>
<td>Mass Communication</td>
<td>3</td>
</tr>
<tr>
<td>JOURN-110</td>
<td>Writing for the Media</td>
<td>3</td>
</tr>
<tr>
<td>JOURN-130</td>
<td>Media Production Practicum I</td>
<td>3</td>
</tr>
</tbody>
</table>

LIST A (COURSES SUPPORTING THE CORE): 3 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOURN-131</td>
<td>Media Production Practicum II</td>
<td>3</td>
</tr>
<tr>
<td>JOURN-160</td>
<td>Photojournalism</td>
<td>3</td>
</tr>
</tbody>
</table>
LIST B (ELECTIVES): 6 UNITS FROM THE FOLLOWING:

- ART-050 Designing with Adobe InDesign 3
- ECON-010 Principles of Microeconomics 3
or
- ECON-011 Principles of Macroeconomics 3
- ENGL-221 Advanced Composition and Critical Thinking 3
- MATH-034 Introduction to Statistics 4
- POLSC-010 Introduction to American Government: Institutions and Ideals 3
or
- POLSC-020 Introduction to Politics: Institutions and Ideals 3
- SOCIO-016 Introduction to Social Problems 3
- ANTHR-007 Culture Change and Globalization 3
- SPCH-120 Argumentation and Debate 3

TOTAL UNITS FOR THE MAJOR 21

TOTAL UNITS FOR THE DEGREE 60

Program-Level Student 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.

COURSE DESCRIPTIONS

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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. 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-100 Mass Communication
TOTAL HOURS LECTURE: 54
UNITS: 3
Advisory: ENGL-090 or eligibility for ENGL-100
(formerly JOURN-035) 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. (C-ID JOUR 100) SC

LMC: GE: Arts and Humanities; DA
TRANSFER: UC; CSU Gen. Ed. Area D7; IGETC Area 4G

JOURN-110 Writing for the Media
TOTAL HOURS COMPOSITION: 36
TOTAL HOURS LAB: 54
UNITS: 3
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. (C-ID JOUR 110) SC

LMC: GE: Arts and Humanities; DA
TRANSFER: CSU

JOURN-115A Media Writing Practicum I
TOTAL HOURS COMPOSITION: 18
UNITS: 1
Advisory: JOURN-110
(formerly JOURN-015A) An applied course in which students practice and refine beginning newsgathering, reporting, persuasion and writing skills by working as staff members on student-run print and online college publications. The focus of study is on basic news, feature and opinion stories. May not be repeated. SC

LMC: DA
TRANSFER: CSU
JOURN-115B  Media Writing Practicum II
TOTAL HOURS COMPOSITION: 18
UNITS: 1
Prerequisite: JOURN-115A
Advisory: JOURN-110
(Formerly JOURN-015B) An applied course in which students practice and refine intermediate newsgathering, reporting, persuasion and writing skills by working as staff members on student-run print and online college 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-115C  Media Writing Practicum III
TOTAL HOURS COMPOSITION: 18
UNITS: 1
Prerequisite: JOURN-115B
Advisory: JOURN-110
(Formerly JOURN-015C) An applied course in which students practice and refine intermediate newsgathering, reporting, persuasion and writing skills by working as staff members on student-run print and online college publications. The focus of study is on investigative and enterprise news stories and series, and related opinion articles. May not be repeated. SC
LMC: DA
TRANSFER: CSU

JOURN-129  Media Production: An Overview of Newsroom Skills and Practices
TOTAL HOURS LECTURE: 18
TOTAL HOURS LAB: 36
TOTAL HOURS LAB BY ARRANGEMENT: 72
UNITS: 3
Advisory: Eligibility for ENGL-100
An overview of media production skills and practices for students interested in learning about careers in the news and information media, and other related fields such as advertising and public relations. The course also addresses communication law and ethics, and requires weekly laboratory work on the college newspaper, online news site, and/or magazine. May not be repeated. SC
LMC: DA
TRANSFER: CSU

JOURN-130  Media Production: Practicum I
TOTAL HOURS LECTURE: 18
TOTAL HOURS LAB: 36
TOTAL HOURS LAB BY ARRANGEMENT: 72
UNITS: 3
Prerequisite: JOURN-110 or JOURN-129
Advisory: Eligibility for ENGL-100
Media production skills and practices for students interested in pursuing careers in the news and information media, and other related fields such as advertising and public relations. The course also addresses communication law and ethics, and requires weekly laboratory work on the college newspaper, online news site, and/or magazine. May not be repeated. (C-ID JOURN 130) SC
LMC: DA
TRANSFER: CSU

JOURN-131  Media Production: Practicum II
TOTAL HOURS LECTURE: 18
TOTAL HOURS LAB: 36
TOTAL HOURS LAB BY ARRANGEMENT: 72
UNITS: 3
Prerequisite: JOURN-130
Advisory: Eligibility for ENGL-100
Intermediate media production skills and practices for students interested in pursuing careers in the news and information media, and other related fields such as advertising and public relations. The course also addresses communication law and ethics, and requires weekly laboratory work on the college newspaper, online news site, and/or magazine. May not be repeated. (C-ID JOURN 131)
LMC: DA
TRANSFER: CSU

JOURN-132  Media Production: Practicum III
TOTAL HOURS LECTURE: 18
TOTAL HOURS LAB: 36
TOTAL HOURS LAB BY ARRANGEMENT: 72
UNITS: 3
Prerequisite: JOURN-131
Advisory: Eligibility for ENGL-100
Advanced media production skills and practices for students interested in pursuing careers in the news and information media, and other related fields such as advertising and public relations. The course also addresses communication law and ethics, and requires weekly laboratory work on the college newspaper, online news site, and/or magazine. May not be repeated. SC
LMC: DA
TRANSFER: CSU
**JOURN-160 Photojournalism**

<table>
<thead>
<tr>
<th>Course</th>
<th>Lecture Hours</th>
<th>Lab Hours</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>TOTAL HOURS LECTURE: 36</td>
<td>TOTAL HOURS LAB: 54</td>
<td>UNITS: 3</td>
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</table>

**Advisory:** ART-072 or ART-074 or concurrent enrollment or completion of any other journalism class

Same as ART-075. This course deals with the photographer as a journalist, focusing on theory and practice in press and publications photography, with emphasis on using the camera as a reporting and communications tool. Covered are news and feature photography and photographic essays, including composition, impact, and creativity, for newspapers, magazines, Internet and other mass communications media. The course includes a background in the history, ethics and aesthetics of the documentary still photograph. Students will complete successive and cumulative exercises and projects based on current industry standards and expectations, including photographic assignments, exercises, quizzes as well as participate in class discussions and critiques. May not be repeated. (C-ID JOUR 160) SC

**LMC:** DA  
**TRANSFER:** CSU

**JOURN-161A Visual Storytelling Practicum I**

<table>
<thead>
<tr>
<th>Course</th>
<th>Lecture Hours</th>
<th>Lab Hours</th>
<th>Units</th>
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<tr>
<td>TOTAL HOURS LECTURE: 12</td>
<td>TOTAL HOURS LAB: 18</td>
<td>UNITS: 1</td>
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</table>

**Advisory:** JOURN-110 or JOURN-160

(Formerly JOURN-016A) An applied course in which students practice and refine beginning visual storytelling skills by working as staff members on student-run print and online college publications. The focus of study is on basic photojournalism, multimedia storytelling and the visual display of information. May not be repeated.

**LMC:** DA  
**TRANSFER:** CSU

**JOURN-161B Visual Storytelling Practicum II**

<table>
<thead>
<tr>
<th>Course</th>
<th>Lecture Hours</th>
<th>Lab Hours</th>
<th>Units</th>
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<tr>
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<td>TOTAL HOURS LAB: 18</td>
<td>UNITS: 1</td>
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</table>

**Prerequisite:** JOURN-161A  
**Advisory:** JOURN-110 or JOURN-160

(Formerly JOURN-016B) An applied course in which students practice and refine intermediate visual storytelling skills by working as staff members on student-run print and online college publications. The focus of study is on photo stories and essays, in-depth informational graphics and multimedia news reports, and persuasive illustrations. May not be repeated. SC

**LMC:** DA  
**TRANSFER:** CSU

**JOURN-161C Visual Storytelling Practicum III**

<table>
<thead>
<tr>
<th>Course</th>
<th>Lecture Hours</th>
<th>Lab Hours</th>
<th>Units</th>
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<tbody>
<tr>
<td>TOTAL HOURS LECTURE: 12</td>
<td>TOTAL HOURS LAB: 18</td>
<td>UNITS: 1</td>
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</tbody>
</table>

**Prerequisite:** JOURN-161B  
**Advisory:** JOURN-110 or JOURN-160

(Formerly JOURN-016C) An applied course in which students practice and refine advanced storytelling skills by working as staff members on student-run print and online college publications. The focus of study is on digital photo slide shows and photo illustrations, informational graphics integrated with full-page layouts, and long-form multimedia reports. May not be repeated. SC

**LMC:** DA  
**TRANSFER:** CSU

**JOURN-170 Occupational Work Experience Education in Journalism**

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<tr>
<th>Course</th>
<th>Hours</th>
<th>Units</th>
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<tbody>
<tr>
<td>TOTAL HOURS: 60-300</td>
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<td>1-4</td>
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**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
Program Requirements, Courses and Learning Outcomes

JOURN-170A  Internship in Journalism

TOTAL HOURS: 60-300
UNITS: 1-4

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.

Kinesiology

DEGREE—Associate in Arts Degree for Transfer
Kinesiology

The Associate in Arts in Kinesiology for Transfer at Los Medanos College prepares students to transfer into a curriculum at a 4 year institution to pursue a baccalaureate degree in kinesiology or physical education. This major will introduce students to many areas of study including health and fitness, physical education, therapeutic/sport medicine, and coaching/sport instruction. Curriculum in this degree will also provide coursework necessary to prepare students for national certifications in the health/fitness industry such as personal training, group fitness instructor, and lifestyle/weight management consultant.

To achieve the Associate in Arts in Kinesiology for Transfer from Los Medanos College students must (1) complete the 24-25 units of kinesiology degree major emphasis requirements; (2) fulfill requirements of either the CSU-General Education; and/or The Intersegmental General Education Transfer Curriculum (IGETC) (3) complete 60 semester units college transfer level units; and (4) obtain a minimum grade point average of 2.0. Note: students must earn a “C” or better in all courses required in the major area of emphasis. A “P” (Pass) grade is not an acceptable grade for courses in the major.

REQUIRED CORE COURSES: UNITS
PE-100  Introduction to Kinesiology  3
BIOSC-040  Human Anatomy  5
BIOSC-045  Human Physiology  5

MOVEMENT BASED COURSES – (3 UNITS):
SELECT A MAXIMUM OF ONE(1) COURSE FROM ANY THREE (3) OF THE FOLLOWING AREAS FOR A MINIMUM OF THREE (3) UNITS.

Aquatics
PE-017  Lap Swimming  1

Combative
PE-033  Cardio Kickboxing  1

Dance
PE-053  Beginning Jazz Dance  1

Fitness
PE-004  Pilates and More  1
PE-008  Weight Training  1
PE-010  Circuit Training  1
PE-057  Yoga for Health and Fitness  1
Leadership and Community Involvement

Leadership and Community Involvement courses are designed to provide students with the opportunity to further develop their leadership and community engagement skills and abilities. Courses may focus on general leadership development or more specialized education for leadership and community involvement in specific types of organizations, or with specific types of issues.

**COURSE DESCRIPTIONS**

**LACI-045  Student Leadership and Governance**

**TOTAL HOURS LECTURE: 36**  
**TOTAL HOURS LAB: 54**  
**UNITS: 2**

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 not be repeated. SC

LMC: DA  
TRANSFER: CSU

**LACI-048  Leadership for Change**

**TOTAL HOURS LECTURE: 36**  
**UNITS: 2**

Advisory: Eligibility for ENGL-090

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

LMC: DA  
TRANSFER: CSU
LACI-049  Social Justice Leadership Seminar

**TOTAL HOURS LECTURE:** 18  
**UNITS:** 1

**Advisory:** Eligibility for ENGL-090. This class is designed for students involved in Learning Communities (Puente, Umoja, TPLC, etc.)

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 (i.e. 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 (i.e. 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

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LACI-098  Independent Study in Human Services

Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. 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

**TOTAL HOURS:** 60-300  
**UNITS:** 1-4

**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

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LACI-170A  Internship in Human Services

**TOTAL HOURS:** 60-300  
**UNITS:** 1-4

**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
Learning Skills

LEARNING SKILLS

LACI-170B Cooperative Work Experience Internship in Community Service

TOTAL HOURS: 60-450
UNITS: 1-8

Prerequisite: Approved Application/ LACI-049 Social Justice Seminar
Advisory: Eligibility for ENGL-090

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 pre-requisite course LACI-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 LACI-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

LRNSK-040 Learning Skills Eligibility Assessment

TOTAL HOURS LECTURE: 8
TOTAL HOURS LAB: 5
UNITS: .5

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

TOTAL HOURS LECTURE: 54
TOTAL HOURS LAB: 18
UNITS: 3

Advisory: LRNSK-050

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

LMC: NDA

LRNSK-051 Applications: Reading, Spelling and Writing Strategies

TOTAL HOURS LECTURE: 54
TOTAL HOURS LAB: 18
UNITS: 3

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

LACI-900s Selected Topics in Human Services

DA varies with course content.
LRNSK-070  Adaptive Computer Technology

TOTAL HOURS LECTURE: 36  
TOTAL HOURS LAB: 54  
UNITS: 3

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 not be repeated. SC  
LMC: NDA

LRNSK-081  Learning Skills Math Reasoning and Strategies I

TOTAL HOURS LECTURE: 27  
TOTAL HOURS LAB: 27  
UNITS: 2

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 not be repeated. SC  
LMC: NDA

LRNSK-082  Learning Skills Math Reasoning and Strategies II

TOTAL HOURS LECTURE: 27  
TOTAL HOURS LAB: 27  
UNITS: 2

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 impacts math learning. May not be repeated. 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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. 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.
Liberal Arts

DEGREES—Associate of Arts

Liberal Arts: Arts and Humanities
Liberal Arts: Behavioral Science and Social Sciences
Liberal Arts: Math and Science

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

Liberal Arts: Arts and Humanities

SELECT 18-20 UNITS FROM:

Art 5, 6, 7, 8, 9
Academic and Career Success 10
Chinese 30, 40
Drama 15, 16, 30, 70
Education 40
English 100, 111, 127, 128, 129, 132, 133, 205, 220, 221, 230, 231
Filipino 60, 61
French 60, 61, 62
Humanities 19, 20, 21, 22, 24, 30
Italian 60, 61
Journalism 35, 110
Music 10, 12, 15
Philosophy 2, 33, 40, 41, 42
Recording Arts 10, 15
Sign Language 65, 66, 67, 68, 72
Spanish 50, 51, 52, 53

TOTAL UNITS FOR THE MAJOR 18-20
TOTAL UNITS FOR THE DEGREE 60

Program Student Learning Outcomes

1. Read critically and communicate effectively as a writer and speaker.
2. Understand 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.

Liberal Arts: Behavioral Science and Social Sciences

SELECT 18 UNITS FROM:

Academic and Career Success 10
Administration of Justice 110
Anthropology 5, 6, 7
Business 109, 294
Child Development 10, 20, 50
Economics 5, 10, 11
Education 40
History 29, 30, 31, 33, 34, 35, 38, 39, 40, 46, 47, 52
Philosophy 33
Political Science 10, 20, 33, 43
Psychology 10, 11, 14, 17
Social Science 45
Sociology 12, 15, 16, 17

TOTAL UNITS FOR THE MAJOR 18-20
TOTAL UNITS FOR THE DEGREE 60
Program Student Learning Outcomes

1. Read critically and communicate effectively as a writer and speaker.
2. Understand 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.

Liberal Arts: Math and Science

SELECT 18-20 UNITS SELECT FROM:

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

TOTAL UNITS FOR THE MAJOR 18-20

TOTAL UNITS FOR THE DEGREE 60

Program Student Learning Outcomes

1. Read critically and communicate effectively as a writer and speaker.
2. Understand 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.

Library Studies

COURSE DESCRIPTIONS

LIBST-014 Library Research and Information Literacy Skills

TOTAL HOURS LECTURE: 18
UNITS: 1
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

TOTAL HOURS LECTURE: 13.5
TOTAL HOURS LAB: 13.5
UNITS: 1
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 not be repeated. SC
LMC: DA
TRANSFER: CSU
LIBST-018  Internet Information Resources - Advanced Search Techniques and Strategies

TOTAL HOURS LECTURE: 9  
TOTAL HOURS LAB: 27  
UNITS: 1  
Advisory: Eligibility for ENGL-090

This short-term course is designed for individuals who may already have some experience using the Internet. The course will cover more advanced search techniques and strategies for locating information resources available on the Internet. Among the topics covered will be the use of various features of Internet web browsers such as Netscape and Internet Explorer, an in-depth comparison of Internet search engines and an exploration of sites which provide subject and discipline based information resources. This course will also cover evaluation criteria and proper documentation of Internet information sources. Students interested in learning how to more effectively and efficiently search the Internet for class assignments or topics of personal interest will find this course of particular value. May not be repeated. SC

LMC: DA  
TRANSFER: CSU

LIBST-098  Independent Study in Library Studies

Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. 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

TOTAL HOURS: 60-300  
UNITS: 1-4  
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

TOTAL HOURS: 60-300  
UNITS: 1-4  
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

DEGREES—Associate of Science
Management and Supervision

CERTIFICATE OF ACHIEVEMENT
Management and Supervision

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. Consult a Los Medanos College counselor to develop your education plan.

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

**REQUIRED COURSES:**

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<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tr>
<td>MANGT-050</td>
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<tr>
<td>MANGT-070</td>
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<td><strong>TOTAL UNITS</strong></td>
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AND SELECT A MINIMUM OF 9 UNITS FROM:

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<td>BUS-035</td>
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<td>BUS-035 A/B/C</td>
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<td>BUS-058</td>
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<tr>
<td>BUS-065</td>
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<tr>
<td>BUS-294</td>
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<td>COMSC-040</td>
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</tr>
<tr>
<td>MANGT-075</td>
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<tr>
<td>MANGT-170***</td>
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<td><strong>TOTAL UNITS FOR THE MAJOR</strong></td>
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<td><strong>TOTAL UNITS FOR THE DEGREE</strong></td>
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<td><strong>TOTAL UNITS FOR THIS CERTIFICATE</strong></td>
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</tr>
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</table>

***Occupational Work Experience Education in Management

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.

Program Student Learning Outcomes

Associate of Science

1. Differentiate the different components of management and the necessary skills, including human resources, supervision, legal, ethical, social responsibilities of management.
2. Respond to critical problems faced by managers and supervisors in a diverse workplace.
3. Demonstrate the technical, problem solving, and soft skills needed of managers and supervisors.
4. Utilize effective communication skills in intercultural environments.

Certificate of Achievement

1. Utilize effective communication skills in intercultural environments.
2. Lead and motivate teams and complete projects.
3. Summarize measures that can be taken by individuals and organizations to respond to issues in the workplace, including legal, personnel, ethical and social.

**COURSE DESCRIPTIONS**

MANGT-050 Introduction to Supervision

TOTAL HOURS LECTURE: 54
UNITs: 3

Advisory: Eligibility for ENGL-090

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**

TOTAL HOURS LECTURE: 54  
UNITS: 3  
Advisory: MANGT-050; eligibility for ENGL-100  
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**

TOTAL HOURS LECTURE: 54  
UNITS: 3  
Advisory: MANGT-050; eligibility for ENGL-090  
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  
TRANSFER: CSU

**MANGT-070 Relating in Human Terms**

TOTAL HOURS LECTURE: 54  
UNITS: 3  
Advisory: MANGT-050; 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**

TOTAL HOURS LECTURE: 54  
UNITS: 3  
Advisory: MANGT-050; eligibility for ENGL-090  
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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. 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**

TOTAL HOURS: 60-300  
UNITS: 1-4  
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

TOTAL HOURS: 60-300
UNITS: 1-4
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

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.

REQUIRED COURSES:

<table>
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<tr>
<th>Course</th>
<th>Units</th>
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<td>MATH-034*</td>
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<td>or PHYSICS*</td>
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<td>MATH-075</td>
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<td>MATH-080</td>
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TOTAL UNITS FOR THE MAJOR 22
TOTAL UNITS FOR THE DEGREE 60

*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.

Program Student Learning Outcomes

1. Preparation and mathematical maturity: Be prepared for the mathematical or statistical 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, determine appropriateness and correctness of their own work and function effectively in different learning environments.
   b. Succeed in different learning environments, particularly in a group setting of working collaboratively with others.

### COURSE DESCRIPTIONS

**MATH-004 Foundations of Arithmetic & Study Skills**

<table>
<thead>
<tr>
<th>TOTAL HOURS LECTURE: 36</th>
<th>TOTAL HOURS LAB: 72</th>
<th>UNITS: 3</th>
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<tr>
<td><strong>Advisory:</strong> Eligibility for ENGL-070 or higher</td>
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MATH-004 teaches basic arithmetic skills, the foundational concepts behind those arithmetic skills, and study skills for success in future college and math courses. The course is designed for students who desire a firm preparation of arithmetic and study skills before taking higher math courses. Arithmetic topics include meanings of and operations with whole numbers, fractions, decimals, and percents, introduction to problem solving, proportional reasoning, and reading tables and graphs. Study skills topics include reading math text, note making, studying, taking tests, Additionally, students will develop proficient skills in communication of mathematics and the use and interpretation of tables and charts. May not be repeated. SC

LMC: NDA

**MATH-007 Self Paced Arithmetic Skills**

| TOTAL HOURS LECTURE: 9-63 | TOTAL HOURS LAB: 9-45 | UNITS: .5-3.5 |

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**

| TOTAL HOURS LECTURE: 72 | TOTAL HOURS LAB: 36 | UNITS: 4 |

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**

| TOTAL HOURS LECTURE: 27 | TOTAL HOURS LAB: 9 | UNITS: 1.5 |

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
TOTAL HOURS LECTURE: 54
TOTAL HOURS LAB: 54
UNITS: 4

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. May not be repeated. SC

LMC: NDA

MATH-024  Elementary Algebra Student Support
TOTAL HOURS LECTURE: 27
TOTAL HOURS LAB: 9
UNITS: 1.5

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
TOTAL HOURS LECTURE: 72
TOTAL HOURS LAB: 36
TOTAL HOURS LAB BY ARRANGEMENT: 18
UNITS: 5

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.

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
TOTAL HOURS LECTURE: 54
TOTAL HOURS LAB: 36
UNITS: 3

Prerequisite: MATH-025, MATH-29 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 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: GE: Language and Rationality: Communication and Analytical Thinking; DA
MATH-027  Algebra for Statistics

TOTAL HOURS LECTURE: 90
TOTAL HOURS LAB: 54
UNITS: 6

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 27 satisfies the prerequisite for Math 034 only. May not be repeated.  SC

LMC: DA

MATH-028  Intermediate Algebra Student Support

TOTAL HOURS LECTURE: 27
TOTAL HOURS LAB: 9
UNITS: 1.5

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-029  Accelerated Elementary & Intermediate Algebra

TOTAL HOURS LECTURE: 126
TOTAL HOURS LAB BY ARRANGEMENT: 36
UNITS: 7

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.

MATH-029 is an accelerated elementary and intermediate algebra equivalent to both MATH-25 and MATH-030. This course focuses on proportional reasoning and linear, quadratic, exponential, and logarithmic functions. Students will investigate algebra concepts from multiple perspectives including tables, graphs, symbolic forms with variables, and written descriptions. Students will develop proficient skills in communication of mathematics, problem-solving, use of multiple representations, effective learning skills and learning to apply algebra to analyze and solve real-life problems takes time and effort. A graphing calculator is required. May not be repeated.  SC

LMC: GE: Language and Rationality: Communication and Analytical Thinking; DA

MATH-030  Intermediate Algebra

TOTAL HOURS LECTURE: 72
TOTAL HOURS LAB BY ARRANGEMENT: 36
UNITS: 4

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.

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: GE: Language and Rationality: Communication and Analytical Thinking; DA
MATH-032 Mathematical Concepts for Elementary Teachers: Number Systems

TOTAL HOURS LECTURE: 72
TOTAL HOURS LAB BY ARRANGEMENT: 36
UNITS: 4
Prerequisite: MATH-030; MATH-029 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: GE: Language and Rationality: Communication and Analytical Thinking; DA
TRANSFER: UC, CSU Gen. Ed. Area B4

MATH-034 Introduction to Statistics

TOTAL HOURS LECTURE: 72
TOTAL HOURS LAB BY ARRANGEMENT: 36
UNITS: 4
Prerequisite: MATH-030, MATH-029 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: GE: Language and Rationality: Communication and Analytical Thinking; DA
TRANSFER: UC; CSU Gen. Ed. Area B4; IGETC Area 2A

MATH-035 Finite Mathematics

TOTAL HOURS LECTURE: 54
TOTAL HOURS LAB BY ARRANGEMENT: 36
UNITS: 3
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: GE: Language and Rationality: Communication and Analytical Thinking; DA
TRANSFER: UC; CSU Gen. Ed. Area B4; IGETC Area 2

MATH-037 Applied Calculus

TOTAL HOURS LECTURE: 72
TOTAL HOURS LAB BY ARRANGEMENT: 18
UNITS: 4
Prerequisite: MATH-030, MATH-029 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: GE: Language and Rationality: Communication and Analytical Thinking; DA
TRANSFER: UC; CSU Gen. Ed. Area B4; IGETC Area 2A

MATH-040 Precalculus

TOTAL HOURS LECTURE: 72
TOTAL HOURS LAB BY ARRANGEMENT: 36
UNITS: 4
Prerequisite: MATH-026 and MATH-030 or MATH-029 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: GE: Language and Rationality: Communication and Analytical Thinking; DA
TRANSFER: UC; CSU Gen. Ed. Area B4; IGETC Area 2A
MATH-050  Calculus and Analytic Geometry I  
TOTAL HOURS LECTURE: 72  
TOTAL HOURS LAB BY ARRANGEMENT: 36  
UNITS: 4  
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. (C-ID MATH 210)  SC  
LMC: GE: Language and Rationality: Communication and Analytical Thinking; DA  
TRANSFER: UC; CSU Gen. Ed. Area B4; IGETC Area 2

MATH-060  Calculus and Analytic Geometry II  
TOTAL HOURS LECTURE: 72  
TOTAL HOURS LAB: 36  
UNITS: 4  
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 anti-derivative of a function; techniques of integration; polar and parametric equations; realistic applications to various fields; basic differential equations and their solutions; infinite sequences and series; 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: GE: Language and Rationality: Communication and Analytical Thinking; DA  
TRANSFER: UC; CSU Gen. Ed. Area B4; IGETC Area 2

MATH-070  Calculus and Analytic Geometry III  
TOTAL HOURS LECTURE: 72  
TOTAL HOURS LAB: 36  
UNITS: 4  
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: GE: Language and Rationality: Communication and Analytical Thinking; DA  
TRANSFER: UC; CSU Gen. Ed. Area B4; IGETC Area 2

MATH-075  Linear Algebra  
TOTAL HOURS LECTURE: 54  
TOTAL HOURS LAB: 36  
UNITS: 3  
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. May not be repeated.  SC  
LMC: GE: Language and Rationality: Communication and Analytical Thinking; DA  
TRANSFER: UC; CSU Gen. Ed. Area B4; IGETC Area 2A

MATH-080  Differential Equations  
TOTAL HOURS LECTURE: 54  
TOTAL HOURS LAB BY ARRANGEMENT: 36  
UNITS: 3  
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. (C-ID MATH 240)  SC  
LMC: GE: Language and Rationality: Communication and Analytical Thinking; 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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated.  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-160 Discrete Math

TOTAL HOURS LECTURE: 72
TOTAL HOURS LAB: 36
UNITS: 4

Prerequisite: MATH-050 or equivalent
Advisory: Concurrent enrollment in MATH-060 or higher
Discrete Math is an introduction to fundamental topics for computer science. Topics include: logic, proof techniques, mathematical induction, sets, relations, functions and recursion, graphs and trees, elementary number theory, basic combinatorics, algebraic structures, discrete probability theory and modeling computation. May not be repeated. (C-ID COMM 152) SC
LMC: GE: Language and Rationality: Communication and Analytical Thinking; DA
TRANSFER: UC, CSU Gen. Ed. Area B4, IGETC 2A

MATH-900s Selected Topics in Mathematics
DA varies with course content.

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 the coursework listed below as well as the General Education requirements. Consult a Los Medanos College counselor to develop your education plan.

REQUIRED COURSES:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC-005</td>
<td>6</td>
</tr>
<tr>
<td>or MUSIC-013</td>
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<tr>
<td>MUSIC-032</td>
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<tr>
<td>or MUSIC-033A</td>
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<tr>
<td>MUSIC-033B</td>
<td>1.5</td>
</tr>
<tr>
<td>MUSIC-081</td>
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</tbody>
</table>

TOTAL UNITS 21.5-24.5

Music Major Ensemble Requirements

AND SELECT A MINIMUM OF SIX SEMESTERS FROM:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>MUSIC-040</td>
<td>2</td>
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<tr>
<td>MUSIC-020</td>
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<td>MUSIC-050</td>
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<tr>
<td>MUSIC-052</td>
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<td>MUSIC-070</td>
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<td>MUSIC-072</td>
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<td>or MUSIC-073</td>
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<tr>
<td>MUSIC-077</td>
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</tr>
<tr>
<td>MUSIC-082</td>
<td>2</td>
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<tr>
<td>MUSIC-250</td>
<td>1</td>
</tr>
</tbody>
</table>

TOTAL UNITS 7-12
TOTAL UNITS FOR THE MAJOR 28.5-36.5

TOTAL UNITS FOR THE DEGREE 60

NOTE: Summer Ensembles will not fulfill the above requirements.

STUDENTS WITH AN ADVANCED GUITAR OR ADVANCED PIANO EMPHASIS MAY CHOOSE TO FULFILL THE ENSEMBLE REQUIREMENT BY COMPLETING FOUR SEMESTERS OF THE FOLLOWING:

MUSIC-033A/B Intermediate/Advanced Piano
or
MUSIC-037 Advanced Guitar

and

Select two additional semesters from any performance class.
(See list of music major ensemble requirements, page 197)

NOTE: Summer ensembles will not fulfill the above requirements.

Program Student 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.).

CERTIFICATE OF ACHIEVEMENT

MUSIC BUSINESS MANAGEMENT

REQUIRED COURSES: UNITS

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS-186</td>
<td>Principles of Financial Accounting</td>
<td>4</td>
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<tr>
<td>BUS-027</td>
<td>Small Business Management</td>
<td>3</td>
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<tr>
<td>BUS-294</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC-012</td>
<td>Popular Music in American Culture</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC-013</td>
<td>Musicianship I</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC-015</td>
<td>Basic Music (or pass theory placement exam)</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC-028</td>
<td>Songwriting I</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC-030</td>
<td>Basic Keyboard Skills</td>
<td>1.5</td>
</tr>
<tr>
<td>MUSIC-081</td>
<td>Introduction to Improvisation</td>
<td>1.5</td>
</tr>
<tr>
<td>MUSIC-082</td>
<td>Intermediate Improvisation Jazz Workshop</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC-089</td>
<td>Music and Recording Industry Business</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC-093</td>
<td>Studio Music Production I</td>
<td>2</td>
</tr>
<tr>
<td>RA-010</td>
<td>Introduction to Recording Arts</td>
<td>3</td>
</tr>
<tr>
<td>RA-021</td>
<td>The Role of the Producer (Basic Session Producing)</td>
<td>2</td>
</tr>
</tbody>
</table>

Any performance classes 4-8

(See list of music major ensemble requirements, page 197)

TOTAL UNITS 32-39.5

AND SELECT TWO COURSES FROM:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC-034</td>
<td>Jazz/Rock Keyboard</td>
</tr>
<tr>
<td>MUSIC-065</td>
<td>Class Voice</td>
</tr>
<tr>
<td>MUSIC-067</td>
<td>Jazz and Popular Vocal Technique</td>
</tr>
</tbody>
</table>

Two additional group performance-oriented courses in addition to those completed for the core requirement, page 197.

TOTAL UNITS FOR THIS CERTIFICATE 34-43.5

Program Student 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 practical knowledge of performance practice in their particular ensemble performing styles.

3. Have proficiency of solo repertoire and technical studies in their major instrumental or vocal area of study.

4. Have writing skills with the ability to independently utilize research tools and resources (library, internet, etc.).

5. Have abilities to understand and navigate music software programs.

6. Have proficiency in basic accounting, small business law, corporate law, entertainment law, state regulations, and artist management.

7. Apply the acquired information from this certificate towards potential employment as a small business owner, artist manager, music personnel manager, and music critic.
CERTIFICATE OF ACHIEVEMENT
MUSIC PERFORMANCE

For the Certificate of Achievement in Music—Commercial – Music Performance, complete the coursework listed below. Consult a Los Medanos College counselor to develop your education plan.

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 1.5
MUSIC-082 Int. Improvisation Jazz Workshop 2
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-010 Introduction to Recording Arts 3
Any performance classes 4-8

(TOTAL 3 UNITS) MUSIC 30, 31, 32, 33A, 33B.

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

Two additional group performance-oriented courses in addition to those completed for the core requirement, page 197.

TOTAL UNITS FOR THIS CERTIFICATE 31-40.5

Program Student 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 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.
6. Apply the acquired information from this certificate towards potential employment, as a professional musical artist and performer, church musician, and studio musician.

CERTIFICATE OF ACHIEVEMENT
MUSIC PEDAGOGY

For the Certificate of Achievement in Music—Commercial – Pedagogy, complete the coursework listed below. Consult a Los Medanos College counselor to develop your education plan.

REQUIRED COURSES: UNITS
MUSIC-008 Private Lessons (4 semesters) 2
MUSIC-010 Music Literature 3
MUSIC-012 Popular Musics in America 3
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 Fundamentals of Music Harmony 4
MUSIC-028 Songwriting I 1
MUSIC-081 Introduction to Improvisation 1
MUSIC-082 Intermediate Improvisation Jazz Workshop 1
MUSIC-089 Music Business Management 2
MUSIC-093 Intro to MIDI 2
Any performance classes 4-8

(See list of music major ensemble requirements, page 197)

AND SELECT A MINIMUM OF TWO SEMESTERS OF LEVEL APPROPRIATE PIANO CLASSES (TOTAL 3 UNITS) MUSIC 30, 31, 32, 33A, 33B.

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

Two additional group performance-oriented courses in addition to those completed for the core requirement, page 197.

TOTAL UNITS FOR THIS CERTIFICATE 38-47.5

Program Student 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 proficiency in solo repertoire and technical studies for the purpose of the art of teaching.
4. Apply the acquired information from this certificate towards potential employment, as a private music instructor.

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.

**COURSE DESCRIPTIONS**

**MUSIC-001 Music Studio 1 (Pitch / Rhythm)**

**TOTAL HOURS LAB:** 27  
**UNITS:** .5  
**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)**

**TOTAL HOURS LAB:** 27  
**UNITS:** .5  
**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)**

**TOTAL HOURS LAB:** 27  
**UNITS:** .5  
**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**

**TOTAL HOURS LAB:** 54  
**UNITS:** 1  
**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 not be repeated. LR  
**LMC:** DA  
**TRANSFER:** UC, CSU
MUSIC-006 Sophomore Recital Preparation

TOTAL HOURS LAB: 54
UNITS: 1

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 not be repeated. LR

LMC: DA
TRANSFER: UC, CSU

MUSIC-008 Private Lessons Practicum

TOTAL HOURS LAB: 27
UNIT: .5

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 in private lessons. Students will audition for the available lesson slots. Students will have private lessons for three hours during the semester in addition to weekly lab practice. 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. LR

LMC: DA
TRANSFER: UC, CSU

MUSIC-010 Music Literature

TOTAL HOURS LECTURE: 54
UNITS: 3

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, instrumenta- tion, and the derivation of increased pleasure form 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: Arts and Humanities; DA
TRANSFER: UC; CSU Gen. Ed. Area C1; IGETC Area 3A

MUSIC-012 Popular Music in American Culture

TOTAL HOURS LECTURE: 54
UNITS: 3

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: Arts and Humanities; DA
TRANSFER: UC; CSU Gen. Ed. Area C1; IGETC Area 3B. Also satisfies American Cultures Requirement at UCB

MUSIC-013 Musicianship I

TOTAL HOURS LECTURE: 54
TOTAL HOURS LAB: 36
UNITS: 2

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 not be repeated. LR

LMC: DA
TRANSFER: UC, CSU
MUSIC-014  Musicianship II  
TOTAL HOURS LECTURE: 27  
TOTAL HOURS LAB: 36  
UNITS: 2  
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 not be repeated. LR  
LMC: DA  
TRANSFER: UC, CSU  

MUSIC-015  Basic Music  
TOTAL HOURS LECTURE: 54  
UNITS: 3  
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: Arts and Humanities; 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  
TOTAL HOURS LECTURE: 54  
UNITS: 3  
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  
TOTAL HOURS LECTURE: 54  
TOTAL HOURS LAB: 54  
UNITS: 4  
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 not be repeated. LR  
LMC: DA  
TRANSFER: UC, CSU  

MUSIC-018  Music Theory III: Chromatic Harmony and Later Styles  
TOTAL HOURS LECTURE: 54  
TOTAL HOURS LAB: 54  
UNITS: 4  
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 not be repeated. LR  
LMC: DA  
TRANSFER: UC, CSU  

MUSIC-020  Baroque Ensemble  
TOTAL HOURS LAB: 54  
UNITS: 1  
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
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Total Hours Lecture</th>
<th>Total Hours Lab</th>
<th>Units</th>
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<tbody>
<tr>
<td>MUSIC-030</td>
<td>Basic Keyboard Skills</td>
<td>18</td>
<td>36</td>
<td>1.5</td>
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<td>This course is designed to</td>
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<td></td>
<td>develop reading skills in</td>
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<td></td>
<td>basic music notation in</td>
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<td>relation to the keyboard.</td>
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<td>Study of piano technique,</td>
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<td>ensemble and solo playing,</td>
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<td>easy repertoire preparation</td>
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<td>piano requirement for music</td>
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<td>provides fundamental skills</td>
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<td>and a solid foundation for</td>
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<td>anyone beginning their music</td>
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<td></td>
<td>study. May not be repeated.</td>
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<td>TRANSFER: UC, CSU</td>
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<tr>
<td>MUSIC-030A</td>
<td>Continuing Piano Workshop</td>
<td>24</td>
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<tr>
<td>Advisory:</td>
<td>Any piano class</td>
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<td>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</td>
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<tr>
<td>MUSIC-031</td>
<td>Piano I</td>
<td>18</td>
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<td>Advisory:</td>
<td>Ability to read music at</td>
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<td>elementary level</td>
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<td>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 not be repeated. LR</td>
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<tr>
<td>MUSIC-032</td>
<td>Piano II</td>
<td>18</td>
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<tr>
<td>Advisory:</td>
<td>MUSIC-031 or equivalent</td>
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<td>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 not be repeated. LR</td>
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<tr>
<td>MUSIC-033A</td>
<td>Intermediate Piano</td>
<td>18</td>
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<td>Advisory:</td>
<td>MUSIC-032 or placement audition</td>
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<td>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 not be repeated. LR</td>
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<tr>
<td>MUSIC-033B</td>
<td>Advanced Piano</td>
<td>18</td>
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<tr>
<td>Advisory:</td>
<td>MUSIC-033A or placement audition</td>
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<tr>
<td>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 not be repeated. LR</td>
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<tr>
<td>MUSIC-034</td>
<td>Jazz/Rock Keyboard</td>
<td>18</td>
<td>36</td>
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<td>Advisory:</td>
<td>Some basic piano experience</td>
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<td>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 not be repeated. LR</td>
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<td>TRANSFER: UC, CSU</td>
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<tr>
<td>MUSIC-035</td>
<td>Introduction to the Guitar</td>
<td>18</td>
<td>36</td>
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<td>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 not be repeated. LR</td>
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</table>
### MUSIC-036  Intermediate Guitar

| TOTAL HOURS LECTURE | 18 |
| TOTAL HOURS LAB     | 36 |
| UNITS               | 1.5 |

**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-037  Advanced Guitar

| TOTAL HOURS LECTURE | 18 |
| TOTAL HOURS LAB     | 36 |
| UNITS               | 1.5 |

**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

| TOTAL HOURS LAB | 108 |
| UNITS          | 2   |

**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. (CID MUS-180) LR

**LMC:** DA

**TRANSFER:** UC, CSU

### MUSIC-050  Chamber Ensembles: Emphasis - Brass and Percussion

| TOTAL HOURS LAB | 90 |
| UNITS           | 1.5 |

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

| TOTAL HOURS LAB | 54 |
| UNITS           | 1   |

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 not be repeated. LR

**LMC:** DA

**TRANSFER:** UC, CSU

### MUSIC-054  Chamber Ensembles: Emphasis - Woodwind, Vocal and Piano

| TOTAL HOURS LAB | 90 |
| UNITS           | 1.5 |

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
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Total Hours Lab</th>
<th>Units</th>
<th>Advisory</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC-060</td>
<td>College Chorus I</td>
<td>108</td>
<td>2</td>
<td>Eligibility for ENGL-090</td>
<td>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 3 times. LR</td>
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<td>LMC: DA</td>
<td>TRANSFER: UC, CSU</td>
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<tr>
<td>MUSIC-065</td>
<td>Class Voice</td>
<td>54</td>
<td>1</td>
<td>Eligibility for ENGL-090</td>
<td>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 not be repeated. LR</td>
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<td>LMC: DA</td>
<td>TRANSFER: UC, CSU</td>
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<tr>
<td>MUSIC-066</td>
<td>Gospel Choir</td>
<td>90</td>
<td>1.5</td>
<td>Eligibility for ENGL-090</td>
<td>The Gospel Choir will offer an introductory experience in the dynamics of performing choral literature from the gospel music tradition. The emphasis of this course will be on developing 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</td>
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<td>LMC: DA</td>
<td>TRANSFER: UC, CSU</td>
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<tr>
<td>MUSIC-067</td>
<td>Jazz and Vocal Popular Techniques</td>
<td>54</td>
<td>1</td>
<td>Eligibility for ENGL-090</td>
<td>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</td>
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<td>LMC: DA</td>
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<tr>
<td>MUSIC-070</td>
<td>Jazz Ensemble styles of Duke Ellington and Miles Davis</td>
<td>108</td>
<td>2</td>
<td>3 or more years rehearsing/performing in a jazz big band on a jazz band instrument</td>
<td>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</td>
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<td>LMC: DA</td>
<td>TRANSFER: UC, CSU</td>
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<tr>
<td>MUSIC-071</td>
<td>Large Jazz Ensemble styles of Count Basie and John Coltrane</td>
<td>108</td>
<td>2</td>
<td>3 or more years rehearsing/performing in a jazz big band on a jazz band instrument</td>
<td>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</td>
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<td>TRANSFER: UC, CSU</td>
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<tr>
<td>MUSIC-072</td>
<td>Large Jazz Ensemble styles of Gil Evans and Dizzy Gillespie</td>
<td>108</td>
<td>2</td>
<td>3 or more years rehearsing/performing in a jazz big band on a jazz band instrument</td>
<td>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</td>
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<td>LMC: DA</td>
<td>TRANSFER: UC, CSU</td>
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<tr>
<td>MUSIC-073</td>
<td>Large Jazz Ensemble styles of Thad Jones and Maria Schneider</td>
<td>108</td>
<td>2</td>
<td>3 or more years rehearsing/performing in a jazz big band on a jazz band instrument</td>
<td>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</td>
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<td>LMC: DA</td>
<td>TRANSFER: CSU</td>
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</tbody>
</table>
MUSIC-074  Jazz Studio - from Basie through Coltrane

TOTAL HOURS LAB: 108
UNITS: 2

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 not be repeated. LR

LMC: DA
TRANSFER: UC, CSU

MUSIC-077  Chamber Chorale

TOTAL HOURS LAB: 108
UNITS: 2

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

TOTAL HOURS LAB: 90
UNITS: 1.5

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 not be repeated. LR

LMC: DA
TRANSFER: UC, CSU

MUSIC-082  Intermediate Improvisation Jazz Workshop

TOTAL HOURS LAB: 108
UNITS: 2

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 not be repeated. LR

LMC: DA
TRANSFER: UC, CSU

MUSIC-089  Music and Recording Industry Business

TOTAL HOURS LECTURE: 36
UNITS: 2

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

TOTAL HOURS LECTURE: 18
TOTAL HOURS LAB: 72
UNITS: 2

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 unto a standard professional recording media. Students will be able to demonstrate how synthesizers, computers and electronic musical devices are con-
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

**MUSIC-093  Studio Music Production I**
TOTAL HOURS LECTURE: 18
TOTAL HOURS LAB: 72
UNITS: 2

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 not be repeated.  SC

**MUSIC-094  Studio Music Production II**
TOTAL HOURS LECTURE: 18
TOTAL HOURS LAB: 72
UNITS: 2

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 not be repeated.  SC

**MUSIC-095  Studio Music Production III**
TOTAL HOURS LECTURE: 18
TOTAL HOURS LAB: 72
UNITS: 2

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 not be repeated.  SC

**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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated.  SC

**MUSIC-250  Night Jazz Band**
TOTAL HOURS LAB: 90
UNITS: 1.5

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 be repeated three times.  P/NP

**MUSIC-900s  Selected Topics in Music**

DA varies with course content.
Nursing

DEGREES—Associate of Science
Registered Nursing

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.

ASSOCIATE OF SCIENCE
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

<table>
<thead>
<tr>
<th>REQUIRED COURSES: PREREQUISITES</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>ENGL-100 College Composition</td>
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<tr>
<td>MATH-030 Intermediate Algebra</td>
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<td>BIOSC-040 Human Anatomy</td>
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<td>BIOSC-045 Human Physiology</td>
<td>5</td>
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<tr>
<td>BIOSC-050 Intro to Microbiology</td>
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<tr>
<td>PSYCH-010 or 11 General Psychology</td>
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<td>TOTAL UNITS</td>
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<tr>
<th>REQUIRED BY THE BOARD OF REGISTERED NURSING</th>
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<tr>
<td>SPCH-110 Oral Communication</td>
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<tr>
<th>ADVISORY COURSE</th>
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<tr>
<td>RNURS-001 Nursing Career Seminar</td>
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Registered Nursing Curriculum

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<tr>
<th>REQUIRED COURSES: FIRST SEMESTER</th>
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<tbody>
<tr>
<td>RNURS-022 Foundations of Nursing Practice</td>
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<tr>
<td>RNURS-023 Nursing Skills Simulation I</td>
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<tr>
<td>RNURS-024 Pharmacology for RN Program I</td>
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<tr>
<th>REQUIRED COURSES: SECOND SEMESTER</th>
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<tr>
<td>RNURS-026 Nursing in Health and Illness I</td>
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<tr>
<td>RNURS-027 Nursing Skills Simulation II</td>
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<tr>
<td>RNURS-028 Pharmacology for RN Program II</td>
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<tr>
<th>REQUIRED COURSES: THIRD SEMESTER</th>
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<tr>
<td>RNURS-031 Nursing in Health &amp; Illness II</td>
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<tr>
<td>RNURS-033 Nursing Skills Simulation III</td>
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<tr>
<td>RNURS-034 Pharmacology for RN Program III</td>
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<tr>
<th>REQUIRED COURSES: FOURTH SEMESTER</th>
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<tr>
<td>RNURS-030 Leadership/Management/Professionalism</td>
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<td>RNURS-036 Nursing in Health &amp; Illness III</td>
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<td>RNURS-038 Nursing Skills Simulation IV</td>
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<td>RNURS-039 Pharmacology for RN Program IV</td>
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TOTAL UNITS FOR THE MAJOR 47
TOTAL UNITS FOR THE DEGREE 60

Program Student 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).

LVN to RN Transition

The LVN to RN transition 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 LVN to RN transition 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**

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Units</th>
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<tbody>
<tr>
<td>ENGL-100</td>
<td>College Composition</td>
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<tr>
<td>MATH-030</td>
<td>Intermediate Algebra</td>
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<tr>
<td>BIOSC-040</td>
<td>Human Anatomy</td>
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<tr>
<td>BIOSC-045</td>
<td>Human Physiology</td>
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<tr>
<td>BIOSC-050</td>
<td>Intro to Microbiology</td>
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<tr>
<td>PSYCH-010 or 11</td>
<td>General Psychology</td>
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**TOTAL UNITS** 24

**REQUIRED COURSES: GRADUATION REQUIREMENTS**

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<td>SPCH-110</td>
<td>Oral Communication</td>
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**TOTAL UNITS REQUIRED FOR PREREQUISITE COURSES** 17.5

**REQUIRED COURSES: FIRST SEMESTER**

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<td>RNURS-031</td>
<td>Nursing in Health &amp; Illness II</td>
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<td>RNURS-033</td>
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<td>RNURS-034</td>
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<td>RNURS-030</td>
<td>Leadership/Management/Professional</td>
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<td>RNURS-036</td>
<td>Nursing in Health &amp; Illness III</td>
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<td>RNURS-039</td>
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**TOTAL UNITS FOR THE MAJOR** 24.3

**TOTAL UNITS FOR THE DEGREE** 60

**Registered Nursing Curriculum**

**REQUIRED COURSES: SECOND SEMESTER**

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<td>VONUR-010</td>
<td>Intermediate Core Concepts in Clinical Pharmacology</td>
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<tr>
<td>VONUR-011</td>
<td>Medical Surgical Nursing</td>
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<tr>
<td>VONUR-012</td>
<td>Medical Surgical Nursing Practice</td>
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**REQUIRED COURSES: THIRD SEMESTER**

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<tr>
<td>VONUR-015</td>
<td>Advanced Core Concepts in Clinical Pharmacology</td>
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<tr>
<td>VONUR-016</td>
<td>Family Centered Nursing</td>
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<tr>
<td>VONUR-017</td>
<td>Family Centered Nursing Practice</td>
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<tr>
<td>VONUR-018</td>
<td>Professional Issues in Vocational Nursing</td>
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**TOTAL UNITS REQUIRED FOR THIS CERTIFICATE** 39

**Program Student 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 a 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 clients.
COURSE DESCRIPTIONS

RNURS-001 Nursing Career Seminar
TOTAL HOURS LECTURE: 6
UNITS: .3
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
TOTAL HOURS LECTURE: 6
UNITS: .3
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: DA
TRANSFER: CSU

RNURS-022 Fundamentals of Nursing Practice
TOTAL HOURS LECTURE: 72
TOTAL HOURS LAB: 297
UNITS: 9.5
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: $145 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
TOTAL HOURS LAB: 54
UNITS: 1
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 for the course include: $60-$150 for Lab Kit. May not be repeated. LR
LMC: DA
TRANSFER: CSU

RNURS-024 Pharmacology for the RN Program I
TOTAL HOURS LECTURE: 18
UNITS: 1
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
TOTAL HOURS LECTURE: 72
TOTAL HOURS LAB: 297
UNITS: 9.5
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 newborn nursing care. Concepts include principles of care to maintain and restore homeostatic mechanisms in clients of all ages with an emphasis on client and family education, disease prevention and health promotion. Concurrent practice in the nursing skills laboratory and clinical facilities in the community. Mandatory fees associated with this course include: $145 for background check and drug screening; For Advanced Placement/Transfer Students ONLY: $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; $55-$75 for CPR Certification; $250 for physical exam, lab fees, and immunizations. May not be repeated. LR
LMC: DA
TRANSFER: CSU
RNURS-027 Nursing Skills Simulation II

TOTAL HOURS LAB: 54  
UNITS: 1  
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: For Advanced Placement/Transfer Students ONLY: $60-$150 for lab kits each year. May not be repeated.  
LMC: DA  
TRANSFER: CSU

RNURS-028 Pharmacology for RN Program II

TOTAL HOURS LECTURE: 18  
UNITS: 1  
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 gastro-intestinal 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

TOTAL HOURS LECTURE: 18  
UNITS: 1  
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 Iih

TOTAL HOURS LECTURE: 72  
TOTAL HOURS LAB: 297  
UNITS: 9.5  
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 concepts presented in RNURS-022 and 026 by introducing principles of care to maintain and/or restore homeostatic mechanisms 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: $145 for background check and drug screening (for advance placement students only); $20-$25 for HealthStream Orientation; $20-$45 for mask fit testing; $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

TOTAL HOURS LAB: 54  
UNITS: 1  
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

TOTAL HOURS LECTURE: 18  
UNITS: 1  
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

TOTAL HOURS LECTURE: 72  
TOTAL HOURS LAB: 297  
UNITS: 9.5  
Prerequisite: Must have been admitted to the Registered Nursing program; RNURS-031, 033, and 034 or equivalent  
Co-requisite: 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: For Advanced Placement/Transfer Students ONLY: $20-$25 for Health-Stream 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; $145 for background check and drug screening. May not be repeated. LR  
LMC: DA  
TRANSFER: CSU  

RNURS-038  Nursing Skills Simulation IV  

TOTAL HOURS LAB: 54  
UNITS: 1  
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: For Advanced Placement/Transfer Students ONLY: $60-$150 for skills lab kit per year. May not be repeated. LR  
LMC: DA  
TRANSFER: CSU  

RNURS-039  Pharmacology for RN Program IV  

TOTAL HOURS LECTURE: 18  
UNITS: 1  
Prerequisite: Must have been admitted to the Registered Nursing program; RNURS-031, 033 and 034 or equivalent  
Co-requisite: Concurrent enrollment in RNURS-030, 036 and 038  

This fourth semester of pharmacology expands upon the principles and drug administration introduced in the previous three semesters. Specific drug classifications covered include, but are not limited to anti-anxiety agents, anti-depressive agents, anti-psychotics, sedative-hypnotics, and drugs to control cardiac dysrhythmia and seizures. Drug dosage calculations continue to be a focus of this course. May not be repeated. LR  
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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. 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-170A  Internship in Registered Nursing

TOTAL HOURS: 60-300
UNITS: 1-4

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

Nursing - Vocational

COURSE DESCRIPTIONS

VONUR-004  Introductory Concepts to Clinical Pharmacology

TOTAL HOURS LECTURE: 18
UNITS: 1

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

TOTAL HOURS LECTURE: 108
UNITS: 6

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

TOTAL HOURS LAB: 342
UNITS: 6

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: $145 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

TOTAL HOURS LECTURE: 18
UNITs: 1
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

TOTAL HOURS LECTURE: 18
UNITs: 1
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

TOTAL HOURS LECTURE: 18
UNITs: 1
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

TOTAL HOURS LECTURE: 90
UNITs: 5
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. May not be repeated. LR
LMC: DA

VONUR-012 Medical-Surgical Nursing Practice

TOTAL HOURS LAB: 342
UNITs: 6
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. May not be repeated. LR
LMC: DA

VONUR-015 Advanced Concepts to Clinical Pharmacology

TOTAL HOURS LECTURE: 18
UNITs: 1
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

TOTAL HOURS LECTURE: 90
UNITs: 5
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-007 Vocational Nursing Role Relationships

TOTAL HOURS LECTURE: 18
UNITs: 1
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

TOTAL HOURS LECTURE: 18
UNITs: 1
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

TOTAL HOURS LECTURE: 18
UNITs: 1
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

TOTAL HOURS LECTURE: 90
UNITs: 5
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. May not be repeated. LR
LMC: DA

VONUR-012 Medical-Surgical Nursing Practice

TOTAL HOURS LAB: 342
UNITs: 6
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. May not be repeated. LR
LMC: DA

VONUR-015 Advanced Concepts to Clinical Pharmacology

TOTAL HOURS LECTURE: 18
UNITs: 1
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

TOTAL HOURS LECTURE: 90
UNITs: 5
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

TOTAL HOURS LAB: 342
UNITs: 6
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; $250 for licensure; $20-$25 for HealthStream Orientation. May not be repeated. LR

LMC: DA

VONUR-018  Professional Issues in Vocational Nursing

TOTAL HOURS LECTURE: 18
UNITs: 1
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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. 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

TOTAL HOURS: 60-300
UNITs: 1-4
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

VONUR-170A  Internship in Vocational Nursing

TOTAL HOURS: 60-300
UNITs: 1-4
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

**COURSE DESCRIPTIONS**

**NUTRI-055 Introduction to Nutrition**

**TOTAL HOURS LECTURE:** 54  
**UNITS:** 3

**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 human life; the various nutrients and energy; nutrition throughout the life cycle; selection of an adequate diet for health and disease prevention; the problems of overnutrition and undernutrition; 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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. 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

**COURSE DESCRIPTIONS**

**PHIL-002 Contemporary Ethical Issues**

**TOTAL HOURS LECTURE:** 54  
**UNITS:** 3

**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. May not be repeated. LR

**LMC:** GE: Arts and Humanities; DA  
**TRANSFER:** UC; CSU Gen. Ed. Area C2; IGETC Area 3B

**PHIL-033 A History of Political Thought: The Problem Of Democracy**

**TOTAL HOURS LECTURE:** 54  
**UNITS:** 3

**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-033 meets Social and Behavioral Sciences and Art and Humanities requirements. May not be repeated. SC

**LMC:** GE: Arts and Humanities; DA  
**TRANSFER:** UC; CSU Gen. Ed. Area C2, D8; IGETC Area 3B, 4H

**PHIL-040 Introduction to Philosophy**

**TOTAL HOURS LECTURE:** 54  
**UNITS:** 3

**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 unifying 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 East-
ern 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: Arts and Humanities; DA
TRANSFER: UC; CSU Gen. Ed. Area C2; IGETC Area 3B

PHIL-041 Critical Thinking

TOTAL HOURS LECTURE: 54
UNITS: 3

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

TOTAL HOURS LECTURE: 54
UNITS: 3

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: Arts and 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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. SC

LMC: DA
TRANSFER: UC, CSU

PHIL-900s Selected Topics in Philosophy

DA varies with course content.

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Physical Education

**COURSE DESCRIPTIONS**

PE-002 Beginning Step Aerobics

TOTAL HOURS ACTIVITY: 54
UNITS: 1

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 not be repeated. SC

LMC: DA
TRANSFER: UC, CSU

PE-004 Pilates and More

TOTAL HOURS ACTIVITY: 54
UNITS: 1

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 lifelong fitness. This class will also teach basic physical fitness principles and their application to total health and fitness. May not be repeated. P/NP

LMC: DA
TRANSFER: CSU

PE-006 Physical Fitness

TOTAL HOURS ACTIVITY: 54
UNITS: 1

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. May not be repeated. SC

LMC: DA
TRANSFER: UC, CSU

PE-008 Weight Training

TOTAL HOURS ACTIVITY: 54
UNITS: 1

This course includes instruction in all elements of weight training. It will involve techniques, safety procedures, knowledge of muscle groups, equipment use, warm-up, strength and endurance training, exercise progression and improved fitness. May not be repeated. SC

LMC: DA
TRANSFER: UC, CSU
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Total Hours Activity</th>
<th>Units</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>PE-010</td>
<td>Circuit Training</td>
<td>54</td>
<td>1</td>
<td>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 not be repeated. SC</td>
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<tr>
<td>PE-011</td>
<td>Super Shape-Up</td>
<td>54</td>
<td>1</td>
<td>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 not be repeated. SC</td>
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<tr>
<td>PE-012</td>
<td>Power Walk Stretch and Tone</td>
<td>54</td>
<td>1</td>
<td>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 not be repeated. SC</td>
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<tr>
<td>PE-014</td>
<td>Volleyball</td>
<td>54</td>
<td>1</td>
<td>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. May not be repeated. SC</td>
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<td>PE-016</td>
<td>Beginning Swimming</td>
<td>54</td>
<td>1</td>
<td>Beginning swimming provides students with the opportunity to learn basic water safety skills and sufficient knowledge to make them reasonably safe in a aquatic environment. It introduces students to all of the parts of the freestyle (crawl) stroke, including breathing techniques, backstroke, breaststroke, elementary backstroke and sidestroke. May not be repeated. SC</td>
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<tr>
<td>PE-017</td>
<td>Lap Swimming</td>
<td>54</td>
<td>1</td>
<td>Lap swimming provides students with the opportunity to complete distance workouts, build cardiovascular endurance, work on stroke technique and learn proper lane etiquette. May not be repeated. SC</td>
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<td>PE-018</td>
<td>Water Fitness</td>
<td>54</td>
<td>1</td>
<td>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 not be repeated. P/ NP</td>
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<td>PE-020</td>
<td>Exerjazz for Fitness</td>
<td>54</td>
<td>1</td>
<td>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 course is appropriate for the student with little experience in rhythmic exercise of dance. May not be repeated. SC</td>
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PE-026  Soccer-Coed
TOTAL HOURS ACTIVITY: 54
UNITS: 1

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. May not be repeated. SC

LMC: DA
TRANSFER: UC, CSU

PE-030  Tennis
TOTAL HOURS ACTIVITY: 54
UNITS: 1

This course is 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 not be repeated. SC

LMC: DA
TRANSFER: UC, CSU

PE-033  Cardio Kickboxing
TOTAL HOURS ACTIVITY: 54
UNITS: 1

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 not be repeated. SC

LMC: DA
TRANSFER: UC, CSU

PE-042  Golf
TOTAL HOURS ACTIVITY: 54
UNITS: 1

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. Mandatory PE Facility fee of $20 due prior to first class meeting. May not be repeated. SC

LMC: DA
TRANSFER: UC, CSU

PE-046  Basketball
TOTAL HOURS ACTIVITY: 54
UNITS: 1

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. May not be repeated. SC

LMC: DA
TRANSFER: UC, CSU

PE-049  Total Body Sculpting
TOTAL HOURS ACTIVITY: 54
UNITS: 1

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 not be repeated. SC

LMC: DA
TRANSFER: UC, CSU

PE-053  Beginning Jazz Dance
TOTAL HOURS ACTIVITY: 54
UNITS: 1

Advisory: Beginning Jazz Dance is recommended
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 not be repeated. SC

LMC: DA
TRANSFER: UC, CSU

PE-054  Intermediate Jazz Dance
TOTAL HOURS ACTIVITY: 54
UNITS: 1

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 intermediate dance technique and choreography. May not be repeated. SC

LMC: DA
TRANSFER: UC, CSU

PE-055  Advanced Jazz Dance
TOTAL HOURS ACTIVITY: 54
UNITS: 1

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 not be repeated. SC

LMC: DA
TRANSFER: UC, CSU
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Total Hours Activity</th>
<th>Units</th>
<th>Advisory</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE-056</td>
<td>Dance Production Workshop</td>
<td>54</td>
<td>1</td>
<td>Students should have taken classes is jazz dance, or ballet, modern or hip hop dance</td>
</tr>
<tr>
<td></td>
<td>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 not be repeated. SC</td>
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<td></td>
<td>LMC: DA</td>
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<tr>
<td></td>
<td>TRANSFER: UC, CSU</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE-057</td>
<td>Yoga for Health and Fitness</td>
<td>54</td>
<td>1</td>
<td>Introduction to basic yoga poses to enhance strength, flexibility, muscle control, mental concentration, alertness. Breathing and relaxation techniques will help student reduce stress and tension. May not be repeated. SC</td>
</tr>
<tr>
<td></td>
<td>LMC: DA</td>
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<td>TRANSFER: UC, CSU</td>
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<tr>
<td>PE-059</td>
<td>Flow Yoga</td>
<td>108</td>
<td>2</td>
<td>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. May not be repeated. SC</td>
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<tr>
<td></td>
<td>LMC: DA</td>
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<td>TRANSFER: UC, CSU</td>
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<tr>
<td>PE-067</td>
<td>Introduction to Sports Medicine &amp; Athletic Training</td>
<td>36</td>
<td>3</td>
<td>This 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</td>
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<td></td>
<td>LMC: DA</td>
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<td></td>
<td>TRANSFER: UC, CSU</td>
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<tr>
<td>PE-098</td>
<td>Independent Study in Physical Education</td>
<td></td>
<td></td>
<td>Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. SC</td>
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<tr>
<td></td>
<td>LMC: Independent study courses may be DA or transferable depending on specific course. See your counselor.</td>
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<td>TRANSFER: Independent study courses may be DA or transferable depending on specific course. See your counselor.</td>
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<tr>
<td>PE-100</td>
<td>Introduction to Kinesiology</td>
<td>54</td>
<td>3</td>
<td>Eligibility for ENGL-090</td>
</tr>
<tr>
<td></td>
<td>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</td>
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<td></td>
<td>LMC: DA</td>
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<td>TRANSFER: UC, CSU</td>
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<tr>
<td>PE-105</td>
<td>CPR/First Aid</td>
<td>54</td>
<td>3</td>
<td>This course involves the theory and detailed demonstration of the first aid care of the injured commonly seen with the Kinesiology major. This course is also geared toward evaluating and treating the physically active since kinesiology is the scientific study of body movement. The student will learn to assess a victim's condition and incorporate and ad-</td>
</tr>
</tbody>
</table>
minister proper care and treatment. Standard first aid, CPR, and AED certification will be granted upon successful completion of requirements. A mandatory material fee of $30.00 (CPR mask and certification card) is required. May not be repeated. SC

LMC: DA
TRANSFER: CSU

PE-170 Occupational Work Experience Education in Physical Education

TOTAL HOURS: 60-300
UNITS: 1-4
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

TOTAL HOURS: 60-300
UNITS: 1-4
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.
Physics

DEGREE—Associate in Science for Transfer

Physics

The Associate in Science in Physics for Transfer Degree at Los Medanos College prepares students to transfer into a curriculum at a 4 year institution to pursue a baccalaureate degree in physics. This major will introduce students to many areas of study including engineering, physics, chemistry, astronomy, geology, and certain specialized majors such as architecture.

To achieve the Associate in Science in Physics for Transfer from Los Medanos College students must (1) complete the physics degree requirements; (2) fulfill CSU-General Education requirements; or IGETC (3) complete 60 college transferrable units; and (4) obtain a minimum grade point average of 2.0. Associate degrees for transfer also require that students must earn a C or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is not an acceptable grade for courses in the major.

REQUIRED COURSES: UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
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<tbody>
<tr>
<td>PHYS-040</td>
<td>Physics for Scientists and Engineers I</td>
<td>4</td>
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<tr>
<td>PHYS-041</td>
<td>Physics for Scientists and Engineers II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS-042</td>
<td>Physics for Scientists and Engineers III</td>
<td>4</td>
</tr>
<tr>
<td>MATH-050</td>
<td>Calculus and Analytic Geometry I</td>
<td>4</td>
</tr>
<tr>
<td>MATH-060</td>
<td>Calculus and Analytic Geometry II</td>
<td>4</td>
</tr>
<tr>
<td>MATH-070</td>
<td>Calculus and Analytic Geometry III</td>
<td>4</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR THE MAJOR 24

TOTAL UNITS FOR THE DEGREE 60

8 units may double count toward the 24 unit major preparation and the CSU GE pattern. The major requires 60 total units; double counting units does not lower the required unit count for the degree. The balance of double counted units would be made up with CSU or IGETC transferable elective classes. If you are double counting units between the major and the CSU GE or IGETC pattern, you must take an additional 8 elective units to reach the 60-unit requirement for the Associate in Science in Physics for Transfer. See a counselor or department faculty for more information on suggested electives.

Program Student Learning Outcomes

1. Explain both the concerns and the main ideas of the major subfields of physics (including Mechanics, Waves and Optics, Electromagnetism, Thermodynamics and Statistical Physics, Quantum Mechanics, and other topics of Modern Physics).
2. Apply critical thinking skills to solve physics problems using theoretical, experimental, and computational techniques.
3. Explain how the ideas of physics apply to everyday situations encountered by individuals (e.g. How a heat engine works.) as well as issues facing society (e.g. How does global warming occur?).
4. Show how important physics ideas are represented, derived, and connected to each other through the language of mathematics.
5. Perform both qualitative and quantitative reasoning, along with knowledge of the relative magnitudes of physical quantities, to estimate the magnitude of certain effects upon the situation under study.
6. Design and perform simple experiments, interpret the results, and give estimates of uncertainties.
7. Synthesize multiple ideas of physics to solve problems.
8. Apply the ideas of physics to astronomy, chemistry, medicine, engineering and/or other disciplines.

COURSE DESCRIPTIONS

PHYS-015 Introduction to Physics

TOTAL HOURS LECTURE: 54
TOTAL HOURS LAB: 54
UNITS: 4
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: Natural Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area B1, B3; IGETC Area 5A

PHYS-035 College Physics I

TOTAL HOURS LECTURE: 54
TOTAL HOURS LAB: 72
UNITS: 4
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**

- TOTAL HOURS LECTURE: 54
- TOTAL HOURS LAB: 72
- UNITS: 4

**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

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**PHYS-037  General College Physics Calculus Supplement I**

- TOTAL HOURS LECTURE: 9
- UNITS: .5

**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:** UC, CSU

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**PHYS-038  General College Physics Calculus Supplement II**

- TOTAL HOURS LECTURE: 9
- UNITS: .5

**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:** UC, CSU

---

**PHYS-040  Physics for Scientists and Engineers I**

- TOTAL HOURS LECTURE: 54
- TOTAL HOURS LAB: 72
- UNITS: 4

**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

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**PHYS-041  Physics for Scientists and Engineers II**

- TOTAL HOURS LECTURE: 54
- TOTAL HOURS LAB: 72
- UNITS: 4

**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

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**PHYS-042  Physics for Scientists and Engineers III**

- TOTAL HOURS LECTURE: 54
- TOTAL HOURS LAB: 72
- UNITS: 4

**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

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**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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. 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.

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**PHYS-900s  Selected Topics in Physics**

DA varies with course content.
Political Science

COURSE DESCRIPTIONS

POLSC-010 Introduction to American Government: Institutions and Ideas

TOTAL HOURS LECTURE: 54
UNITS: 3
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 American History and Institutions CSU transfer requirement. May not be repeated. SC

LMC: GE: Social and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area D8; IGETC Area 4H

POLSC-020 Introduction to Politics: Institutions and Ideals

TOTAL HOURS LECTURE: 54
UNITS: 3
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 transfer requirement. May not be repeated. SC

LMC: GE: Social and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area D8; IGETC Area 4H

POLSC-033 A History of Political Thought: The Problem Of Democracy

TOTAL HOURS LECTURE: 54
UNITS: 3
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, includ-
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 35 units of coursework listed below as well as the General Education 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 35 units of coursework listed below. Consult a Los Medanos College counselor to develop your education plan.

RECOMMENDED COURSES: PROGRAM ENTRY

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH-025</td>
<td>Elementary Algebra</td>
<td>5</td>
</tr>
<tr>
<td>ENGL-090</td>
<td>Integrated Reading, Writing, and Critical Thinking</td>
<td>5</td>
</tr>
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</table>

REQUIRED COURSES:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTEC-007</td>
<td>Industrial Technology Career Skills</td>
<td>1</td>
</tr>
<tr>
<td>PTEC-010</td>
<td>Introduction to Process Technology</td>
<td>3</td>
</tr>
<tr>
<td>PTEC-012</td>
<td>Petrochemical Safety, Health and Environment</td>
<td>1</td>
</tr>
<tr>
<td>PTEC-024</td>
<td>Process Instrumentation</td>
<td>3</td>
</tr>
<tr>
<td>PTEC-025</td>
<td>Process Technology I – Equipment</td>
<td>3</td>
</tr>
<tr>
<td>PTEC-027</td>
<td>Applied Instrumentation</td>
<td>1</td>
</tr>
<tr>
<td>PTEC-035</td>
<td>Process Technology II – Systems</td>
<td>3</td>
</tr>
<tr>
<td>PTEC-044</td>
<td>Petrochemical Simulation Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>PTEC-045</td>
<td>Process Technology III – Operations</td>
<td>3</td>
</tr>
<tr>
<td>PTEC-048</td>
<td>Process Trouble Shooting</td>
<td>3</td>
</tr>
<tr>
<td>PTEC-060</td>
<td>Industrial Technology Employment Preparation</td>
<td>1</td>
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<tr>
<td>MATH-030*</td>
<td>Intermediate Algebra</td>
<td>4</td>
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<tr>
<td>CHEM-006</td>
<td>Introduction to Inorganic and Physical Chemistry</td>
<td>4</td>
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<tr>
<td>CHEM-007</td>
<td>Introduction General, Organic and Biochemistry</td>
<td>4</td>
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<tr>
<td>PHYS-015**</td>
<td>Introduction to Physics</td>
<td>4</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR THE MAJOR 35

TOTAL UNITS FOR THE DEGREE 60

TOTAL UNITS FOR THIS CERTIFICATE 35

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

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

Program Student 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.

COURSE DESCRIPTIONS

PTEC-004 Process Technology (PTEC) Career Exploration

TOTAL HOURS LECTURE: 18
TOTAL UNITS: 1

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
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Total Hours Lecture</th>
<th>Total Hours Lab</th>
<th>Units</th>
<th>Advisory</th>
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<tr>
<td>PTEC-007</td>
<td>Industrial Technology Career Skills</td>
<td>18</td>
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<td>1</td>
<td>Eligibility for ENGL-090</td>
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<tr>
<td></td>
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<td>This highly interactive course gives</td>
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<td>students awareness and knowhow to</td>
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<td>succeed in the industrial technology</td>
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<td>environment. The student will learn</td>
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<td>about personal and interpersonal</td>
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<td>interactions including self motivation,</td>
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<td>communication, teamwork, work/life</td>
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<td>balance, shift operations behavior,</td>
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<td>personal vision, confidence, initiative,</td>
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<td>attitude, personal appearance and</td>
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<td>positive behavior. The student will</td>
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<td>learn about working in the industrial</td>
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<td>technology environment and acquire</td>
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<td>these skills through a series of</td>
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<td>interactions with the instructor and</td>
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<td>other students utilizing a variety of</td>
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<td>learning media. May not be repeated. SC</td>
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<td>PTEC-010</td>
<td>Introduction to Process Technology</td>
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<td>Eligibility for ENGL-100</td>
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<td>This introductory course will provide</td>
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<td>a clear overview of everyday life in</td>
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<td>the process technology industry. The</td>
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<td>student will learn about and experience</td>
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<td>first hand the variety of equipment</td>
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<td>used in typical processes and see how</td>
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<td>important safety and environmental</td>
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<td>considerations are in petrochemical</td>
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<td>operations. The class includes labs and</td>
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<td>field trips to typical chemical and</td>
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<td>petroleum manufacturing plants. The</td>
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<td>student is expected to climb ladders</td>
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<td>to the top of processing units, wear</td>
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<td>and carry safety equipment, and work</td>
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<td>in confined spaces. May not be repeated.</td>
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<td>LMC: DA</td>
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<td>SC</td>
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<tr>
<td>PTEC-012</td>
<td>Petrochemical Safety, Health, and Environment</td>
<td>18</td>
<td></td>
<td>1</td>
<td>PTEC-010; eligibility for ENGL-100</td>
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<td>This course provides an in-depth view</td>
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<td>of how important safety and environmental</td>
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<td>considerations are in the petrochemical</td>
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<td>industry. Covers the various government</td>
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<td>regulatory groups that oversee this</td>
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<td>industry and explains why the use of</td>
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<td>planning, protection, and preventative</td>
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<td>procedures enable the petrochemical</td>
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<td>industries to provide occupations that</td>
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<td></td>
<td></td>
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<td>are interesting, rewarding and safe.</td>
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<td>May not be repeated. SC</td>
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<tr>
<td>PTEC-024</td>
<td>Process Instrumentation</td>
<td>45</td>
<td>27</td>
<td>3</td>
<td>PHYS-015, PTEC-010; eligibility for</td>
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<td>ENGL-100</td>
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<td></td>
<td>This class puts together all of the</td>
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<td>typical components of a “control loop”</td>
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<td>and explains how an instrument control</td>
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<td></td>
<td></td>
<td>system works. The student will also</td>
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<td>learn about the instruments that</td>
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<td>measure and control process variables</td>
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<td>such as pressure, temperature, and flow,</td>
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<td>and will gain an appreciation of this</td>
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<td>critical and applicable knowledge. The</td>
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<td>student will also see how instruments</td>
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<td>do most of the work in a typical</td>
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<td>petrochemical process. May not be</td>
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<td>repeated. SC</td>
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<td>PTEC-025</td>
<td>Process Technology I - Equipment</td>
<td>54</td>
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<td>3</td>
<td>PHYS-015; MATH-030; PTEC-010, 012;</td>
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<td>eligibility for ENGL-100</td>
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<td>The student will learn about equipment</td>
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<td>such as heat exchangers, distillation</td>
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<td>towers, reactors, valves, and pumps. Not</td>
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<td>only will you acquire essential skills</td>
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<td>that will help you pursue a career in</td>
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<td>the petrochemical industry, but the next</td>
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<td>time you drive past a chemical plant,</td>
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<td>you will be able to explain to your</td>
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<td>family or friends what is really going</td>
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<td>on. May not be repeated. SC</td>
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<td>PTEC-027</td>
<td>Applied Instrument Analysis</td>
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<td>27</td>
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<td>CHEM-006 or CHEM-007</td>
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<td>Prerequisite: CHEM-006 or CHEM-007</td>
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<td>Co-requisite: CHEM-006 or CHEM-007</td>
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<td>Advisory: PTEC-010; eligibility for</td>
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<td>ENGL-100</td>
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<td>An introduction to analytical instruments</td>
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<td>used in typical laboratories, such as</td>
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<td>gas chromatographs and chemical titrating</td>
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<td>instruments. Covers various methods of</td>
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<td>sampling and analyzing to determine the</td>
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<td>composition of typical liquids, solids,</td>
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<td>and gases used in the petrochemical</td>
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<td>industry. May not be repeated. SC</td>
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<td>Course Code</td>
<td>Course Title</td>
<td>Hours and Units</td>
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<td>Advisory</td>
<td>Description</td>
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<td>PTEC-035</td>
<td>Process Technology II - Systems</td>
<td>Lecture: 54</td>
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<td>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</td>
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<td></td>
<td>Lab: 0</td>
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<td>Units: 3</td>
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<td>LMC: DA</td>
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<td>Transfer: CSU</td>
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<td>PTEC-044</td>
<td>Petrochemical Simulation Laboratory</td>
<td>Lab: 54</td>
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<td></td>
<td>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 not be repeated. P/NP</td>
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<td>LMC: DA</td>
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<td>PTEC-045</td>
<td>Process Technology III - Operations</td>
<td>Lecture: 45</td>
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<td>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</td>
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<td>Lab: 27</td>
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<td>Units: 3</td>
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<td>Transfer: CSU</td>
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<td>PTEC-048</td>
<td>Process Troubleshooting</td>
<td>Lecture: 54</td>
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<td>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</td>
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<td>Lab: 0</td>
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<td>PTEC-060</td>
<td>Industrial Technology Career Preparation</td>
<td>Lecture: 18</td>
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<td>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</td>
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<td></td>
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<td>Lab: 0</td>
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<td>Transfer: CSU</td>
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<tr>
<td>PTEC-098</td>
<td>Independent Study in Process Technology</td>
<td>Lab: 222</td>
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<td>Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. SC</td>
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<td>Units: 8</td>
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<td>LMC: Independent study courses may be DA or transferable depending on specific course. See your counselor.</td>
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<td>Transfer: CSU</td>
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<td>TRANSFER: Independent study courses may be DA or transferable depending on specific course. See your counselor.</td>
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PTEC-170  Occupational Work Experience
Education in Process Technology

**TOTAL HOURS:** 60-300
**UNITS:** 1-4

**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

**TOTAL HOURS:** 60-300
**UNITS:** 1-4

**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.

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**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. The 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. Associate degrees for transfer also require that students must earn a C or better in all courses required for the major or area of emphasis. A “P” (Pass) grade is not an acceptable grade for courses in the major.

**REQUIRED CORE COURSES:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH-034</td>
<td>Introduction to Statistics</td>
<td>4</td>
</tr>
<tr>
<td>PSYCH-011</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH-017</td>
<td>Introduction to Research Methods in Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

**LIST A:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOSC-010</td>
<td>Introduction to Biology</td>
<td>4</td>
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**LIST B:**

<table>
<thead>
<tr>
<th>Course Code</th>
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</thead>
<tbody>
<tr>
<td>SOCIO-015</td>
<td>Introduction to Sociology</td>
<td>3</td>
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**LIST C:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYCH-010</td>
<td>Individual and Social Processes</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR THE MAJOR**

<table>
<thead>
<tr>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>20</td>
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</table>

**TOTAL UNITS FOR THE DEGREE**

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
</tr>
</tbody>
</table>
Program Student Learning Outcomes

1. Utilize critical thinking skills to analyze, evaluate and make decisions regarding current issues in psychology.
2. Recognize the complexity of social, cultural and global diversity.
3. Demonstrate understanding of the major theoretical perspectives, concepts and research findings in the field of psychology.
4. Demonstrate an understanding of biological processes underlying behavior and experience.
5. Demonstrate knowledge of the principles of research and the ethical considerations in conducting research.

COURSE DESCRIPTIONS

PSYCH-010 Individual and Social Processes
TOTAL HOURS LECTURE: 54
UNITS: 3
Advisory: Eligibility for ENGL-100

This psychology course is designed to study 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 of one's self-concept. May not be repeated. SC

LMC: GE: Social and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area D9; IGETC Area 4I

PSYCH-011 General Psychology
TOTAL HOURS LECTURE: 54
UNITS: 3
Advisory: Eligibility for ENGL-100

This introduction to psychology serves as a 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, current controversial issues and views for understanding our present social and world conditions are discussed. 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 and development of this discipline. May not be repeated. (C-ID PSY 110) SC

LMC: GE: Social and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area D9; IGETC Area 4I

PSYCH-014 Psychology of Human Sexuality
TOTAL HOURS LECTURE: 54
UNITS: 3
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 Methods in Psychology
TOTAL HOURS LECTURE: 54
UNITS: 3
Prerequisite: PSYCH-011; MATH-034
Advisory: Eligibility for ENGL-100

This course is an introduction to scientific methodology in psychology and other behavioral sciences. Emphasis is placed on descriptive, experimental, and applied research. Topics include hypothesis formation, review of professional literature, research design, collection of data, statistical analysis, and scientific report writing. May not be repeated. (C-ID PSY 200) 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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. 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

**TOTAL HOURS:** 60-300  
**UNITS:** 1-4  
**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

**TOTAL HOURS:** 60-300  
**UNITS:** 1-4  
**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.

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### Real Estate

#### DEGREE—Associate of Science

**Real Estate**

#### CERTIFICATE OF ACHIEVEMENT

**Real Estate**

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.

For the Associate of Arts Degree in Real Estate, complete 27 units of coursework listed below as well as the General Education requirements. Consult a Los Medanos College counselor to develop your education plan.

For the Certificate of Achievement in Real Estate, complete 27 units of coursework listed below. Consult a Los Medanos College counselor to develop your education plan.

<table>
<thead>
<tr>
<th>REQUIRED COURSES:</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>REAL-005*/****</td>
<td>3</td>
</tr>
<tr>
<td>REAL-020*/**</td>
<td>3</td>
</tr>
<tr>
<td>REAL-025**/***</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL UNITS</strong></td>
<td>9</td>
</tr>
</tbody>
</table>

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 FOR THE MAJOR**  27

**TOTAL UNITS FOR THE DEGREE**  60

**TOTAL UNITS FOR THIS CERTIFICATE**  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

The Real Estate courses prepare the student to complete the California State Broker’s License Examination.
Program Student Learning Outcomes

1. Demonstrate the knowledge and skills necessary for an entry level position in real estate and/or pass the state licensing exam.

2. Explain the functions of real estate markets, real estate practices, real estate institutions, and recommend choices for common real estate situations.

3. Demonstrate how to calculate the time value of money and evaluate various financing alternatives for real estate investment strategies.

COURSE DESCRIPTIONS

REAL-005 Real Estate Principles

TOTAL HOURS LECTURE: 54
UNITS: 3
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

TOTAL HOURS LECTURE: 54
UNITS: 3
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

TOTAL HOURS LECTURE: 54
UNITS: 3
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 a 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 load 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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. 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

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

TOTAL HOURS: 60-300
UNITS: 1-4

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

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.

ASSOCIATE OF ARTS DEGREE
RECORDING ARTS

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

REQUIRED COURSES:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RA-010</td>
<td>Recording Arts I</td>
<td>3</td>
</tr>
<tr>
<td>RA-012</td>
<td>Sound Reinforcement</td>
<td>3</td>
</tr>
<tr>
<td>RA-015</td>
<td>Music Fundamentals for Audio Professionals</td>
<td>3</td>
</tr>
<tr>
<td>RA-020</td>
<td>Recording Arts II</td>
<td>3</td>
</tr>
<tr>
<td>RA-021</td>
<td>The Role of the Producer</td>
<td>2</td>
</tr>
<tr>
<td>RA-025</td>
<td>Basic Tracking Sessions</td>
<td>3</td>
</tr>
<tr>
<td>RA-030</td>
<td>Recording Arts III</td>
<td>3</td>
</tr>
<tr>
<td>RA-032</td>
<td>Recording Arts Workshop</td>
<td>(min) 1</td>
</tr>
<tr>
<td>RA-035</td>
<td>Protools Production &amp; Editing</td>
<td>3</td>
</tr>
<tr>
<td>RA-040</td>
<td>Recording Arts IV</td>
<td>3</td>
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</tbody>
</table>

TOTAL UNITS 27

AND SELECT A MINIMUM OF 5 UNITS FROM:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ETEC-010</td>
<td>Direct Current Circuits</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC-015</td>
<td>Basic Music</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC-089</td>
<td>Music and Recording Industry Business</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC-093</td>
<td>Studio Music Production I</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC-094</td>
<td>Studio Music Production II</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC-095</td>
<td>Studio Music Production III</td>
<td>2</td>
</tr>
<tr>
<td>RA-033</td>
<td>Summer Recording Arts Workshop</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>Electives approved by Recording Arts Department Chair</td>
<td></td>
</tr>
</tbody>
</table>

TOTAL UNITS 5

TOTAL UNITS FOR THE MAJOR 32

TOTAL UNITS FOR THE DEGREE 60
Program Student 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.

CERTIFICATE OF ACHIEVEMENT
RECORDING ARTS

For the Certificate of Achievement in Recording Arts, complete 27 units of coursework listed below. Consult a Los Medanos College counselor to develop your education plan.

REQUIRED COURSES: FIRST SEMESTER

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>RA-010</td>
<td>Introduction to Recording Arts</td>
<td>3</td>
</tr>
<tr>
<td>RA-012</td>
<td>Sound Reinforcement</td>
<td>3</td>
</tr>
<tr>
<td>RA-015</td>
<td>Music Fundamentals for Audio Professionals</td>
<td>3</td>
</tr>
<tr>
<td>RA-020</td>
<td>Recording Arts II</td>
<td>3</td>
</tr>
<tr>
<td>RA-021</td>
<td>The Role of the Producer</td>
<td>2</td>
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</table>

REQUIRED COURSES: SECOND SEMESTER

<table>
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<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>RA-025</td>
<td>Basic Tracking Sessions</td>
<td>3</td>
</tr>
<tr>
<td>RA-030</td>
<td>Recording Arts III</td>
<td>3</td>
</tr>
<tr>
<td>RA-032</td>
<td>Recording Arts Workshop</td>
<td>1</td>
</tr>
<tr>
<td>RA-035</td>
<td>Protools Production &amp; Editing</td>
<td>3</td>
</tr>
<tr>
<td>RA-040</td>
<td>Recording Arts IV</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS REQUIRED FOR THIS CERTIFICATE: 27

Program Student 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.

COURSE DESCRIPTIONS

RA-010 Introduction to Recording Arts

TOTAL HOURS LECTURE: 36
TOTAL HOURS LAB: 72
UNITS: 3

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 not be repeated. LR

LMC: DA
TRANSFER: CSU

RA-012 Sound Reinforcement

TOTAL HOURS LECTURE: 36
TOTAL HOURS LAB: 54
UNITS: 3

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-scenes look at how this information is used by concert audio engineers. Meets the LMC Recording Arts Associate Degree and Certificate requirements. May not be repeated. LR

LMC: DA
TRANSFER: CSU

RA-015 Music Fundamentals for Audio Professionals

TOTAL HOURS LECTURE: 54
UNITS: 3

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

TOTAL HOURS LECTURE: 36
TOTAL HOURS LAB: 72
UNITS: 3

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 not be repeated. LR

LMC: DA
TRANSFER: CSU
RA-021  The Role of the Producer (Basic Session Producing)

TOTAL HOURS LECTURE: 36  
TOTAL HOURS LAB: 36  
UNITS: 2  
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 not be repeated. LR

LMC: DA  
TRANSFER: CSU

RA-025  Basic Tracking Sessions

TOTAL HOURS LECTURE: 36  
TOTAL HOURS LAB: 54  
UNITS: 3  
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 not be repeated. SC

LMC: DA  
TRANSFER: CSU

RA-030  Recording Arts III

TOTAL HOURS LECTURE: 36  
TOTAL HOURS LAB: 72  
UNITS: 3  
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 Tools|HD Accel 3 digital recording system. May not be repeated. LR

LMC: DA  
TRANSFER: CSU

RA-032  Recording Arts Workshop

TOTAL HOURS LAB: 54  
UNITS: 1  
Prerequisite: 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, mixdowns, 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 not be repeated. LR

LMC: DA  
TRANSFER: CSU

RA-033  Summer Recording Workshop

TOTAL HOURS LECTURE: 36  
TOTAL HOURS LAB: 36  
UNITS: 2.5  
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 not be repeated. SC

LMC: DA  
TRANSFER: CSU
Program Requirements, Courses and Learning Outcomes

RA-035  ProTools Production and Editing

<table>
<thead>
<tr>
<th>TOTAL HOURS LECTURE:</th>
<th>54</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNITS:</td>
<td>3</td>
</tr>
</tbody>
</table>

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

| TOTAL HOURS LECTURE: | 36 |
| TOTAL HOURS LAB:     | 72 |
| UNITS:               | 3  |

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 not be repeated. 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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. 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

<table>
<thead>
<tr>
<th>TOTAL HOURS:</th>
<th>60-300</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNITS:</td>
<td>1-4</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>TOTAL HOURS:</th>
<th>60-300</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNITS:</td>
<td>1-4</td>
</tr>
</tbody>
</table>

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

COLLEGE SKILLS CERTIFICATE
American Sign Language

AMERICAN SIGN LANGUAGE

Job Opportunities
A certificate in ASL may be completed in four or five semesters with possible career opportunities to work with deaf children in home or school settings, interact with members of the Deaf Community in social and work related situations or provide communicative support in schools, hospital settings, and in service related areas.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIGN-068</td>
<td>American Sign Language IV</td>
<td>3</td>
</tr>
<tr>
<td>SIGN-072</td>
<td>Deaf Culture</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE</td>
<td>6</td>
</tr>
</tbody>
</table>

Program Student Learning Outcomes
1. Communicate orally and in writing in Spanish/American Sign Language in real life situations with native and non-native speakers.
2. Read and comprehend Spanish/American Sign Language at levels commensurate with those of students seeking a degree in Spanish/American Sign Language.
3. Differentiate the Chinese/Filipino/Italian/French/Hispanic/American Sign Language culture(s), through the study of their history, literature, arts, contributions of prominent figures, and community interaction with native speakers.

COURSE DESCRIPTIONS

SIGN-050 Elementary American Sign Language I

<table>
<thead>
<tr>
<th>TOTAL HOURS LECTURE: 90</th>
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<tr>
<td>UNITS: 5</td>
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<tr>
<td>ADVISORY: Eligibility for ENGL-090</td>
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</tbody>
</table>

An intensive visual/finger/hand/ signing approach to understanding and communicating in American Sign Language as it is used in the United States, and other English speaking cultures. The content used in learning the language is drawn from the rich deaf and hearing cultures of the United States. May not be repeated. SC

LMC: DA
TRANSFER: CSU

SIGN-065 American Sign Language I

<table>
<thead>
<tr>
<th>TOTAL HOURS LECTURE: 54</th>
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<tbody>
<tr>
<td>UNITS: 3</td>
</tr>
<tr>
<td>Advisory: Eligibility for ENGL-090</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>TOTAL HOURS LECTURE: 54</th>
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<tbody>
<tr>
<td>UNITS: 3</td>
</tr>
<tr>
<td>Prerequisite: SIGN-065</td>
</tr>
<tr>
<td>Advisory: Eligibility for ENGL-090</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>TOTAL HOURS LECTURE: 54</th>
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<tbody>
<tr>
<td>UNITS: 3</td>
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<tr>
<td>Prerequisite: SIGN-066</td>
</tr>
<tr>
<td>Advisory: Eligibility for ENGL-090</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>TOTAL HOURS LECTURE:</th>
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<tbody>
<tr>
<td>UNITS:</td>
<td>3</td>
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</table>

**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

<table>
<thead>
<tr>
<th>TOTAL HOURS LECTURE:</th>
<th>9</th>
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<tbody>
<tr>
<td>TOTAL HOURS LAB:</td>
<td>9</td>
</tr>
<tr>
<td>UNITS:</td>
<td>.5</td>
</tr>
</tbody>
</table>

**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. May not be repeated.  SC

**LMC:** DA  
**TRANSFER:** CSU

### SIGN-071 Fingerspelling II

<table>
<thead>
<tr>
<th>TOTAL HOURS LECTURE:</th>
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<tbody>
<tr>
<td>TOTAL HOURS LAB:</td>
<td>9</td>
</tr>
<tr>
<td>UNITS:</td>
<td>.5</td>
</tr>
</tbody>
</table>

**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. May not be repeated.  SC

**LMC:** DA  
**TRANSFER:** CSU

### SIGN-072 Deaf Culture

<table>
<thead>
<tr>
<th>TOTAL HOURS LECTURE:</th>
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<tr>
<td>UNITS:</td>
<td>3</td>
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</table>

**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-078 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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated.  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-090s Selected Topics in Sign Language

DA varies with course content.
SOCSC-045  Issues Facing African Americans

TOTAL HOURS LECTURE: 54
UNITS: 3
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:Ethnic/Multicultural Studies; Social and Behavioral Sciences; 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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. 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-135  Introduction to Lesbian, Gay, Bisexual, Transgender (LGBT) Studies

TOTAL HOURS LECTURE: 54
UNITS: 3
Advisory: Eligibility for ENGL-100
(same as ENGL-135)

Lesbian, Gay, Bisexual, and Transgender (LGBT) Studies takes an interdisciplinary, multicultural approach to examining the historical, political, social and cultural issues that have affected LGBT people throughout time and across the world. Students will study primary and secondary texts by and about LGBT people from a wide variety of cultures, and gain a greater understanding of how matters of sexual orientation and gender identity affect not only the LGBT community, but everyone in society. Students will have an opportunity for an independent project on a subject of their own choosing. May not be repeated. SC
LMC: GE: Ethnic/Multicultural Studies; DA
TRANSFER: CSU

SOCSC-170  Occupational Work Experience Education in Social Science

TOTAL HOURS: 60-300
UNITS: 1-4
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

TOTAL HOURS: 60-300
UNITS: 1-4
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

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. Associate degrees for transfer also require that students must earn a C or better in all courses required for the major or area of emphasis. A “P” (Pass) grade is not an acceptable grade for courses in the major.

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. Associate degrees for transfer also require that students must earn a C or better in all courses required for the major or area of emphasis. A “P” (Pass) grade is not an acceptable grade for courses in the major.

Program Student Learning Outcomes

1. Demonstrate an understanding of the major theoretical perspectives, concepts and research findings in the field of sociology.
2. Utilize critical thinking skills to analyze, evaluate and make decisions regarding current issues studied in the field of sociology.
3. Recognize the diversity of social, cultural and global perspectives.
4. Demonstrate knowledge of the principles of research and the ethical considerations involved in conducting research.
5. Understand how theoretical perspectives can explain both the causes and the solutions to social problems.

COURSE DESCRIPTIONS

SOCIO-012 Introduction to Marriage and Family
TOTAL HOURS LECTURE: 54
UNITS: 3
Advisory: Eligibility for ENGL-090
This course is an analysis of the family and how socio-cultural and economic forces have shaped the family. This course is designed to help students better understand family system dynamics and appreciate the variety and diversity among families today. Students will be introduced to a variety of topics including: traditional family and changing family forms, gender roles and socialization, communication patterns, singlehood, cohabitation and other non-marital options, family violence, crises and change, and the future of the family. May not be repeated. SC
LMC: DA
TRANSFER: CSU Gen. Ed. Area E

SOCIO-015 Introduction to Sociology
TOTAL HOURS LECTURE: 54
UNITS: 3
Advisory: Eligibility for ENGL-100
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. Comprehensive reading and writing exercises and assignments will provide students an opportunity to develop critical ways of looking at sociological phenomena. An examination of the various modes of inquiry used by behavioral scientists will encourage students 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: Social and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area D10; IGETC Area 4J

SOCIO-016 Introduction to Social Problems
TOTAL HOURS LECTURE: 54
UNITS: 3
Advisory: Eligibility for ENGL-100
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 and problems, such as crime, violence, drug use, racism, sexism, social change, wealth and poverty, education and health issues, 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: Social and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area D10; IGETC Area 4J
**SOCIO-017  Introduction to Research Methods**

**TOTAL HOURS LECTURE:** 54  
**UNITS:** 3  
**Prerequisite:** SOCIO-015  
**Advisory:** Eligibility for ENGL-100, MATH-034

This course examines the fundamental elements of empirical research and the ways in which sociologists think critically about research projects. Emphasis will be placed on the nature of theory, hypotheses, variables, computer applications, and the ethics of research. Application of qualitative and quantitative analytic tools including logic and research designs, such as survey, observational, experimental, and case study research designs will be examined. May not be repeated. SC

**LMC:** DA  
**TRANSFER:** UC, CSU Gen. Ed. Area D9

**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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. 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.

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**Spanish**

**COLLEGE SKILLS CERTIFICATE  
Spanish**

**COLLEGE SKILLS CERTIFICATE  
SPANISH**

**Job Opportunities**

A certificate in Spanish may be completed in four semesters by taking the four-level Spanish 50-53 sequence. Previous knowledge or appropriate WEB CAPE placement may allow certificate completion in as little as one semester of Intermediate Level II, Spanish 53. Possible career opportunities are varied and include, but are not limited to volunteer work or work as a tutor for students learning Spanish. College Skills Certificate earners in Spanish may work with or for Spanish speaking individuals or groups within the community in educational, religious, and service related areas such as first responder emergency providers, fire, and hospital employees. They may work within the local bilingual workforce. In addition they may work in many service related fields and earn higher wages because they are bilingual in both oral and written skills and improve communication.

**REQUISITED COURSES:**

<table>
<thead>
<tr>
<th>Courses</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN-053</td>
<td>5</td>
</tr>
<tr>
<td>TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE</td>
<td>5</td>
</tr>
</tbody>
</table>

**Program Student Learning Outcomes**

1. Communicate orally and in writing in Spanish/American Sign Language in real life situations with native and non-native speakers.
2. Read and comprehend Spanish/American Sign Language at levels commensurate with those of students seeking a degree in Spanish/American Sign Language.
3. Differentiate the Chinese/Filipino/Italian/French/Hispanic/American Sign Language culture(s), through the study of their history, literature, arts, contributions of prominent figures, and community interaction with native speakers.

**COURSE DESCRIPTIONS**

**SPAN-044  Conversational Spanish I**

**TOTAL HOURS LECTURE:** 54  
**UNITS:** 3  
**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

TOTAL HOURS LECTURE: 54
UNITS: 3
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

TOTAL HOURS LECTURE: 54
UNITS: 3
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

TOTAL HOURS LECTURE: 90
UNITS: 5
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, Afro-Caribbean and Latino cultures. SC

LMC: DA
TRANSFER: UC; CSU Gen. Ed. Area C2; IGETC Area 6

SPAN-051  Elementary Spanish II

TOTAL HOURS LECTURE: 90
UNITS: 5
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

TOTAL HOURS LECTURE: 90
UNITS: 5
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

TOTAL HOURS LECTURE: 90
UNITS: 5
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

TOTAL HOURS LECTURE: 54
UNITS: 3

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

TOTAL HOURS LECTURE: 54
UNITS: 3

Prerequisite: SPAN-052, or WEB CAPE Placement Score of 403 and above.

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-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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. 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

COURSE DESCRIPTIONS

See Communication Studies, page 126.
Travel Marketing

DEGREE—Associate of Science
Travel Marketing

CERTIFICATE OF ACHIEVEMENT
Travel Marketing

COLLEGE SKILLS CERTIFICATES
Travel Marketing
Home-Based Travel Specialist
Cruise Specialist

ASSOCIATE OF SCIENCE DEGREE AND CERTIFICATE OF ACHIEVEMENT
TRAVEL MARKETING

This 21-unit certificate provides a well-rounded education and includes a selection of courses designed to prepare students for placement in a position as a travel professional in the travel industry. Opportunities include employment as a full-service travel consultant in a travel agency or a travel specialist in the selected area of specialization. This certificate can be completed in two semesters.

In addition to the 21 units of courses in the Travel Marketing Certificate of Achievement, complete the Los Medanos College General Education requirements for an Associate of Science Degree in Travel Marketing. This degree can lead to placement in positions of greater responsibility in the travel industry. Consult a Los Medanos College counselor to develop your personal education plan.

REQUIRED COURSES: UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRAVL-072</td>
<td>Introduction to Travel</td>
<td>3</td>
</tr>
<tr>
<td>TRAVL-076</td>
<td>Travel Sales and Marketing</td>
<td>3</td>
</tr>
<tr>
<td>TRAVL-077</td>
<td>Customized Vacation Planning</td>
<td>2</td>
</tr>
<tr>
<td>TRAVL-095</td>
<td>Advanced Travel Concepts</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL UNITS</td>
<td></td>
<td>11</td>
</tr>
</tbody>
</table>

AND SELECT 3 UNITS OF DESTINATION SPECIALIST GEOGRAPHY COURSES FROM:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRAVL-074</td>
<td>North American Destination Specialist</td>
<td>3</td>
</tr>
<tr>
<td>TRAVL-075</td>
<td>Western Europe Destination Specialist</td>
<td>3</td>
</tr>
<tr>
<td>TRAVL-082</td>
<td>Hawaii Destination Specialist</td>
<td>1.5</td>
</tr>
<tr>
<td>TRAVL-084</td>
<td>Caribbean Destination Specialist</td>
<td>1.5</td>
</tr>
<tr>
<td>TRAVL-085</td>
<td>South Pacific Destination Specialist</td>
<td>1.5</td>
</tr>
<tr>
<td>TRAVL-087</td>
<td>Mexico Destination Specialist</td>
<td>1.5</td>
</tr>
<tr>
<td>TRAVL-096</td>
<td>Alaska Destination Specialist</td>
<td>1.5</td>
</tr>
<tr>
<td>TRAVL-101</td>
<td>Home-Based Travel – Is it for You?</td>
<td>.5</td>
</tr>
<tr>
<td>TRAVL-102</td>
<td>Establishing a Home-Based Travel Business</td>
<td>.5</td>
</tr>
<tr>
<td>TRAVL-103</td>
<td>Marketing and Promoting a Home-Based Travel Business</td>
<td>.5</td>
</tr>
<tr>
<td>TRAVL-104</td>
<td>Resources for the Home-Based Travel Professional</td>
<td>.5</td>
</tr>
<tr>
<td>TRAVL-105</td>
<td>Business and Financial Plans for Home-Based Travel</td>
<td>.5</td>
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<tr>
<td>TRAVL-106</td>
<td>Home-Based Travel and the Law</td>
<td>.5</td>
</tr>
<tr>
<td>TRAVL-170</td>
<td>Cooperative Education in Travel (Travel Internship)</td>
<td>1-2</td>
</tr>
<tr>
<td>TRAVL 900*</td>
<td>Selected Topics in Travel</td>
<td>.3 –3</td>
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</table>

TOTAL UNITS FOR THE MAJOR                                      21
TOTAL UNITS FOR THE DEGREE                                     60
TOTAL UNITS FOR THIS CERTIFICATE                                21

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

Program Student Learning Outcomes

1. Applying critical thinking to research, evaluate, analyze, and synthesize travel-related information.
2. Demonstrating excellent communication skills as well as soft skills in a sales and business environment.
3. Demonstrating knowledge of current technologies and applying technological skills necessary to succeed in the travel industry.
COLLEGE SKILLS CERTIFICATES

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.

<table>
<thead>
<tr>
<th>Required Courses:</th>
<th>Units</th>
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<tbody>
<tr>
<td>TRAVL-072</td>
<td>3</td>
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<tr>
<td>TRAVL-076</td>
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</tr>
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<tr>
<td><strong>Total Units</strong></td>
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AND SELECT A MINIMUM OF 3 ELECTIVE UNITS FROM:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>TRAVL-074</td>
<td>3</td>
</tr>
<tr>
<td>TRAVL-075</td>
<td>3</td>
</tr>
<tr>
<td>TRAVL-077</td>
<td>2</td>
</tr>
<tr>
<td>TRAVL-082</td>
<td>3</td>
</tr>
<tr>
<td>TRAVL-083</td>
<td>1.5</td>
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<tr>
<td>TRAVL-084</td>
<td>1.5</td>
</tr>
<tr>
<td>TRAVL-085</td>
<td>1.5</td>
</tr>
<tr>
<td>TRAVL-087</td>
<td>1.5</td>
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<tr>
<td>TRAVL-096</td>
<td>1.5</td>
</tr>
<tr>
<td>TRAVL-101</td>
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<tr>
<td>TRAVL-102</td>
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<tr>
<td>TRAVL-103</td>
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<tr>
<td>TRAVL-104</td>
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<td>TRAVL-105</td>
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<td>TRAVL-106</td>
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</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>9</strong></td>
</tr>
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</table>

Program Student Learning Outcomes
1. Applying critical thinking to research, evaluate, analyze, and synthesize travel-related information.
2. Demonstrating excellent communication skills as well as soft skills in a sales and business environment.
3. Demonstrating knowledge of current technologies and applying technological skills necessary to succeed in the travel industry.

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.

<table>
<thead>
<tr>
<th>Required Courses:</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>TRAVL-072</td>
<td>3</td>
</tr>
<tr>
<td>TRAVL-076</td>
<td>3</td>
</tr>
<tr>
<td>TRAVL-101</td>
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<tr>
<td>TRAVL-102</td>
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<td>TRAVL-103</td>
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<tr>
<td>TRAVL-104</td>
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<tr>
<td><strong>Total Units Required in College Skills Certificate</strong></td>
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AND SELECT A MINIMUM OF 5 ELECTIVE UNITS FROM:

<table>
<thead>
<tr>
<th>Course</th>
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</thead>
<tbody>
<tr>
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<tr>
<td>TRAVL-075</td>
<td>3</td>
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<tr>
<td>TRAVL-077</td>
<td>2</td>
</tr>
<tr>
<td>TRAVL-082</td>
<td>3</td>
</tr>
<tr>
<td>TRAVL-083</td>
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<tr>
<td>TRAVL-084</td>
<td>1.5</td>
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<tr>
<td>TRAVL-085</td>
<td>1.5</td>
</tr>
<tr>
<td>TRAVL-087</td>
<td>1.5</td>
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<tr>
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<td>1.5</td>
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<tr>
<td>TRAVL-101</td>
<td>0.5</td>
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<tr>
<td>TRAVL-102</td>
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<tr>
<td>TRAVL-103</td>
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</tr>
<tr>
<td>TRAVL-104</td>
<td>0.5</td>
</tr>
<tr>
<td>TRAVL-105</td>
<td>0.5</td>
</tr>
<tr>
<td>TRAVL-106</td>
<td>0.5</td>
</tr>
<tr>
<td>TRAVL-114</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>Total Units Required in College Skills Certificate</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

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

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.

<table>
<thead>
<tr>
<th>Required Courses:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRAVL-082</td>
<td>3</td>
</tr>
<tr>
<td>TRAVL-076</td>
<td>3</td>
</tr>
<tr>
<td>TRAVL-077</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Units Required in College Skills Certificate</strong></td>
<td><strong>8</strong></td>
</tr>
</tbody>
</table>
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.

**COURSE DESCRIPTIONS**

**TRAVL-072 Introduction to Travel**

TOTAL HOURS LECTURE: 54
UNITS: 3
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**

TOTAL HOURS LECTURE: 54
UNITS: 3
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**

TOTAL HOURS LECTURE: 54
UNITS: 3
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**

TOTAL HOURS LECTURE: 54
UNITS: 3
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**

TOTAL HOURS LECTURE: 36
UNITS: 2
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**

TOTAL HOURS LECTURE: 54
UNITS: 3
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

TOTAL HOURS LECTURE: 27
UNITS: 1.5

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 is placed 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

TOTAL HOURS LECTURE: 27
UNITS: 1.5

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

TOTAL HOURS LECTURE: 27
UNITS: 1.5

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

TOTAL HOURS LECTURE: 27
UNITS: 1.5

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

TOTAL HOURS LECTURE: 54
UNITS: 3

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

TOTAL HOURS LECTURE: 27
UNITS: 1.5

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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. 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.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Total Hours Lecture</th>
<th>Units</th>
<th>Advisory</th>
<th>Description</th>
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<tbody>
<tr>
<td>TRAVL-105</td>
<td>Business and Financial Plans for</td>
<td>9</td>
<td>5</td>
<td>Eligibility for ENGL-090</td>
<td>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</td>
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<tr>
<td></td>
<td>Home-Based Travel</td>
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<td>LMC: DA</td>
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<td>TRANSFER: CSU</td>
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<tr>
<td>TRAVL-106</td>
<td>Home-Based Travel and the Law</td>
<td>9</td>
<td>5</td>
<td>Eligibility for ENGL-090</td>
<td>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</td>
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<td>LMC: DA</td>
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<td>TRANSFER: CSU</td>
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<tr>
<td>TRAVL-114</td>
<td>Group Travel Management</td>
<td>27</td>
<td>1.5</td>
<td>Eligibility for ENGL-090</td>
<td>This course will introduce students to group travel and explore ways in which groups can enhance and grow a travel business. In this course students will explore the benefits of booking group travel and identify various types of groups and where to find them. This course will emphasize options for marketing and promoting group trips, incorporating current technologies and other strategies for building enthusiasm and interest. The course will include a discussion of the basic mechanics for booking group cruises and tours, as well as hotel stays and air travel. Basic customization of group trips will be covered along with legal considerations. Emphasis will be placed on practical application of knowledge and skills. May not be repeated. SC</td>
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<td>LMC: DA</td>
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<td>TRANSFER: CSU</td>
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<tr>
<td>TRAVL-130</td>
<td>Home Based Travel: Launching Your</td>
<td>18</td>
<td>1</td>
<td>ENGL-090</td>
<td>This course explores all the components of establishing a new business. The course will offer 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 types of travel agencies that will host a home-based travel business. May not be repeated. SC</td>
</tr>
<tr>
<td></td>
<td>Business</td>
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<td>LMC: DA</td>
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<td>TRANSFER: CSU</td>
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<tr>
<td>TRAVL-131</td>
<td>Home Based Travel: Success Factors</td>
<td>36</td>
<td>2</td>
<td>ENGL-090</td>
<td>Many people have difficulty running a successful travel business, because they lack a proper plan. This class will help students define their business goals and objectives, identify critical success factors, and start to create a formal business plan. Students will explore marketing options and determine which ones will be most effective given their goals and objectives. They will learn about the various resources available to travel professionals and will discuss the benefits of working with preferred suppliers. Legal responsibilities for the home-based travel professional will also be discussed. May not be repeated. SC</td>
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<td>LMC: DA</td>
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<td>TRANSFER: CSU</td>
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<tr>
<td>TRAVL-170</td>
<td>Occupational Work Experience</td>
<td>60-300</td>
<td>1-4</td>
<td>Approved online application</td>
<td>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</td>
</tr>
<tr>
<td></td>
<td>Education in Travel</td>
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<td></td>
<td>Eligibility for ENGL-090</td>
<td>LMC: DA</td>
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<td>TRANSFER: CSU</td>
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</table>
TRAVL-170A  Internship in Travel
TOTAL HOURS: 60-300
UNITS: 1-4
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

COURSE DESCRIPTIONS

SPTUT-020  Supervised Tutoring
TOTAL HOURS LECTURE: May Vary
UNITS: 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

Welding Technology

DEGREE--Associate of Science
Welding Technology

CERTIFICATE OF ACHIEVEMENT
Welding Technology

COLLEGE SKILLS CERTIFICATE
Welding Pre-Apprenticeship

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

ASSOCIATE OF SCIENCE
WELDING TECHNOLOGY

REQUIRED COURSES:  

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD-010</td>
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</tr>
<tr>
<td>WELD-011</td>
<td>3</td>
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<tr>
<td>WELD-015</td>
<td>2</td>
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<tr>
<td>WELD-016</td>
<td>1</td>
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<tr>
<td>WELD-021</td>
<td>3</td>
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<tr>
<td>WELD-031</td>
<td>3</td>
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<tr>
<td>WELD-035</td>
<td>3</td>
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<tr>
<td>WELD-040</td>
<td>3</td>
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<tr>
<td>WELD-041</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS REQUIRED IN MAJOR COURSES 24
TOTAL UNITS FOR THE DEGREE 60

Program Student Learning Outcomes
1. Be able to know and specify the safety requirements and knowledge as required in the welding trade.
2. Demonstrate the ability and theory to effectively solve problems encountered while welding or cutting and perform in accordance with industry standards.
3. Be prepared to learn the step-by-step procedure to pass the AWS Welder Qualification/Certification Exam, essential for employment as a welder.
CERTIFICATE OF ACHIEVEMENT
WELDING TECHNOLOGY

For the Certificate of Achievement in Welding Technology, complete the units of coursework listed below. Consult a Los Medanos College counselor to develop your education plan.

REQUISITE COURSES:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>Description</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>WELD-010</td>
<td>Basic Arc Welding Theory</td>
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<tr>
<td>WELD-011</td>
<td>Basic Shielded Metal Arc Welding Practice</td>
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</tr>
<tr>
<td>WELD-015</td>
<td>Basic Oxyacetylene Welding</td>
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<tr>
<td>WELD-016</td>
<td>Advanced Oxyacetylene Welding</td>
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<tr>
<td>WELD-020</td>
<td>Intermediate Shielded Metal Arc Welding Practice</td>
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<tr>
<td>WELD-021</td>
<td>Advanced Shielded Metal Arc Welding Practice</td>
<td>2</td>
</tr>
<tr>
<td>WELD-031</td>
<td>TIG Welding Practice</td>
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<tr>
<td>WELD-033</td>
<td>MIG Welding Practice</td>
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<td>WELD-035</td>
<td>Blueprint Reading for Welders</td>
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<tr>
<td>WELD-040</td>
<td>TIG, MIG and FCA Welding Theory</td>
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<tr>
<td>WELD-041</td>
<td>Pipe Welding Practice</td>
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</tr>
<tr>
<td>WELD-043</td>
<td>Flux-Core Arc Welding Practice</td>
<td>2</td>
</tr>
<tr>
<td>ENGL-090</td>
<td>Integrated Reading, Writing and Critical Thinking</td>
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<td>or</td>
<td>ENGL-100 College Composition</td>
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<tr>
<td>MATH 12 or higher* Prealgebra</td>
<td>4</td>
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<tr>
<td>or</td>
<td>COMSC-040 Introduction to Computers</td>
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<tr>
<td>or</td>
<td>COMSC-049 Computer Literacy</td>
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TOTAL UNITS REQUIRED FOR THIS CERTIFICATE: 33.5-39

*Possible higher Math courses (3-7 units): 25, 26, 27, 29, 30, 32, 34, 35, 37, 40, 50, 60, 75, 80, 160

Program Student Learning Outcomes
1. Be able to know and have an appreciation for the safety knowledge required in the welding trade.
2. Have a basic understanding how to solve common welding problems encountered in industry as well as reveal basic welding and cutting manipulative skills.

COURSE DESCRIPTIONS

WELD-010 Basic Arc Welding Theory
TOTAL HOURS LECTURE: 54
UNITS: 3
Advisory: Concurrent enrollment in WELD-011; eligibility for ENGL-090

WELD-011 Basic Shielded Metal Arc Welding Practice
TOTAL HOURS LAB: 108
UNITS: 2
Advisory: WELD-010; eligibility for ENGL-090

WELD-015 Basic Oxyacetylene Welding
TOTAL HOURS LECTURE: 18
TOTAL HOURS LAB: 54
UNITS: 2
Advisory: WELD-010 or Concurrent enrollment; eligibility for ENGL-090

Program Requirements, Courses and Learning Outcomes
WELDING TECHNOLOGY

COLLEGE SKILLS CERTIFICATE
WELDING PRE-APPRENTICESHIP

REQUISITE COURSES:

<table>
<thead>
<tr>
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<th>UNITS</th>
</tr>
</thead>
<tbody>
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<td>WELD-010</td>
<td>Basic Arc Welding Theory</td>
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<tr>
<td>WELD-011</td>
<td>Basic Shielded Metal Arc Welding Practice</td>
<td>2</td>
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<tr>
<td>MATH-012</td>
<td>PreAlgebra Math</td>
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</table>

TOTAL UNITS REQUIRED COLLEGE SKILLS CERTIFICATE: 9

WELDING TECHNOLOGY

www.losmedanos.edu 249
WELD-016  Advanced Oxyacetylene Welding

TOTAL HOURS LAB: 54
UNITS: 1
Prerequisite: WELD-015
Advisory: WELD-010 or concurrent enrollment; eligibility for ENGL-090

This course covers 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, tubes and pipes. Students will gain additional proficiency in flame cutting operations using manual and machine torches. May not be repeated. SC

LMC: DA
TRANSFER: CSU

WELD-020  Intermediate Shielded Metal Arc Welding Practice

TOTAL HOURS LAB: 108
UNITS: 2
Advisory: WELD 10 and WELD-011; eligibility for ENGL-090 and MATH-012.

This course is designed for intermediate welding students. Training with different electrodes is conducted to allow a student to obtain the necessary skills to pass visual inspection and a break test. This course covers shielded metal arc welding on t-joints (fillet welds) in all positions with E7018. Additional training with oxyacetylene torch cutting is included as well as instruction in plasma arc cutting. May not be repeated. SC

LMC: DA
TRANSFER: CSU

WELD-021  Advanced Shielded Metal Arc Welding Practice

TOTAL HOURS LAB: 108
UNITS: 2
Advisory: WELD-010 and WELD-020; eligibility for ENGL-090 and MATH-012

This course is designed for advanced SMAW students. This course covers layout, fitting, tacking, and plate welding in all positions with a V-groove joint configuration and backing bar. This course utilizes welding with E7018 and allows the student to obtain the skills to pass a visual inspection and the bend or X-ray test.

May not be repeated. SC

LMC: DA
TRANSFER: CSU

WELD-031  TIG Welding Practice

TOTAL HOURS LAB: 108
UNITS: 2
Advisory: WELD-010, 015, 040 or concurrent enrollment; MATH-012; ENGL-090

This course is designed to develop welding skills with the gas tungsten arc welding (GTAW) aka TIG process as frequently utilized in industry. It includes welding steel, stainless steel, and aluminum on light gauge metals in all positions in various joint configurations. This course includes set-up, calibrating, adjusting, operating and shutting down the equipment. May not be repeated. SC

LMC: DA
TRANSFER: CSU

WELD-033  MIG Welding Practice

TOTAL HOURS LAB: 108
UNITS: 2
Advisory: WELD-010, WELD-040 or concurrent enrollment; ENGL-090; MATH-012

This course is designed to develop welding skills with the gas metal arc welding (GMAW) aka MIG process as frequently utilized in industry. It includes welding steel sheetmetal and plate in all positions in various joint configurations. This course includes set-up, calibrating, adjusting, operating and shutting down the equipment. May not be repeated. SC

LMC: DA
TRANSFER: CSU

WELD-035  Blueprint Reading for Welders

TOTAL HOURS LECTURE: 54
UNITS: 3
Advisory: WELD-010, WELD-040; ENGL-090; MATH-012

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

**TOTAL HOURS LECTURE:** 54
**UNITS:** 3

**Advisory:** WELD-010; ENGL-090; MATH-012

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

**TOTAL HOURS LAB:** 108
**UNITS:** 2

**Prerequisite:** WELD-010, WELD-011 and WELD-021

**Advisory:** WELD-031; MATH-012; ENGL-090

This course is an advanced welding course that includes open-groove plate and pipe welding in all positions. This course involves cutting, layout, fitup, tacking, and welding of plate and pipe. Students perform welding in the 2G, 3G, and 4G plate positions then onto 2G, 5G, and 6G pipe positions. Students will focus on one process of welding from SMAW, GTAW, GMAW, or FCAW. This course provides skills to enable the student to pass a visual inspection and the bend or X-ray test. May not be repeated. SC

LMC: DA
TRANSFER: CSU

WELD-043  Flux-Core Arc Welding Practice

**TOTAL HOURS LAB:** 108
**UNITS:** 2

**Advisory:** WELD-010, WELD-040 or concurrent enrollment; ENGL-090; MATH-012

This course is designed to develop welding skills with the flux-core arc welding (FCAW) process as frequently utilized in industry. One practices the skills to weld plate fillet and groove welds in all positions primarily employing the self-shielded version of this process as well as introduction to the gas-shielded version. This course contains set-up, adjusting, and operating of the welding equipment. May not be repeated. 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. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. 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

**TOTAL HOURS:** 60-300
**UNITS:** 1-4

**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
TOTAL HOURS: 60-300
UNITS: 1-4
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.

World Languages

COLLEGE SKILLS CERTIFICATE
Cultural Competence in Modern World Language

A certificate in Cultural Competence in Modern Languages may be completed in three semesters with possible career opportunities to volunteer or work in community groups, mentor or tutor children or community college students, and work in service areas such as schools, day care centers, or hospitals.

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

Program Student Learning Outcomes
1. Communicate orally and in writing in Spanish/American Sign Language in real life situations with native and non-native speakers.
2. Read and comprehend Spanish/American Sign Language at levels commensurate with those of students seeking a degree in Spanish/American Sign Language.
3. Differentiate the Chinese/Filipino/Italian/French/Hispanic/American Sign Language culture(s), through the study of their history, literature, arts, contributions of prominent figures, and community interaction with native speakers.

See Filipino courses, page 165.
See French courses, page 169.
See Italian courses, page 176.
See Sign Language courses, page 236.
See Spanish courses, page 240.
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
Knott, Veronica ............................... Senior Dean of Occupational Education
Livingston, Richard ......................... Senior Dean of Instruction

Los Medanos Faculty Emeriti
Arenivar, Olga ................................. Speech
Bachmann, Nancy .............................. Music
Bank, Judith .................................... English
Baskin, Shirley .................................. Counseling
Biles, Lorraine Leith ......................... Physical Education
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-Alward, Sandra ..................... Nursing
Cecchini, Eva .................................... Nursing
Cesa, Margaret ................................. English
Clark, Spencer .................................. Counseling
Coats, Elisabeth .............................. Nursing
Corioso, April .................................. Librarian
Crouch, William R. ......................... Nursing
Davis, Jerry W. ............................... Biological Science
De Anda, Natividad ......................... Counseling
Duggan, Curtis J. .............................. Business
Fisher, Dorothy ............................... Counseling
Facisco, William .............................. 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
Hunnicutt, Dora B. (Jane) ............... Geography
Janes, Donal ................................. Computer Science
Jacobs, Stan J. ............................... Language Arts
Johnson, Sharon ............................. Nursing
Jorgensen, Diane ........................... Administration of Justice
Juarez, Angel .................................. Chemistry
Kaiper, Don .................................... History
Kishi, Thais .................................... Psychology
Leung, Shirley .................................. Business

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 .......................... Career Development Manager
Rodriguez, Gil ............................... Dean of Liberal Arts and Sciences
Robert Skapura .............................. Senior Dean of Instructional Technology
Skeen, Esther ................................. Police Services Lieutenant
Smith, Sandra ............................... Director of Business Services
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
Nash, Brad ..................................... Business
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
Schweickert, Mitch ......................... Chemistry
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
Stein, Jeannine .............................. Mathematics
Stewart, Janhavi ............................. Nursing
Strain, Tom ................................. Physical Education
Sysum, Robert L. .......................... Welding
Thomas, Gary (Skip) ....................... Physical Education
Trapp, G. Louis .............................. Drafting
Tsuij, Muriel ................................. Nursing
Wagener, J. Patrick .......................... Mathematics
Willet, Kathleen ............................. Biology
Yeoman, Eric B. ............................ Natural Science
Zipkin, Naomi .............................. Child Development
Los Medanos Full-Time Faculty / Administrators / Supervisors

Abril, Elizabeth ................................................................. Counselor/PUENTE
B.A., St. Mary’s College; M.S., San Francisco State University

Adkins, Theodora ................................................................. Business
B.A., Cal State Univ, East Bay

Alexander, Kenneth ............................................................ Art
B.A., M.A., Cal State Univ, Sacramento

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., San Francisco State University; Ph.D., Univ for Integrative Learning

Beal, Tawny ............................................................... Management
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 Inst of Technology; M.S., Univ of Cal, Berkeley

Belman, David ................................................................. Academic/Student Services Manager
B.A., M.A., Univ of the Pacific

Benford, Jeffrey ................................................................. Dean, Counseling and Student Support
B.A., Morehouse College; M. Div., Interdenominational Theological Center

Bent, Joanne ................................................................. Nursing
B.A., Univ of New Mexico; M.S.N., San Francisco State University

Bonner, Jeanne ................................................................. Physics
B.S., Univ Cal, Davis

Cabral, Scott ................................................................. Astronomy
B.A., Univ Cal, Berkeley; M.S., San Francisco State University

Caldwell, Tselane ................................................................. English
B.A., M.A., Univ Cal, Berkeley

Cea, Jorge ................................................................. Academic/Student Services Manager-Outreach
B.A., San Francisco State University

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., San Francisco State University

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., San Francisco State University

Crowder, Kurt ................................................................. Engineering/Physics
B.S., Massachusetts Inst 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., Univ of Virginia

Davi, Estelle, R ................................................................. Psychology
B.A., M.A., San Francisco State University

Dearman, Jason ................................................................. Automotive
A.S., Los Medanos College

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

Dorritie, Frank ................................................................. Recording Arts
B.A., Manhattan College

Edwards, Barry ................................................................. Custodial Manager
B.A., Univ Cal, Berkeley

Estrada, Robert ................................................................. Bookstore Manager

Appendices
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<tr>
<th>Name</th>
<th>Institution(s)</th>
<th>Position</th>
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<tr>
<td>Garcia, Nicholas</td>
<td>B.A., Adams State College; M.F.A., Univ of Iowa</td>
<td>Drama</td>
</tr>
<tr>
<td>Gardner, Kasey</td>
<td>B.A., Western Kentucky Univ; M.A., Univ of the Pacific</td>
<td>Speech Communication</td>
</tr>
<tr>
<td>Giambattista, Louie</td>
<td>A.A., City College of S.F.; B.A., Univ Cal, Berkeley; MBA, Southern Methodist Univ</td>
<td>Computer Science</td>
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<tr>
<td>Godinez, Marco</td>
<td>A.A., Los Medanos College; B.A., Cal State Univ, East Bay; M.A., John F. Kennedy Univ</td>
<td>Counselor</td>
</tr>
<tr>
<td>Goff, Christina</td>
<td>B.A., Cal State Univ, Sonoma; M.S., Simmons College</td>
<td>Librarian, Instructional/Library Director</td>
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<tr>
<td>Goodin, Ruth</td>
<td>B.A., Univ of Bridgeport, Connecticut; M.A., St. Mary's College</td>
<td>Senior Foundation Director</td>
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<tr>
<td>Gravert, Dennis</td>
<td>B.S., Santa Clara Univ; Ph.D., Stanford Univ</td>
<td>Chemistry</td>
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<tr>
<td>Grillo, Michael</td>
<td>B.S., Cal State Univ, Long Beach</td>
<td>Fire Technology</td>
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<tr>
<td>Gunter, Paula</td>
<td>B.A., Univ of Washington; M.A., Monterey Inst of International Studies; Ph.D., Univ of Arizona</td>
<td>ESL</td>
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<tr>
<td>Hailey, Anthony</td>
<td>B.A., Univ of the State of New York; M.A., San Jose State Univ.</td>
<td>Administration of Justice</td>
</tr>
<tr>
<td>Hannum, Natalie</td>
<td>B.S., Cal State Univ Chico, M.A., Cal State Univ San Bernadino</td>
<td>Dean of Career Technical Education and Social Science</td>
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<tr>
<td>Henderson, Silvester</td>
<td>B.A., M.A., San Francisco State University</td>
<td>Music</td>
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<tr>
<td>Herman, Mel</td>
<td>B.A., Univ of Cal, Berkeley; A.S.N. Merritt College; M.S.N. Loyola Univ</td>
<td>Nursing</td>
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<tr>
<td>Hernandez, Carol</td>
<td>B.A., Emory University; M.N.S., Univ of Idaho</td>
<td>MESA Program Director</td>
</tr>
<tr>
<td>Hiltbrand, Joellen</td>
<td>B.A. Univ of Colorado; M.A., Univ Cal, Berkeley</td>
<td>English</td>
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<tr>
<td>Hobbs, Joann</td>
<td>A.A., Los Medanos College; B.A., Cal State Univ, Chico; M.A., San Francisco State University</td>
<td>English</td>
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<tr>
<td>Holt, Russell</td>
<td>A.A., Diablo Valley College</td>
<td>Buildings and Grounds Manager</td>
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<tr>
<td>Holtmann, Eric</td>
<td>B.S., M.S., Ph.D., Univ Cal, Berkeley</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Horan, Kevin</td>
<td>B.A., St. Mary's College; M.S., Western Illinois Univ; Ed.D, St. Mary's College</td>
<td>Vice President</td>
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<td>Hsieh, Durwynne</td>
<td>B.S., Mass Institute of Technology; Ph.D., Univ Cal, Berkeley</td>
<td>Biological Science</td>
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<td>Huddleston, Ryan</td>
<td>B.A., Cal State Univ, Sacramento; M.S., Cal State Univ, East Bay; M.A., Cal State Univ, Sacramento; Ph.D., Capella Univ</td>
<td>Lieutenant of College Police and Safety</td>
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<td>Huffman, Laurie</td>
<td>B.A., Cal State Univ, Sacramento; M.S., Cal State Univ, East Bay; M.A., Cal State Univ, Sacramento; Ph.D., Capella Univ</td>
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<td>Johnson, Scott</td>
<td>B.A., Univ of Washington</td>
<td>Mathematics</td>
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<td>Jones, Erlinda</td>
<td>B.A., Stanford Univ; M.A., San Francisco State University</td>
<td>Child Development</td>
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<td>Kamath, Kiran</td>
<td>B.A., St Francis College, Osmania; M.A., Simon Fraser Univ</td>
<td>Senior Dean, Planning and Institutional Effectiveness</td>
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<td>Karp, Marie</td>
<td>B.A., New York Univ; M.A., Cal State Univ, East Bay</td>
<td>Counselor/STEM Counselor</td>
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<td>Kratochvil, Robert</td>
<td>B.A., M.A., Univ of Southern California</td>
<td>President</td>
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<td>Landers, Mara</td>
<td>B.A., Swarthmore College; M.A., Ph.D., Univ Cal, Berkeley</td>
<td>Mathematics</td>
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<td>Lewis, Mark</td>
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<td>Liubich, Danielle</td>
<td>B.S., Fairfield Univ; B.S., Univ of Queensland, Australia; M.S., Univ of Chicago; Ph.D., Univ Cal, Berkeley</td>
<td>Biological Science</td>
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<td>Lugani, Shalini</td>
<td>B.A., M.A., Univ of Delhi; M.A., Jawaharlal Nehru Univ; Ph.D., Univ of Georgia</td>
<td>Economics</td>
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<td>Lynn, Morgan</td>
<td>B.A., Holyoke College; M.Ed., Boston Univ; M.A., San Francisco State Univ</td>
<td>English</td>
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<td>Martin, Kirsten</td>
<td>B.S., Univ Cal, Berkeley; M.S.N., Univ Cal, San Francisco</td>
<td>Nursing</td>
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McDowell, Colin ................................................................. Nursing
A.A., Contra Costa College; B.S., 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 Matthews, Jeffrey .................................................. English
B.A., M.A., San Francisco State University

Moore, A’kilah ............................................................... Dean of Mathematics and Sciences
B.S., Spellman College, Georgia; M.S., Howard Univ, Washington, D.C.; Ed.D., St. Mary’s College

Morales, Luis ................................................................. Counselor/Transfer
A.A., Contra Costa College; B.A., Cal State Univ, East Bay; M.A., John F. Kennedy Univ

Moriel, Daniel ................................................................. Philosophy
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Moy, Frances ................................................................. Counselor
B.A., M.A., Cal State Univ, San Francisco

Nakaji, Karen ................................................................. English
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Nasworthy, Cecil ............................................................. Electromechanical Technology
B.S., Georgia Southern College

Newman, Gail ................................................................. Business
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

Olanjuni, Aderonke .......................................................... Director of Business Services
B.A. Cal State Univ East Bay

Ortiz, Earl .................................................................. Automotive
A.S., Los Medanos College

Padilla-Wilson, Liana ........................................................... Anthropology
B.A., St. Mary’s College; M.A., Arizona State Univ

Park, Christine .............................................................. Librarian, Technical Services
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

Pok, 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
B.A., M.S., Cal State Univ, San Francisco; Ed.D. Univ 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., San Francisco State University

Rust, Tue ................................................................ Mathematics
B.A., Univ Cal, Berkeley; M.S., San Jose State University

Saito, Jennifer ................................................................ Mathematics
B.A., M.A., Univ Cal, Berkeley

Sample III, Alexander ........................................................ Sociology
B.A., Ohio State Univ; M.A., San Francisco State University

Shriever, 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

Snell, Myra ................................................................ Mathematics
B.A., Univ Texas-Austin; M.A., Univ Cal, Berkeley
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<tr>
<th>Name</th>
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<td>Snow, Lucy</td>
<td>Art Professor</td>
<td>B.S., Tufts Univ; M.F.A. Univ Cal, Berkeley</td>
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<tr>
<td>Speer, Denise</td>
<td>Biological Science Professor</td>
<td>B.S., Cal Poly State Univ, San Luis Obispo; D.V.M., Univ Cal, Davis</td>
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<tr>
<td>Sterling, Alex</td>
<td>English Professor</td>
<td>B.A., M.A., Purdue Univ; M.A., Cal State Univ, East Bay</td>
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<td>Stricker, Matthew</td>
<td>Mathematics Professor</td>
<td>B.S., Univ of the Pacific; M.A., Texas A&amp;M Univ</td>
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<td>Subia, Laura</td>
<td>EOP&amp;S Counselor</td>
<td>B.A., Univ Cal, Berkeley; M.S., San Francisco State University</td>
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<td>Toruno-Conley, Sara</td>
<td>English Professor</td>
<td>B.A., Cal State Univ, San Marcos; M.F.A., Univ of Cal, Riverside</td>
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<td>Townsend, Janice</td>
<td>Child Development/Graduate</td>
<td>B.A., M.A., Univ Cal, Santa Barbara</td>
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<td>Tuttle, Maria</td>
<td>English/Puente</td>
<td>B.F.A. Art Academy of Cincinnati; M.A., Univ of Cincinnati; M.F.A., Univ of Texas</td>
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<td>Valenzuela, Eileen</td>
<td>Office of Instruction Supervisor</td>
<td>A.A. Los Medanos College, B.S., M.P.A., Cal State Univ, East Bay</td>
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<td>Villegas, Richard</td>
<td>Physical Education Professor</td>
<td>B.S., Cal State Univ, San Bernardino</td>
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<td>Von Bergen, Julie</td>
<td>Mathematics Professor</td>
<td>B.A., Univ Cal San Diego; M.A., San Francisco State University</td>
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<td>Wahl, David</td>
<td>Program Manager</td>
<td>A.A., Los Medanos College, B.A. Cal State Univ Long Beach, M.A. Cal State Univ East Bay</td>
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<td>Wellbrooke, Sharon</td>
<td>Biological Science Professor</td>
<td>B.A., Univ Cal, Santa Cruz; D.C., Palmer College of Chiropractic</td>
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<td>Wentworth, Kimberly</td>
<td>Librarian, Electronic/Technical Services</td>
<td>B.S., Clemson Univ; M.L.I.S., San Jose State University</td>
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<td>Wethington, Katalina</td>
<td>English Professor</td>
<td>B.A., Univ of San Diego; M.F.A., St. Mary’s College</td>
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<td>Whitman, Nancy</td>
<td>Spanish Professor</td>
<td>B.A., Cal State Univ, Chico; M.A., Cal State Univ, Sacramento; Ed.D., Univ So Cal</td>
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<td>Wilkins, Penny</td>
<td>Business Professor</td>
<td>B.A., M.A., Ph.D. University of Phoenix, M.S. Cal State Univ East Bay</td>
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<td>Yamakoshi, Lois</td>
<td>Mathematics Professor</td>
<td>B.S., Pepperdine Univ; M.A., Cal State Northridge</td>
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<td>Ybarra, Nancy</td>
<td>Dean of Liberal Arts</td>
<td>B.S., Indiana Univ of Pennsylvania; M.Ed., St. Mary’s College</td>
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<td>Yeong, Michael</td>
<td>Reading Professor</td>
<td>B.A., St. Francis College; M.A., Antioch College</td>
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<td>Zhu, Yongmin</td>
<td>English/ESL Professor</td>
<td>B.A., Hanzhou Univ - China; M.A., Univ of Utah; Ed.D., St Mary’s College</td>
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<td>Zilber, Michael</td>
<td>Music Professor</td>
<td>B.A., New England Conservatory of Music; M.A., Tufts Univ</td>
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<td>Zimny, David</td>
<td>Political Science Professor</td>
<td>B.A., Univ of Chicago; M.A., Ph.D., Yale Univ</td>
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Adjunct professors are listed online at www.losmedanos.edu/adjunct.

Staff

Acevedo, Claudia........................................................................ Scholarship Program Coordinator

Adams, Jennifer.......................................................................... Senior Executive Assistant

Adams, Tomi................................................................................ Science Laboratory Coordinator

Ahlborn, Diane........................................................................... Lead Admissions/Records Assistant

Almassey, Nicole........................................................................ Administrative Assistant

Amaral, Gilbert........................................................................... Lead Grounds Worker/Gardener

Amaral, Gilbert........................................................................... Lead Grounds Worker/Gardener

Basket, Deborah........................................................................... Financial Aid Assistant I

Benzler, Camme........................................................................... Senior Administrative Assistant

Benzler, Sylvia........................................................................... Administrative Assistant

Betts, Carole............................................................................... Counselor Assistant

Bigs, Glen................................................................................. Grounds Worker/Gardener II
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<td>Bransford, Michael</td>
<td>A.A., Diablo Valley College</td>
<td>Equipment Maintenance Worker</td>
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<td>Bridges, John</td>
<td>A.S., Los Medanos College</td>
<td>Custodian II</td>
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<td>Butler, Steve</td>
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<td>Chapman, Eloine</td>
<td>A.S., Los Medanos College</td>
<td>Senior Web Administrator</td>
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<td>Chen, San Mei</td>
<td>B.A., Pontifical Catholic Univ of Chile; M.A., Cal State Univ, East Bay</td>
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<td>Cullar, Katherine</td>
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<td>Customer Services Clerk</td>
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<td>Fantuzzi, Angela</td>
<td>B.A., Pontifical Catholic Univ of Chile; M.A., Cal State Univ, East Bay</td>
<td>Family Life Education Specialist</td>
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<td>Fay, Jennifer</td>
<td>B.A., Cal State Univ, Sonoma</td>
<td>Science Laboratory Technician II</td>
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<td>Sr. Library Assistant</td>
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<td>Student Services and Instructional Support Coordinator</td>
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<td>Fonteno, Amber</td>
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<td>Goldberg, Steven</td>
<td>B.S., M.S., Ph.D., State Univ of New York</td>
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<td>Dartmouth College; J.D., Univ San Francisco School of Law</td>
<td>College Human Resources Assistant</td>
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<td>Hotton, Michael</td>
<td>A.A., Los Medanos College, B.A., Cal State Univ, East Bay</td>
<td>Senior Parking Services Officer</td>
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<td>Howe, Thomas</td>
<td>A.A., Los Medanos College, B.A., Cal State Univ, East Bay</td>
<td>Police Services Officer</td>
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<td>A.A., Los Medanos College, B.A., Cal State Univ, East Bay</td>
<td>Student Services and Instructional Support Coordinator</td>
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<td>Kohler, Linda</td>
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<td>Senior Accountant</td>
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<td>Lares, Imelda</td>
<td>A.A., Diablo Valley College</td>
<td>Admissions/Records Assistant II</td>
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<td>Lawrence, Demetria</td>
<td>A.A., Los Medanos College, B.A., Cal State Univ, East Bay</td>
<td>Student Services and Instructional Support Coordinator</td>
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<td>Leung, Chunni</td>
<td>A.A., Los Medanos College, B.A., Cal State Univ, East Bay</td>
<td>Financial Aid Specialist</td>
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<td>Love, V. Carol</td>
<td>A.A., Diablo Valley College</td>
<td>Math Laboratory Coordinator - Brentwood</td>
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<td>Macias, Antonio</td>
<td>A.A., Diablo Valley College</td>
<td>Building Maintenance Worker</td>
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<td>Maniscalco, Linda</td>
<td>A.A., Los Medanos College, B.A., Cal State Univ, East Bay</td>
<td>Senior Account Clerk- Cashier</td>
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<td>Martin, Analicia</td>
<td>B.S., Cal Poly State Univ; M.S., Univ of the Pacific</td>
<td>Athletic Trainer</td>
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<tr>
<td>McAlpin, Rashaad</td>
<td>A.S., ITT Technical Institute</td>
<td>Electronics Technician</td>
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Appendices

Pankiewicz, Anthony  
A.S., Heald College, School of Technology

Ortiz, Elaine  
A.S., Los Medanos College

Ortiz, Janine  
B.A., Univ Cal, Berkeley

Ortiz, Michelle  
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Medel, Gretchen  
B.S., Univ Cal Davis

Mills, George  
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Mills, Sandra  
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Monteverde, Eva  
B.S., Loma Linda Univ; B.S., Cal State Univ, San Bernadino; M.S., Cal State Univ, Fullerton

Muir, Clark  
CTE Programs Laboratory Equipment Technician II

Nelson, George  
B.A., San Jose State University; B.F.A., California College of the Arts

Nogar, Justin  
A.A., Lake Tahoe Community College; A.A., Los Medanos College

Olgin, Anthony  
A.A., Los Medanos College

Oleski, David  
B.A., Trinity College; M.S.W., Univ of Illinois

Oleson, Mary  
A.A., Los Medanos College

Oleson, Mary  
Sr. Administrative Secretary

Oran, Tammy  
Financial Aid Specialist I

A.S., Los Medanos College

Origenwa, Adeirawo  
B.A., Univ Cal, Los Angeles

Ornelas, Janine  
A.S., Los Medanos College

Ortez, Elaine  
A.S., Heald College, School of Technology

Pankiewicz, Anthony  
B.S., St. John’s University

Parsons, Keith  
B.S., Southern Suburban College; B.A., Columbia College, Chicago

Payton, Carl  
Police Services Assistant/Dispatcher

Perez, Roberto  
A.S., Heald College

Raumer, Rodney  
A.A., A.S., Contra Costa College

Robertson, Beth  
B.S., Grambling State Univ

Robertson, Leetha  
B.S., Univ Arkansas; M.S., Univ Cal Berkeley

Rogers, Carole  
A.A., Los Medanos College; B.A., Univ of Cal, Berkeley

Rosas, Carla  
B.A., Cal State Univ, East Bay; M.A., St. Mary’s College

Ryan, Clint  
B.A., Univ of Arkansas, M.S., Univ Cal Berkeley

Sanchez, Eric  
B.F.A., Cal State Univ, East Bay; M.F.A., San Francisco State Univ

Sanders, Tara Dale  
B.A., Univ of Redlands, M.A., Cal State Univ Chico

Salamanca, Fernando  
B.A., Cal State Univ, San Bernadino; M.S., Cal State Univ, Fullerton

Schall, John  
B.A., San Jose State University; B.F.A., California College of the Arts

McDermott, John  
B.A., Sonoma State Univ; M.S.S., U.S. Sports Academy

McEwen, Tennille  
A.A., A.S., Los Medanos College

McFarland, Lisa  
B.A., Univ Cal, Berkeley

McLean, Sharen  
A.A., Los Medanos College

McQuaid, Michelle  
A.A., Lake Tahoe Community College; A.A., Los Medanos College

Medel, Gretchen  
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Mills, Jr., George  
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Muir, Clark  
CTE Programs Laboratory Equipment Technician II

Muniz, Noel  
Custodian II

Nelson, George  
Maintenance Mechanic

Nogar, Justin  
Offset Technician II

A.A., Los Medanos College, B.S., Cal State Univ, Sacramento; MA, Cal State Univ, San Francisco

O’Malley, Margaret  
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

Oran, Tammy  
Financial Aid Specialist I

A.S., Los Medanos College

Origenwa, Adeirawo  
B.A., Univ Cal, Los Angeles

A.S., Heald College

Parsons, Keith  
B.S., Southern Suburban College; B.A., Columbia College, Chicago

Payton, Carl  
Police Services Assistant/Dispatcher

Perez, Roberto  
A.S., Heald College

Raumer, Rodney  
A.A., A.S., Contra Costa College

Robertson, Beth  
B.S., Grambling State Univ

Robertson, Leetha  
B.S., Univ Arkansas; M.S., Univ Cal Berkeley

Rogers, Carole  
A.A., Los Medanos College; B.A., Univ of Cal, Berkeley

Rosas, Carla  
B.A., Cal State Univ, East Bay; M.A., St. Mary’s College

Ryan, Clint  
B.A., Univ of Arkansas, M.S., Univ Cal Berkeley

Sanchez, Eric  
B.F.A., Cal State Univ, East Bay; M.F.A., San Francisco State Univ

Sanders, Tara Dale  
B.A., Univ of Redlands, M.A., Cal State Univ Chico

Salamanca, Fernando  
B.A., Cal State Univ, San Bernadino; M.S., Cal State Univ, Fullerton

Schall, John  
B.A., San Jose State University; B.F.A., California College of the Arts

McDermott, John  
B.A., Sonoma State Univ; M.S.S., U.S. Sports Academy

McEwen, Tennille  
A.A., A.S., Los Medanos College

McFarland, Lisa  
B.A., Univ Cal, Berkeley

McLean, Sharen  
A.A., Los Medanos College

McQuaid, Michelle  
A.A., Lake Tahoe Community College; A.A., Los Medanos College

Medel, Gretchen  
B.S., Univ Cal Davis

Mills, Jr., George  
A.A., Los Medanos College; B.A., Cal State Univ, East Bay

Mills, Sandra  
A.A., Los Medanos College, B.A., Cal State Univ, East Bay

Monteverde, Eva  
B.S., Loma Linda Univ; B.S., Cal State Univ, San Bernadino; M.S., Cal State Univ, Fullerton

Muir, Clark  
CTE Programs Laboratory Equipment Technician II

Muniz, Noel  
Custodian II

Nelson, George  
Maintenance Mechanic

Nogar, Justin  
Offset Technician II

A.A., Los Medanos College, B.S., Cal State Univ, Sacramento; MA, Cal State Univ, San Francisco

O’Malley, Margaret  
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

Oran, Tammy  
Financial Aid Specialist I

A.S., Los Medanos College

Origenwa, Adeirawo  
B.A., Univ Cal, Los Angeles

A.S., Heald College

Parsons, Keith  
B.S., Southern Suburban College; B.A., Columbia College, Chicago

Payton, Carl  
Police Services Assistant/Dispatcher

Perez, Roberto  
A.S., Heald College

Raumer, Rodney  
A.A., A.S., Contra Costa College

Robertson, Beth  
B.S., Grambling State Univ

Robertson, Leetha  
B.S., Univ Arkansas; M.S., Univ Cal Berkeley

Rogers, Carole  
A.A., Los Medanos College; B.A., Univ of Cal, Berkeley

Rosas, Carla  
B.A., Cal State Univ, East Bay; M.A., St. Mary’s College

Ryan, Clint  
B.A., Univ of Arkansas, M.S., Univ Cal Berkeley

Sanchez, Eric  
B.F.A., Cal State Univ, East Bay; M.F.A., San Francisco State Univ

Sanders, Tara Dale  
B.A., Univ of Redlands, M.A., Cal State Univ Chico

Salamanca, Fernando  
B.A., Cal State Univ, San Bernadino; M.S., Cal State Univ, Fullerton

Schall, John  
B.A., San Jose State University; 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 ............................................................ Grounds Worker/Gardener II
Sobolik, Glenn ............................................................... Lead Maintenance Mechanic
Soto, Annica ................................................................. Admissions/Records Assistant II

B.A., San Jose State University

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

A.A., Diablo Valley College

Thomas, Anthony ........................................................... Grounds Worker/Gardener II

Tiscareno, Spring .......................................................... Lead Custodian

Turner, Reginald .......................................................... Employment Dev Services Spec/Office Assistant II

A.A. Wilkes Community College

Tutt, Arvella ................................................................. Book Buyer

A.A., Los Medanos College; B.A., San Francisco State Univ

Valencia, Steven ........................................................... Custodian II

Villegas, Grace ............................................................. Scheduling Specialist

Vu, Johnny ................................................................. Custodian II

Wagner, Gilbert ............................................................ Custodian II

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

## MAIN CAMPUS .......... 925-439-2181

**TDD .......... 925-439-5709**

<table>
<thead>
<tr>
<th>DEPARTMENT</th>
<th>ROOM</th>
<th>PHONE</th>
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<tbody>
<tr>
<td>Admissions &amp; Records Office</td>
<td>CC3-821</td>
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<td>Assessment Center</td>
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<td>Athletic Programs</td>
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<td>473-7605</td>
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<td>Fire/EMS</td>
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<td>Foundation Office</td>
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<td>Lost and Found/Police Services</td>
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<td>Student Government/Activities</td>
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### INSTRUCTIONAL LABS

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<td>Biology</td>
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<td>Business</td>
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<td>Computer</td>
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<td>Journalism</td>
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<td>Math Tutorial</td>
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<td>MIDI (Music)</td>
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<td>PTEC</td>
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### INSTRUCTIONAL DEANS’ OFFICES

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<tr>
<td>Liberal Arts</td>
<td>473-7397</td>
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<tr>
<td>Math &amp; Sciences</td>
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</tr>
<tr>
<td>Career and Technical Education &amp; Social Sciences</td>
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</table>

Individual instructors may be contacted at their campus phone extensions.

### STUDENT SERVICES DEANS’ OFFICES

<table>
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<tr>
<td>Dean of Counseling &amp; Student Support</td>
<td>473-7426</td>
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<tr>
<td>Dean of Student Success</td>
<td>473-7424</td>
</tr>
<tr>
<td>Senior Dean, Student Services</td>
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**NOTE:** These are NEW phone numbers

All LMC phone extensions are changing in late May 2014. Visit www.losmedanos.edu/directory for current numbers.
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 and general education requirements.

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; including major and general education requirements.

AA-T and AS-T Degrees
The Student Transfer Achievement Reform Act (SB 1440), signed into legislation on September 29, 2010, enabled California Community Colleges and California State University to work together to create the Associate in Arts for Transfer Degree (AA-T) and the Associate in Science for Transfer Degree (AS-T). Upon completion of the associate degree for transfer, the student is eligible for transfer with junior standing into the California State University (CSU) system.

Students are given guaranteed admission into the CSU system, and are given priority consideration when applying to a particular program that is similar to the student's community college major. The law prohibits the CSU from requiring a transferring student to repeat courses similar to those taken at the community college that counted toward their associate degree for transfer.

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.
LET LMC SUPPORT
YOUR ACADEMIC SUCCESS
WE CONTINUE BUILDING FOR SUCCESS AT LMC!

Plan your schedule with our construction in mind

The construction closure may change depending on progress. Anticipated completion: March 2015.

Access to and from Lot A and Child Development Library and Science

Access to and from Lot B and Math Building
The east side of the College Complex will be closed due to construction.

Access is limited to and from the outside quad. Please follow directional signs and maps to gain access and/or exit the College Complex.

Since this will impact how people move around the college, we recommend you carefully plan your schedule and allow extra time for passing between classes.

We’re busy at work making LMC a better place.

When completed, the Student Services Center will provide a one-stop service center for our students.

Thank you for your cooperation and patience!

This project is supported completely by Measure A bonds, approved by Contra Costa County voters. We appreciate the community’s support for local public higher education.
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